

Service Manual

Air Conditioner



Indoor Unit
S-2545PK4E
S-5010PK4E

Destination
Europe



Please file and use this manual together with the service manual for Model No. U-25PZ3E5, U-36PZ3E5, U-50PZ3E5 U-60PZ3E5A, U-71PZ3E5A, U-100PZ3E5, U-125PZ3E5, U-140PZ3E5, U-100PZ3E8, U-125PZ3E8, U-140PZ3E8, Order No. SBPAC2212005CE.

WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the products dealt with in this service information by anyone else could result in serious injury or death.

IMPORTANT SAFETY NOTICE

There are special components used in this equipment which are important for safety. These parts are marked by  in the Schematic Diagrams, Circuit Board Diagrams, Exploded Views and Replacement Parts List. It is essential that these critical parts should be replaced with manufacturer's specified parts to prevent shock, fire or other hazards. Do not modify the original design without permission of manufacturer.

CAUTION

R32 REFRIGERANT – This Air Conditioner contains and operates with refrigerant R32.
THIS PRODUCT MUST ONLY BE INSTALLED OR SERVICED BY QUALIFIED PERSONNEL.
Refer to National, State, Territory and local legislation, regulations, codes, installation & operation manuals, before the installation, maintenance and/or service of this product.

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1. Safety Precautions

- Read the following “SAFETY PRECAUTIONS” carefully before installation.
- Electrical work must be installed by a licensed electrician. Be sure to use the correct rating of the power plug and main circuit for the model to be installed.
- The caution items stated here must be followed because these important contents are related to safety. The meaning of each indication used is as below. Incorrect installation due to ignoring of the instruction will cause harm or damage, and the seriousness is classified by the following indications.

 WARNING	This indication shows the possibility of causing death or serious injury.
 CAUTION	This indication shows the possibility of causing injury or damage to properties only.

The items to be followed are classified by the symbols:

	Symbol with white background denotes item that is PROHIBITED.
 	Symbol with dark background denotes item that must be carried out.

- Carry out test running to confirm that no abnormality occurs after the installation. Then, explain to user the operation, care and maintenance as stated in instructions. Please remind the customer to keep the operating instructions for future reference.

 WARNING		
1.	Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacturer. Any unfit method or using incompatible material may cause product damage, burst and serious injury.	
2.	Do not install outdoor unit near handrail of veranda. When installing air-conditioner unit on veranda of a high rise building, child may climb up to outdoor unit and cross over the handrail causing an accident.	
3.	Do not use unspecified cord, modified cord, joint cord or extension cord for power supply cord. Do not share the single outlet with other electrical appliances. Poor contact, poor insulation or over current will cause electrical shock or fire.	
4.	Do not tie up the power supply cord into a bundle by band. Abnormal temperature rise on power supply cord may happen.	
5.	Do not insert your fingers or other objects into the unit, high speed rotating fan may cause injury. 	
6.	Do not sit or step on the unit, you may fall down accidentally. 	
7.	Keep plastic bag (packaging material) away from small children, it may cling to nose and mouth and prevent breathing.	
8.	When installing or relocating air conditioner, do not let any substance other than the specified refrigerant, eg. air etc mix into refrigeration cycle (piping). Mixing of air etc. will cause abnormal high pressure in refrigeration cycle and result in explosion, injury etc.	
9.	Do not pierce or burn as the appliance is pressurized. Do not expose the appliance to heat, flame, sparks, or other sources of ignition. Else, it may explode and cause injury or death.	
10.	Do not add or replace refrigerant other than specified type. It may cause product damage, burst and injury etc.	
11.	• For R32 model, use new piping, flare nut and tools which is specified for R32 refrigerant. Using of existing (R22) piping, flare nut and tools may cause abnormally high pressure in the refrigerant cycle (piping), and possibly result in explosion and injury. For R32 and R410A, the same flare nut on the outdoor unit side and pipe can be use. • Since the working pressure for R32/R410A is higher than that of refrigerant R22 models, replacing conventional piping and flare nuts on the outdoor unit side are recommended. • If reuse piping is unavoidable, refer to instruction REFRIGERANT INSTALLATION (IN CASE OF REUSING EXISTING REFRIGERANT PIPING) in outdoor unit installation manual. • Thickness for copper pipes used with R32 must be more than 0.6 mm. Never use copper pipes thinner than 0.6 mm. For copper pipe ø15.88 or more use copper pipe thickness 0.8 mm and above. • It is desirable that the amount of residual oil less than 40 mg/10 m.	
12.	Engage authorized dealer or specialist for installation. If installation done by the user is incorrect, it will cause water leakage, electrical shock or fire.	
13.	For refrigeration system work, install according to this installation instructions strictly. If installation is defective, it will cause water leakage, electrical shock or fire.	
14.	Use the attached accessories parts and specified parts for installation. Otherwise, it will cause the set to fall, water leakage, fire or electrical shock.	
15.	Install at a strong and firm location which is able to withstand weight of the set. If the strength is not enough or installation is not properly done, the set will drop and cause injury.	

 WARNING

16.	For electrical work, follow the national regulation, legislation and this installation instruction. An independent circuit and single outlet must be used. If electrical circuit capacity is not enough or defect found in the electrical work, it will cause electrical shock or fire.	
17.	ELECTRICAL WIRING and connect tightly for indoor/outdoor connection. Clamp the cable so that no external force will have impact on the terminal. If connection or fixing is not perfect, it will cause heat up or fire at the connection.	
18.	Wire routing must be properly arranged so that control board cover is fixed properly. If control board cover is not fixed perfectly, it will cause fire or electrical shock.	
19.	This equipment is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD), with sensitivity of 30mA at 0.1 sec or less. Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown.	
20.	During installation, install the refrigerant piping properly before running the compressor. Operation of compressor without fixing refrigeration piping and valves at opened position will cause suck-in of air, abnormal high pressure in refrigeration cycle and result in explosion, injury etc.	
21.	During pump down operation, stop the compressor before removing the refrigeration piping. Removal of refrigeration piping while compressor is operating and valves are opened will cause suck-in of air, abnormal high pressure in refrigeration cycle and result in explosion, injury etc.	
22.	Tighten the flare nut with torque wrench according to specified method. If the flare nut is over-tightened, after a long period, the flare may break and cause refrigerant gas leakage.	
23.	After completion of installation, confirm there is no leakage of refrigerant gas. It may generate toxic gas when the refrigerant contacts with fire.	
24.	Ventilate if there is refrigerant gas leakage during operation. It may cause toxic gas when the refrigerant contacts with fire.	
25.	Be aware that refrigerants may not contain an odour.	
26.	This equipment must be properly earthed. Earth line must not be connected to gas pipe, water pipe, earth of lightning rod and telephone. Otherwise, it may cause electrical shock in case of equipment breakdown or insulation breakdown.	

 CAUTION

1.	Do not install the unit at place where leakage of flammable gas may occur. In case gas leaks and accumulates at surrounding of the unit, it may cause fire.	
2.	Prevent liquid or vapor from entering sumps or sewers since vapor is heavier than air and may form suffocating atmospheres.	
3.	Do not overcharge the unit, refer to gas charge specification in Outdoor Installation manual. Overcharge will cause over current and damage to compressor.	
4.	Do not release refrigerant during piping work for installation, re-installation and during repairing a refrigeration parts. Take care of the liquid refrigerant, it may cause frostbite.	
5.	Do not install this appliance in a laundry room or other location where water may drip from the ceiling, etc.	
6.	Do not touch the sharp aluminium fin, sharp parts may cause injury. 	
7.	Carry out drainage piping as mentioned in installation instructions. If drainage is not perfect, water may enter the room and damage the furniture.	
8.	Select an installation location which is easy for maintenance. Incorrect installation, service or repair of this air conditioner may increase the risk of rupture and this may result in loss damage or injury and/or property.	
9.	Power supply connection to the room air conditioner. Use power supply cord type designation 60245 IEC 57 or heavier cord. Connect the power supply cord of the air conditioner to a circuit breaker for the permanent connection. It must be a double pole switch with a minimum 3.0 mm contact gap. Power supply point should be in easily accessible place for power disconnection in case of emergency.	
10.	Installation work. It may need two people to carry out the installation work.	
11.	Keep any required ventilation openings clear of obstruction.	

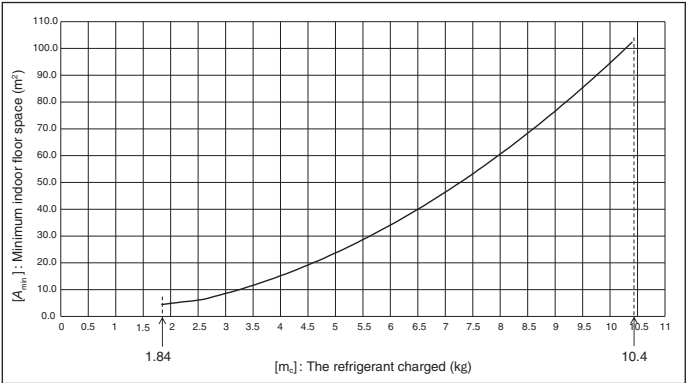
2. Precaution for Using R32 Refrigerant

- The basic installation work procedures are the same as conventional refrigerant (R410A, R22) models. However, pay careful attention to the following points:

 WARNING		
1.	Do not perform flare connection inside a building or dwelling or room, when joining the heat exchanger of indoor unit with interconnecting piping. Refrigerant connection inside a building or dwelling or room must be made by brazing or welding. Joint connection of indoor unit by flaring method can only be made at outdoor or at outside of a building or dwelling or room. Flare connection may cause gas leak and flammable atmosphere.	
2.	The appliance shall be stored, installed and operated in a well ventilated room with indoor floor area larger than A_{min} (m ²) [refer to Check of Density Limit] and without any continuously operating ignition source. Keep away from open flames, any operating gas appliances or any operating electric heater. Else, it may explode and cause injury or death.	
3.	Refer to "PRECAUTION FOR USING R32 REFRIGERANT" in outdoor unit installation manual for other precautions that need to pay attention to.	

Check of Density Limit

The refrigerant (R32), which is used in the air conditioner, is a flammable refrigerant. So the requirements for installation space of appliance are determined according to the refrigerant charge amount [m_c] used in the appliance.
Regarding the refrigerant charge amount [m_c] used in the appliance, refer to the installation instructions for the outdoor unit.
The minimum indoor floor space compared with the amount of refrigerant is roughly as follows:



$$A_{min} = (m_c / (2.5 \times (LFL)^{(5/4)} \times h_0))^2$$

** not less than safety factor margin

A_{min} = Required minimum room area, in m²
m_c = Refrigerant charge in appliance, in kg
LFL = Lower flammability limit (0.307 kg/m³)
h₀ = Release height is 1.8m.
CF = Concentration factor with a value of 0.75
** The required minimum room area, A_{min}, shall also be governed by the safety factor margin formula below:

$$A_{min} = m_c / (CF \times LFL \times h_0)$$

The higher value shall be taken when determining the room area.
m_c ≤ 1.84 : Can be installed
1.84 < m_c ≤ m_{max} : Can be installed above "Density Limit Line" *1
*1 Refer to table and the installation instructions of indoor unit when deciding "Density Limit Line".

[m _c] (kg)	[A _{min}] (m ²)
1.8	4.5
1.9	4.6
2.0	4.9
2.1	5.1
2.2	5.4
2.3	5.6
2.4	5.8
2.5	6.1
2.6	6.4
2.7	6.9
2.8	7.5
2.9	8.0
3.0	8.6
3.1	9.1
3.2	9.7
3.3	10.3
3.4	11.0
3.5	11.6

[m _c] (kg)	[A _{min}] (m ²)
3.6	12.3
3.7	13.0
3.8	13.7
3.9	14.4
4.0	15.2
4.1	15.9
4.2	16.7
4.3	17.5
4.4	18.4
4.5	19.2
4.6	20.1
4.7	20.9
4.8	21.8
4.9	22.8
5.0	23.7
5.1	24.6
5.2	25.6
5.3	26.6

[m _c] (kg)	[A _{min}] (m ²)
5.4	27.6
5.5	28.7
5.6	29.7
5.7	30.8
5.8	31.9
5.9	33.0
6.0	34.1
6.1	35.2
6.2	36.4
6.3	37.6
6.4	38.8
6.5	40.0
6.6	41.2
6.7	42.5
6.8	43.8
6.9	45.1
7.0	46.4

[m _c] (kg)	[A _{min}] (m ²)
7.1	47.7
7.2	49.1
7.3	50.4
7.4	51.8
7.5	53.2
7.6	54.7
7.7	56.1
7.8	57.6
7.9	59.1
8.0	60.6
8.1	62.1
8.2	63.6
8.3	65.2
8.4	66.8
8.5	68.4
8.6	70.0
8.7	71.6

[m _c] (kg)	[A _{min}] (m ²)
8.8	73.3
8.9	75.0
9.0	76.6
9.1	78.4
9.2	80.1
9.3	81.8
9.4	83.6
9.5	85.4
9.6	87.2
9.7	89.0
9.8	90.9
9.9	92.7
10.0	94.6
10.1	96.5
10.2	98.4
10.3	100.4
10.4	102.3

EU	IDU Model name	Single	Twin	Triple	Double twin
2.5kW	S-2545PK4E	U-25PZ3E5	U-50PZH3E5	U-71PZH4E5	U-100PZH4E5
				U-71PZH4E8	U-100PZH4E8
3.6kW	S-2545PK4E	U-36PZ3E5			
		U-36PZH3E5	U-71PZH4E5		
			U-71PZH4E8	U-100PZH4E5	U-125PZH4E5
				U-100PZH4E8	U-125PZH4E8
(4.5kW)	S-2545PK4E				
				U-125PZH4E5	
				U-125PZH4E8	
5.0kW	S-5010PK4E	U-50PZ3E5	U-100PZ3E5		U-200PZH4E8
		U-50PZH3E5	U-100PZ3E8		
			U-100PZH4E5	U-140PZH4E5	
			U-100PZH4E8	U-140PZH4E8	
6.0kW	S-5010PK4E	U-60PZ3E5A	U-125PZ3E5		U-250PZH4E8
		U-60PZH3E5	U-125PZ3E8		
			U-125PZH4E5		
			U-125PZH4E8		
7.1kW	S-5010PK4E	U-71PZH4E5	U-140PZ3E5	U-200PZH4E8	
		U-71PZ3E5A	U-140PZ3E8		
		U-71PZH4E8	U-140PZH4E5		
			U-140PZH4E8		
9.0kW	S-5010PK4E	U-100PZ3E5	U-200PZH4E8		
		U-100PZ3E8			
		U-100PZH4E5			
		U-100PZH4E8			

3. Specifications

3.1 Unit Specifications

INDOOR		MODEL		S-2545PK4E (25)			-			-		
PANEL		POS (EAN)		5025232978472			-			-		
		MODEL		-			-			-		
OUTDOOR		POS (EAN)		-			U-25PZ3E5			-		
Branch pipe		MODEL		-			5025232915538			-		
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz					
COOLING	Capacity	V		220V	230V	240V	220V	230V	240V	Min	Max	
		kW		2.5	2.5	2.5	-	-	-	1.3	3.9	
		BTU/h		8500	8500	8500	-	-	-	4400	13300	
		Sensible	kW	2.2	2.2	2.2	-	-	-	-	-	
	Latent	kW	0.3	0.3	0.3	-	-	-	-	-		
	Current	A		0.29	0.28	0.27	2.70	2.60	2.45	-	-	
	Input power	W		28	28	28	-	-	-	-	-	
		TOTAL W		-	-	-	0.570k	0.570k	0.570k	260	1.06k	
	Annual consumption		TOTAL kWh *4		-	-	-	-	285	-	-	
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.39	4.39 / A	4.39	5.00	3.68
	ErP *6	Pdesign	kW		-	-	-	-	2.5	-	-	-
		SEER	(W/W)		-	-	-	-	6.6	-	-	-
		Annual consumption	kWh		-	-	-	-	133	-	-	-
		Class			-	-	-	-	A++	-	-	-
	Power factor	%		-	-	-	96	96	96	-	-	-
	Noise indoor *7	dB-A (H/M/L)		39/34/29						-	-	-
Power Level dB		55/50/45						-	-	-		
Noise outdoor	dB-A (H/L)					46/-			-	-	-	
	Power Level dB					64/-			-	-	-	
HEATING	Capacity	kW		2.8	2.8	2.8	-	-	-	1.3	4.6	
		BTU/h		9600	9600	9600	-	-	-	4400	15700	
	Current	A		0.29	0.28	0.27	2.90	2.80	2.65	-	-	
		W		28	28	28	-	-	-	-	-	
	Input power	TOTAL W		-	-	-	0.620k	0.620k	0.620k	230	1.30k	
		COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.52	4.52 / A	4.52	5.65
	ErP *6	Pdesign at -10°C	kW		-	-	-	-	2.5	-	-	-
		Tbivalent	°C		-	-	-	-	-10	-	-	-
		SCOP	(W/W)		-	-	-	-	4.2	-	-	-
		Annual consumption	kWh		-	-	-	-	833	-	-	-
		elbu(-10°C)	kW		-	-	-	-	-	-	-	-
		Class			-	-	-	-	A+	-	-	-
	Power factor	%		-	-	-	97	97	97	-	-	-
	Noise indoor *7	dB-A (H/M/L)		39/34/29						-	-	-
		Power Level dB		55/50/45						-	-	-
	Noise outdoor	dB-A (H/L)					47/-			-	-	-
Power Level dB					66/-			-	-	-		
LOW TEMP	Total capacity(kW)			-			-			-		
EXTRA LOW TEMP	Total capacity(kW) *2			-			2.80			-		
Max Current (A) / Max Input power (W)				0.29/28	0.28/28	0.27/28	8.90 / 1.95k	8.90 / 1.99k	8.90 / 2.04k	-		
Starting current (A) (Cooling/Heating)				-	-	-	2.70 / 2.90	2.60 / 2.80	2.45 / 2.65	-		
Comp output (W)				-	-	-	1.10k	1.10k	1.10k	-		
Time Delay fuse max size (A)				-	-	-	15			-		
Network impedance (ΩMAX.)				-	-	-				-		
Fan motor output (Indoor/Outdoor) W				-	30	-	40			-		
Moisture removal volume				L/h	0.4	(0.4 × 1)				-		
External static pressure				Pa							-	
Indoor Air flow *7	Cooling	m³/min (H/M/L)		10.5 / 9.0 / 7.0						-	-	
	Heating	m³/min (H/M/L)		10.5 / 9.0 / 7.0						-	-	
	Cooling	m³/min					33.6			-	-	
	Heating	m³/min					34.0			-	-	
Outdoor Air flow	Cooling	m³/min					33.6			-	-	
	Heating	m³/min					34.0			-	-	
Refrigerant type / amount (ship) kg/ amount (max) kg				-			R32	0.870	0.950	-		
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)			-			675	0.59	0.64	-		
Product dimension	Height	mm	290			619			-			
	Width	mm	765			824			-			
	Depth	mm	214			299			-			
Product dimension (Panel)		H × W × D	mm			-			-			
Packing dimension	Height	mm	260			680			-			
	Width	mm	847			958			-			
	Depth	mm	364			416			-			
Mass	(NET)	kg	9			32			-			
	(GROSS)	kg	10			35			-			
	Panel (NET)	kg	-			-			-			
Layers limit (actually)				11(12)			5(6)			-		
Operation condition		Cool (DBT)	18°C~32°C			-10°C~43°C			-			
		Heat (DBT)	16°C~30°C			-15°C~24°C			-			
Max Working Pressure HP/LP MPa				4.15/2.55						-		
Max Allowable Pressure MPa				4.55						-		
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			-			
	Pipe diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)						-			
	Connecting method		flared type			flared type			-			
	Standard length m		5 m						-			
	Pipe length range m		3 ~ 15 m						-			
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 15 m (OD located higher)						-			
	Add gas amount g/m		10 g/m						-			
	Pipe length for additional gas m		7.5 m						-			

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-2545PK4E (36)								
PANEL		POS (EAN)		5025232978472								
		MODEL		-								
OUTDOOR		MODEL		-			U-36PZ3E5					
		POS (EAN)		-			5025232899333					
Branch pipe		MODEL		-								
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz					
		V		220V	230V	240V	220V	230V	240V	Min	Max	
COOLING	Capacity	kW		3.5	3.5	3.5	-	-	-	1.3	4.0	
		BTU/h		11900	11900	11900	-	-	-	4400	13600	
		Sensible	kW	2.8	2.8	2.8	-	-	-	-	-	
				Latent	kW	0.7	0.7	0.7	-	-	-	-
	Current	A		0.34	0.33	0.32	4.15	4.00	3.85	-	-	
	Input power	W		33	33	33	-	-	-	-	-	
		TOTAL W		-	-	-	0.900k	0.900k	0.900k	260	1.07k	
	Annual consumption	TOTAL kWh *4		-	-	-	-	450	-	-	-	
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.89	3.89 / A	3.89	5.00	3.74	
	ErP *6	Pdesign	kW	-	-	-	-	3.5	-	-	-	
		SEER	(W/W)	-	-	-	-	6.8	-	-	-	
		Annual consumption	kWh	-	-	-	-	181	-	-	-	
		Class	-	-	-	-	A++	-	-	-	-	
	Power factor	%		-	-	-	98	98	98	-	-	
	Noise indoor *7	dB-A (H/M/L)		41/36/30			-			-	-	-
		Power Level dB		57/52/46			-			-	-	-
		dB-A (H/L)		-			46/-			-	-	-
Power Level dB		-			64/-			-	-	-		
HEATING	Capacity	kW		3.6	3.6	3.6	-	-	-	1.3	4.6	
		BTU/h		12300	12300	12300	-	-	-	4400	15700	
	Current	A		0.34	0.33	0.32	4.10	3.95	3.80	-	-	
	Input power	W		33	33	33	-	-	-	-	-	
		TOTAL W		-	-	-	0.880k	0.880k	0.880k	230	1.30k	
	COP/COP CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.09	4.09 / A	4.09	5.65	3.54	
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	2.6	-	-	-	
		Tbivalent	°C	-	-	-	-	-10	-	-	-	
		SCOP	(W/W)	-	-	-	-	4.4	-	-	-	
		Annual consumption	kWh	-	-	-	-	827	-	-	-	
	elbu (-10°C)	kW	-	-	-	-	-	-	-	-	-	
	Class	-	-	-	-	-	A+	-	-	-	-	
	Power factor	%		-	-	-	97	97	97	-	-	
	Noise indoor *7	dB-A (H/M/L)		41/36/30			-			-	-	-
		Power Level dB		57/52/46			-			-	-	-
		dB-A (H/L)		-			47/-			-	-	-
		Power Level dB		-			66/-			-	-	-
LOW TEMP	Total capacity (kW)			-			-			-		
EXTRA LOW TEMP	Total capacity (kW) *2			-			2.90			-		
Max Current (A) / Max Input power (W)				0.34/33	0.33/33	0.32/33	8.90 / 1.95k	8.90 / 1.99k	8.90 / 2.04k	-		
Starting current (A) (Cooling/Heating)				-	-	-	4.15 / 4.10	4.00 / 3.95	3.85 / 3.80	-		
Comp output (W)				-	-	-	1.10k	1.10k	1.10k	-		
Time Delay fuse max size (A)				-	-	-	-	15	-	-		
Network Impedance (ΩMAX)				-	-	-	-	-	-	-		
Fan motor output (Indoor/Outdoor) W				-	30	-	-	-	-	-		
Moisture removal volume				L/h	1.0	(1.0 ×1)	-	-	-	-		
External static pressure				Pa	-	-	-	-	-	-		
Indoor Air flow *7	Cooling	m³/min (H/M/L)		11.5 / 9.5 / 7.0			-			-	-	
	Heating	m³/min (H/M/L)		11.5 / 9.5 / 7.0			-			-	-	
	Cooling	m³/min		-			33.6			-	-	
	Heating	m³/min		-			34.0			-	-	
Refrigerant type / amount (ship) kg/ amount (max) kg				-			R32	0.870	0.950	-		
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)			-			675	0.59	0.64	-		
Product dimension	Height	mm	290			619			-			
	Width	mm	765			824			-			
	Depth	mm	214			299			-			
Product dimension (Panel)	H × W × D	mm	-			-			-			
Packing dimension	Height	mm	260			680			-			
	Width	mm	847			958			-			
	Depth	mm	364			416			-			
Mass	(NET)	kg	9			32			-			
	(GROSS)	kg	10			35			-			
	Panel (NET)	kg	-			-			-			
Layers limit (actually)				11(12)			5(6)			-		
Operation condition	Cool (DBT)	18°C~32°C			-10°C~43°C			-			-	
	Heat (DBT)	16°C~30°C			-15°C~24°C			-			-	
Max Working Pressure HP/LP MPa				4.15/2.55			-			-		
Max Allowable Pressure MPa				4.55			-			-		
PIPING	Pipe port diameter mm (inch)	(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			-			-	
	Pipe diameter mm (inch)	(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			-			-			-	
	Connecting method	flared type			flared type			-			-	
	Standard length m	5 m			-			-			-	
	Pipe length range m	3 ~ 15 m			-			-			-	
	Indoor unit & Outdoor unit height difference m	15 m(OD located lower) / 15 m(OD located higher)			-			-			-	
	Add gas amount g/m	10 g/m			-			-			-	
	Pipe length for additional gas m	7.5 m			-			-			-	

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E(50)								
PANEL		POS (EAN)		5025232978489								
		MODEL		-								
OUTDOOR		MODEL		-						U-50PZ3E5		
		POS (EAN)		-						5025232899340		
Branch pipe		MODEL		-								
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz					
		V		220V			230V			240V		
		kW		5.0			5.0			5.0		
Capacity		BTU/h		17100			17100			17100		
		Sensible kW		3.9			3.9			3.9		
		Latent kW		1.1			1.1			1.1		
Current		A		0.35			0.34			0.33		
Input power		W		34			34			34		
Annual consumption		TOTAL W		-			-			-		
		TOTAL kWh *4		-			-			-		
EER/EEER CLASS		TOTAL (W/W) *5/ (*A~*G*)		-			-			-		
ErP *6		Pdesign kW		-			-			-		
		SEER (W/W)		-			-			-		
Annual consumption		kWh		-			-			-		
Class		-		-			-			-		
Power factor		%		-			-			-		
Noise indoor *7		dB-A (H/M/L)		41/36/31			-			-		
		Power Level dB		57/52/47			-			-		
Noise outdoor		dB-A (H/L)		-			46/-			-		
		Power Level dB		-			64/-			-		
Capacity		kW		5.0			5.0			5.0		
		BTU/h		17100			17100			17100		
Current		A		0.35			0.34			0.33		
Input power		W		34			34			34		
		TOTAL W		-			-			-		
COP/COP CLASS		TOTAL (W/W) *5/ (*A~*G*)		-			-			-		
ErP *6		Pdesign at -10°C kW		-			-			-		
		Tbivalent °C		-			-			-		
SCOP		(W/W)		-			-			-		
Annual consumption		kWh		-			-			-		
elbu (-10°C)		kW		-			-			-		
Class		-		-			-			-		
Power factor		%		-			-			-		
Noise indoor *7		dB-A (H/M/L)		41/36/31			-			-		
		Power Level dB		57/52/47			-			-		
Noise outdoor		dB-A (H/L)		-			46/-			-		
		Power Level dB		-			64/-			-		
LOW TEMP	Total capacity(kW)			-			-			-		
EXTRA LOW TEMP	Total capacity(kW) *2			-			4.40			-		
Max Current (A) / Max Input power (W)				0.35/34			0.34/34			0.33/34		
Starting current (A) (Cooling/Heating)				-			-			-		
Comp output (W)				-			-			-		
Time Delay fuse max size (A)				-			-			-		
Network Impedance (ΩMAX.)				-			-			-		
Fan motor output (Indoor/Outdoor) W				-			30			40		
Moisture removal volume L/h				1.6			(1.6 ×1)			-		
External static pressure Pa				-			-			-		
Indoor Air flow *7	Cooling	m³/min (H/M/L)		17.0 / 15.5 / 12.0			-			-		
	Heating	m³/min (H/M/L)		17.0 / 15.5 / 12.0			-			-		
Outdoor Air flow	Cooling	m³/min		-			32.7			-		
	Heating	m³/min		-			31.9			-		
Refrigerant type / amount (ship) kg / amount (max) kg				-			R32			1.140 1.330		
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)			-			675			0.77 0.90		
Product dimension		Height mm	295			619			-			
		Width mm	1060			824			-			
		Depth mm	249			299			-			
Product dimension (Panel)		H × W × D mm	-			-			-			
Packing dimension		Height mm	314			680			-			
		Width mm	1168			958			-			
		Depth mm	383			416			-			
Mass		(NET) kg	14			35			-			
		(GROSS) kg	16			38			-			
		Panel (NET) kg	-			-			-			
Layers limit (actually)		11(12)			5(6)			-				
Operation condition		Cool (DBT)	18°C~32°C			-10°C~43°C			-			
		Heat (DBT)	16°C~30°C			-15°C~24°C			-			
Max Working Pressure HP/LP MPa				4.15/2.55			-			-		
Max Allowable Pressure MPa				4.55			-			-		
PIPING	Pipe port diameter mm (inch)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			-		
	Pipe diameter mm (inch)			(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			-			-		
	Connecting method			*Connect the gas socket tube (Ø12.7~Ø15.88) to the gas tubing side indoor unit			-			-		
	Standard length m			*Connect the liquid socket tube (Ø6.35~Ø9.52) to the liquid tubing side indoor unit			-			-		
	Pipe length range m			flared type			flared type			-		
	Indoor unit & Outdoor unit height difference m			5 m			-			-		
	Add gas amount g/m			3 ~ 20 m			-			-		
	Pipe length for additional gas m			15 m (OD located lower) / 15 m (OD located higher)			-			-		
				15 g/m			-			-		
				7.5 m			-			-		

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL	S-5010PK4E (50) ×2								
PANEL		POS (EAN)	5025232978489								
		MODEL	-								
OUTDOOR		MODEL	-			U-100PZ3E5					
		POS (EAN)	-			5025232941032					
Branch pipe		MODEL				CZ-P155BK1					
Performance test condition			ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz	1Ø 50Hz			1Ø 50Hz					
COOLING	Capacity	V	220V	230V	240V	220V	230V	240V	Min	Max	
		kW	9.0	9.0	9.0	-	-	-	3.0	9.7	
		BTU/h	30700	30700	30700	-	-	-	10200	33100	
		Sensible	kW	-	-	-	-	-	-	-	-
	Current	Latent	kW	-	-	-	-	-	-	-	-
		A	0.35 x2	0.34 x2	0.33 x2	13.9	13.3	12.8	-	-	
	Input power	W	34 x2	34 x2	34 x2	-	-	-	-	-	
		TOTAL W	-	-	-	2.79k	2.79k	2.79k	560	3.10k	
	Annual consumption	TOTAL kWh *4	-	-	-	-	1395	-	-	-	
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")	-	-	-	3.23	3.23 / A	3.23	5.36	3.13	
	ErP *6	Pdesign	kW	-	-	-	-	9.0	-	-	-
		SEER	(W/W)	-	-	-	-	6.2	-	-	-
		Annual consumption	kWh	-	-	-	-	508	-	-	-
		Class	-	-	-	-	-	A++	-	-	-
	Power factor	%	-	-	-	91	91	91	-	-	
	Noise indoor *7	dB-A (H/M/L)	41/36/31						-	-	-
		Power Level dB	57/52/47						-	-	-
	Noise outdoor	dB-A (H/L)				52/-			-	-	-
Power Level dB					70/-			-	-	-	
HEATING	Capacity	kW	9.0	9.0	9.0	-	-	-	3.0	10.5	
		BTU/h	30700	30700	30700	-	-	-	10200	35800	
	Current	A	0.35 x2	0.34 x2	0.33 x2	11.8	11.3	10.8	-	-	
		W	34 x2	34 x2	34 x2	-	-	-	-	-	
	Input power	TOTAL W	-	-	-	2.36k	2.36k	2.36k	560	2.95k	
		COP/COP CLASS	TOTAL (W/W) *5/ ("A"~"G")	-	-	-	3.81	3.81 / A	3.81	5.36	3.56
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	8.8	-	-	-
		Tbivalent	°C	-	-	-	-	-7	-	-	-
		SCOP	(W/W)	-	-	-	-	4.0	-	-	-
		Annual consumption	kWh	-	-	-	-	3080	-	-	-
		elbu (-10°C)	kW	-	-	-	-	1.13	-	-	-
	Class	-	-	-	-	-	A+	-	-	-	
	Power factor	%	-	-	-	91	91	91	-	-	
	Noise indoor *7	dB-A (H/M/L)	41/36/31						-	-	-
		Power Level dB	57/52/47						-	-	-
	Noise outdoor	dB-A (H/L)				52/-			-	-	-
		Power Level dB				70/-			-	-	-
LOW TEMP	Total capacity (kW)										
EXTRA LOW TEMP	Total capacity (kW) *2					9.70					
Max Current (A) / Max Input power (W)			0.35/34 ×2	0.34/34 ×2	0.33/34 ×2	27.9 / 5.69k	27.9 / 5.94k	27.9 / 6.14k			
Starting current (A) (Cooling/Heating)			-	-	-	13.9 / 11.8	13.3 / 11.3	12.8 / 10.8			
Comp output (W)			-	-	-	2.50k	2.50k	2.50k			
Time Delay fuse max size (A)			-	-	-	-	35	-			
Network Impedance (QMAX.)			-	-	-	-	-	-			
Fan motor output (Indoor/Outdoor) W			-	30	-	-	120	-			
Moisture removal volume			L/h	3.2	(1.6 ×2)	-	-	-			
External static pressure			Pa	-	-	-	-	-			
Indoor Air flow *7	Cooling	m³/min (H/M/L)	17.0 ×2 / 15.5 ×2 / 12.0 ×2						-	-	
	Heating	m³/min (H/M/L)	17.0 ×2 / 15.5 ×2 / 12.0 ×2						-	-	
Outdoor Air flow	Cooling	m³/min				73.0			-	-	
	Heating	m³/min				73.0			-	-	
Refrigerant type / amount (ship) kg / amount (max) kg						R32	2.400	3.300			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					675	1.62	2.23			
Product dimension	Height	mm	295			996					
	Width	mm	1060			980					
	Depth	mm	249			370					
Product dimension (Panel)		H × W × D	mm								
Packing dimension	Height	mm	314			1134					
	Width	mm	1168			1095					
	Depth	mm	383			529					
Mass	(NET)	kg	14			83					
	(GROSS)	kg	16			91					
	Panel (NET)	kg									
Layers limit (actually)			11(12)			2 (3)					
Operation condition	Cool (DBT)		18°C~32°C			-10°C~43°C					
	Heat (DBT)		16°C~30°C			-15°C~24°C					
Max Working Pressure HP/LP MPa			4.15/2.55								
Max Allowable Pressure MPa			4.15								
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)					
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)								
	Connecting method		flared type			flared type					
	Standard length m		5 m								
	Pipe length range m		5 ~ 50 m								
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)								
	Add gas amount g/m		45 g/m								
	Pipe length for additional gas m		30 m								

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (50) ×2																	
PANEL		POS (EAN)		5025232978489																	
		MODEL																			
OUTDOOR		MODEL					U-100PZ3E8														
		POS (EAN)					5025232941049														
Branch pipe		MODEL					CZ-P155BK1														
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825																	
COOLING		Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz												
		Capacity		V		220V		230V		240V		380V		400V		415V		Min		Max	
				kW		9.0		9.0		9.0		-		-		-		3.0		9.7	
				BTU/h		30700		30700		30700		-		-		-		10200		33100	
				Sensible		kW		-		-		-		-		-		-		-	
				Latent		kW		-		-		-		-		-		-			
		Current		A		0.35 ×2		0.34 ×2		0.33 ×2		4.65		4.45		4.25		-		-	
		Input power		W		34 ×2		34 ×2		34 ×2		-		-		-		-		-	
				TOTAL W								2.79k		2.79k		2.79k		560		3.10k	
		Annual consumption		TOTAL kWh *4		-		-		-		-		1395		-		-		-	
		EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-		-		-		3.23		3.23 / A		3.23		5.36		3.13	
		ErP *6		Pdesign		kW		-		-		-		9.0		-		-		-	
				SEER		(W/W)		-		-		-		6.2		-		-		-	
				Annual consumption		kWh		-		-		-		508		-		-		-	
				Class				-		-		-		A++		-		-		-	
		Power factor		%		-		-		-		91		91		91		-		-	
		Noise indoor *7		dB-A (H/M/L)				41/36/31													
				Power Level dB				57/52/47													
		Noise outdoor		dB-A (H/L)				-						52/-							
Power Level dB						-						70/-									
HEATING		Capacity		kW		9.0		9.0		9.0		-		-		-		3.0		10.5	
				BTU/h		30700		30700		30700		-		-		-		10200		35800	
		Current		A		0.35 ×2		0.34 ×2		0.33 ×2		3.95		3.75		3.60		-		-	
		Input power		W		34 ×2		34 ×2		34 ×2		-		-		-		-		-	
				TOTAL W								2.36k		2.36k		2.36k		560		2.95k	
		COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-		-		-		3.81		3.81 / A		3.81		5.36		3.56	
		ErP *6		Pdesign at -10°C		kW		-		-		-		8.8		-		-		-	
				Tbivalent		°C		-		-		-		-7		-		-		-	
				SCOP		(W/W)		-		-		-		4.0		-		-		-	
				Annual consumption		kWh		-		-		-		3080		-		-		-	
				elbu(-10°C)		kW		-		-		-		1.13		-		-		-	
				Class				-		-		-		A+		-		-		-	
		Power factor		%		-		-		-		91		91		91		-		-	
		Noise indoor *7		dB-A (H/M/L)				41/36/31													
				Power Level dB				57/52/47													
Noise outdoor		dB-A (H/L)				-						52/-									
		Power Level dB				-						70/-									
LOW TEMP			Total capacity(kW)				-				-						-				
EXTRA LOW TEMP			Total capacity(kW) *2				-				9.70						-				
		Max Current (A) / Max Input power (W)				0.35/34 ×2		0.34/34 ×2		0.33/34 ×2		11.9 / 5.99k		11.9 / 6.29k		11.9 / 6.49k		-			
		Starting current (A) (Cooling/Heating)				-		-		-		4.65 / 3.95		4.45 / 3.75		4.25 / 3.60		-			
		Comp output (W)				-		-		-		2.50k		2.50k		2.50k		-			
		Time Delay fuse max size (A)				-		-		-		15						-			
		Network Impedance (ΩMAX.)				-		-		-		-						-			
		Fan motor output (Indoor/Outdoor) W				-		30		-		-		120				-			
		Moisture removal volume		L/h		3.2		(1.6 ×2)		-		-		-		-		-			
		External static pressure		Pa		-		-		-		-		-		-		-			
Indoor Air flow *7		Cooling		m³/min (H/M/L)		17.0 ×2 / 15.5 ×2 / 12.0 ×2				-		-		-		-		-			
		Heating		m³/min (H/M/L)		17.0 ×2 / 15.5 ×2 / 12.0 ×2				-		-		-		-		-			
Outdoor Air flow		Cooling		m³/min		-		-		-		73.0		-		-		-			
		Heating		m³/min		-		-		-		73.0		-		-		-			
		Refrigerant type / amount (ship) kg / amount (max) kg				-		-		R32		2.400		3.300		-		-			
F-Gas		CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)				-		-		675		1.62		2.23		-		-			
Product dimension		Height		mm		295						996						-			
		Width		mm		1060						980						-			
		Depth		mm		249						370						-			
		H × W × D		mm		-						-						-			
Packing dimension		Height		mm		314						1134						-			
		Width		mm		1168						1095						-			
		Depth		mm		383						529						-			
Mass		(NET)		kg		14						83						-			
		(GROSS)		kg		16						91						-			
		Panel		kg		-						-						-			
		(NET)		kg		-						-						-			
		Layers limit (actually)				11(12)						2 (3)						-			
Operation condition		Cool (DBT)				18°C~32°C						-10°C ~43°C						-			
		Heat (DBT)				16°C~30°C						-15°C ~24°C						-			
		Max Working Pressure HP/LP MPa								4.15/2.55								-			
		Max Allowable Pressure MPa								4.15								-			
PIPEING		Pipe port diameter mm (inch)				(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						-			
		Pipe diameter mm (inch)										(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						-			
		Connecting method				flared type						flared type						-			
		Standard length m								5 m								-			
		Pipe length range m								5 ~ 50 m								-			
		Indoor unit & Outdoor unit height difference m						15 m (OD located lower) / 30 m (OD located higher)										-			
		Add gas amount g/m						45 g/m										-			
		Pipe length for additional gas m						30 m										-			
																		-			

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (60)			-			-	
PANEL		POS (EAN)		5025232978489			-			-	
		MODEL		-			-			-	
OUTDOOR		MODEL		-			U-60PZ3E5A			-	
		POS (EAN)		-			5025232920884			-	
Branch pipe		MODEL		-							
Performance test condition											
ISO5151 / EN14511 / EN12102 / EN14825											
Power supply		Ø, Hz		10 50Hz			10 50Hz				
		V		220V	230V	240V	220V	230V	240V	Min	Max
COOLING	Capacity	kW		6.1	6.1	6.1	-	-	-	2.0	7.1
		BTU/h		20800	20800	20800	-	-	-	6800	24200
		Sensible	kW	4.8	4.8	4.8	-	-	-	-	-
		Latent	kW	1.3	1.3	1.3	-	-	-	-	-
	Current	A		0.67	0.65	0.63	7.95	7.60	7.25	-	-
	Input power	W		65	65	65	-	-	-	-	-
		TOTAL W		-	-	-	1.71k	1.71k	1.71k	290	2.36k
	Annual consumption	TOTAL kWh *4		-	-	-	-	855	-	-	-
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.57	3.57 / A	3.57	6.90	3.01
	ErP *6	Pdesign	kW	-	-	-	-	6.1	-	-	-
		SEER	(W/W)	-	-	-	-	7.0	-	-	-
		Annual consumption	kWh	-	-	-	-	305	-	-	-
		Class		-	-	-	-	A++	-	-	-
	Power factor	%		-	-	-	98	98	98	-	-
	Noise indoor *7	dB-A (H/M/L)		47/44/40			-			-	
		Power Level dB		63/60/56			-			-	
	Noise outdoor	dB-A (H/L)		-			47/-			-	
		Power Level dB		-			64/-			-	
HEATING	Capacity	kW		6.1	6.1	6.1	-	-	-	1.8	7.0
		BTU/h		20800	20800	20800	-	-	-	6100	23900
	Current	A		0.67	0.65	0.63	6.65	6.35	6.10	-	-
	Input power	W		65	65	65	-	-	-	-	-
		TOTAL W		-	-	-	1.43k	1.43k	1.43k	240	2.20k
	COP/COP CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.27	4.27 / A	4.27	7.50	3.18
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	4.6	-	-	-
		Tbivalent	°C	-	-	-	-	-10	-	-	-
		SCOP	(W/W)	-	-	-	-	4.6	-	-	-
		Annual consumption	kWh	-	-	-	-	1400	-	-	-
		elbu(-10°C)	kW	-	-	-	-	-	-	-	-
		Class		-	-	-	-	A++	-	-	-
	Power factor	%		-	-	-	98	98	98	-	-
	Noise indoor *7	dB-A (H/M/L)		47/44/40			-			-	
		Power Level dB		63/60/56			-			-	
	Noise outdoor	dB-A (H/L)		-			48/-			-	
		Power Level dB		-			65/-			-	
	LOW TEMP	Total capacity(kW)			-			-			-
EXTRA LOW TEMP	Total capacity(kW) *2			-			5.10			-	
Max Current (A) / Max Input power (W)				0.67/65	0.65/65	0.63/65	13.1 / 2.60k	13.1 / 2.65k	13.1 / 2.70k	-	
Starting current (A) (Cooling/Heating)				-	-	-	7.95 / 6.65	7.60 / 6.35	7.25 / 6.10	-	
Comp output (W)				-	-	-	1.70k	1.70k	1.70k	-	
Time Delay fuse max size (A)				-	-	-	20			-	
Network Impedance (QMAX.)				-	-	-	-			-	
Fan motor output (Indoor/Outdoor) W				-	30	-	40			-	
Moisture removal volume				L/h	1.9	(1.9 x1)	-			-	
External static pressure				Pa	-	-	-			-	
Indoor Air flow *7	Cooling	m³/min (H/M/L)		21.0 / 19.0 / 16.5			-			-	-
	Heating	m³/min (H/M/L)		21.0 / 19.0 / 16.5			-			-	-
Outdoor Air flow	Cooling	m³/min		-			42.6			-	-
	Heating	m³/min		-			41.5			-	-
Refrigerant type / amount (ship) kg / amount (max) kg				-	-	-	R32	1.150	1.300	-	
F-Gas	GWP /		-			-			-		
	CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)		-			675			0.78	0.88	-
Product dimension	Height	mm	295			695			-		
	Width	mm	1060			875			-		
	Depth	mm	249			320			-		
Product dimension (Panel)		H x W x D	-			-			-		
Packing dimension	Height	mm	314			761			-		
	Width	mm	1168			1049			-		
	Depth	mm	383			460			-		
Mass	(NET)	kg	14			42			-		
	(GROSS)	kg	16			46			-		
	Panel (NET)	kg	-			-			-		
Layers limit (actually)		11(12)			3(4)			-			
Operation condition	Cool (DBT)	18°C~32°C			-10°C~43°C			-			
	Heat (DBT)	16°C~30°C			-15°C ~ 24°C			-			
Max Working Pressure HP/LP MPa				4.15/2.55			-			-	
Max Allowable Pressure MPa				4.55			-			-	
PIPING	Pipe port diameter mm (inch)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			-	
	Pipe diameter mm (inch)			(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)						-	
				*Connect the gas socket tube (Ø12.7~Ø15.88) to the gas tubing side indoor unit						-	
				*Connect the liquid socket tube (Ø6.35~Ø9.52) to the liquid tubing side indoor unit						-	
	Connecting method			flared type			flared type			-	
	Standard length m			5 m						-	
	Pipe length range m			3 ~ 40 m						-	
	Indoor unit & Outdoor unit height difference m			15 m (OD located lower) / 30 m (OD located higher)						-	
	Add gas amount g/m			15 g/m						-	
Pipe length for additional gas m			30 m						-		

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (60) ×2						-		-					
PANEL		POS (EAN)		5025232978489						-		-					
		MODEL		-						-		-					
OUTDOOR		MODEL		-						U-125PZ3E5		-					
		POS (EAN)		-						5025232941056		-					
Branch pipe		MODEL								CZ-P155BK1							
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825													
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz										
		V		220V	230V	240V	220V	230V	240V	Min	Max						
COOLING	Capacity	kW		12.5	12.5	12.5	-	-	-	3.2	13.2						
		BTU/h		42700	42700	42700	-	-	-	10900	45000						
		Sensible	kW	-	-	-	-	-	-	-	-						
		Latent	kW	-	-	-	-	-	-	-	-						
	Current	A		0.67 ×2	0.65 ×2	0.63 ×2	18.4	17.6	16.8	-	-						
	Input power	W		65 ×2	65 ×2	65 ×2	-	-	-	-	-						
	TOTAL W		-	-	-	3.80k	3.80k	3.80k	600	4.80k							
	Annual consumption	TOTAL kWh *4		-	-	-	-	1900	-	-	-						
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.29	3.29 / A	3.29	5.33	2.75						
	ErP *6	Pdesign	kW	-	-	-	-	12.5	-	-	-						
		ηsc	%	-	-	-	-	254.1	-	-	-						
		Annual consumption	kWh	-	-	-	-	-	-	-	-						
		Class	-	-	-	-	-	-	-	-	-						
	Power factor	%		-	-	-	94	94	94	-	-						
	Noise indoor *7	dB-A (H/M/L)		47/44/40						-	-						
		Power Level dB		63/60/56						-	-						
	Noise outdoor	dB-A (H/L)		-			55/-			-	-						
		Power Level dB		-			73/-			-	-						
	HEATING	Capacity	kW		12.5	12.5	12.5	-	-	-	3.3	15.0					
BTU/h			42700	42700	42700	-	-	-	11300	51200							
A			0.67 ×2	0.65 ×2	0.63 ×2	15.1	14.5	13.9	-	-							
W			65 ×2	65 ×2	65 ×2	-	-	-	-	-							
Input power		TOTAL W		-	-	-	3.13k	3.13k	3.13k	600	4.60k						
COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.99	3.99 / A	3.99	5.50	3.26						
ErP *6		Pdesign at -10°C	kW	-	-	-	-	12.5	-	-	-						
		Tbivalent	°C	-	-	-	-	-7	-	-	-						
		ηsh	%	-	-	-	-	152.1	-	-	-						
		Annual consumption	kWh	-	-	-	-	-	-	-	-						
elbu(-10°C)		kW		-	-	-	-	2.51	-	-	-						
		Class	-	-	-	-	-	-	-	-	-						
Power factor		%		-	-	-	94	94	94	-	-						
Noise indoor *7		dB-A (H/M/L)		47/44/40						-	-						
		Power Level dB		63/60/56						-	-						
Noise outdoor		dB-A (H/L)		-			55/-			-	-						
		Power Level dB		-			73/-			-	-						
LOW TEMP	Total capacity(kW)			-			-			-							
EXTRA LOW TEMP	Total capacity(kW) *2			-			13.80			-							
Max Current (A) / Max Input power (W)				0.67/65 ×2		0.65/65 ×2		0.63/65 ×2		31.9 / 6.44k		31.9 / 6.74k		31.9 / 7.04k		-	
Starting current (A) (Cooling/Heating)				-		-		-		18.4 / 15.1		17.6 / 14.5		16.8 / 13.9		-	
Comp output (W)				-		-		-		2.80k		2.80k		2.80k		-	
Time Delay fuse max size (A)				-		-		-		-		40		-		-	
Network Impedance (ΩMAX)				-		-		-		-		-		-		-	
Fan motor output (Indoor/Outdoor) W				-		30		-		-		120		-		-	
Moisture removal volume				L/h		3.8		(1.9 ×2)		-		-		-		-	
External static pressure				Pa		-		-		-		-		-		-	
Indoor Air flow *7	Cooling	m³/min (H/M/L)		21.0 ×2 / 19.0 ×2 / 16.5 ×2						-		-		-			
		m³/min (H/M/L)		21.0 ×2 / 19.0 ×2 / 16.5 ×2						-		-					
	Outdoor Air flow	Cooling	m³/min		-			82.0			-		-				
			Heating	m³/min		-			80.0			-		-			
Refrigerant type / amount (ship) kg / amount (max) kg				-			R32		2.800		3.700		-				
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)			-			675		1.89		2.50		-				
Product dimension		Height	mm	295			996			-							
		Width	mm	1060			980			-							
		Depth	mm	249			370			-							
Product dimension (Panel)		H × W × D	mm	-			-			-							
Packing dimension		Height	mm	314			1134			-							
		Width	mm	1168			1095			-							
		Depth	mm	383			529			-							
Mass		(NET)	kg	14			87			-							
		(GROSS)	kg	16			95			-							
		Panel (NET)	kg	-			-			-							
Layers limit (actually)				11(12)			2 (3)			-							
Operation condition		Cool (DBT)	18°C~32°C			-10°C~43°C			-								
		Heat (DBT)	16°C~30°C			-15°C~24°C			-								
Max Working Pressure HP/LP MPa				4.15/2.55						-							
Max Allowable Pressure MPa				4.15						-							
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			-								
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						-								
	Connecting method		flared type			flared type			-								
	Standard length m		5 m						-								
	Pipe length range m		5 ~ 50 m						-								
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)						-								
	Add gas amount g/m		45 g/m						-								
	Pipe length for additional gas m		30 m						-								

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (60) ×2											
PANEL		POS (EAN)		5025232978489											
		MODEL													
OUTDOOR		MODEL									U-125PZ3E8				
		POS (EAN)									5025232941063				
Branch pipe		MODEL									CZ-P155BK1				
		Performance test condition									ISO5151 / EN14511 / EN12102 / EN14825				
Power supply		Ø, Hz		1Ø 50Hz				3Ø 50Hz							
		V		220V	230V	240V	380V	400V	415V	Min	Max				
COOLING	Capacity	kW		12.5	12.5	12.5	-	-	-	3.2	13.2				
		BTU/h		42700	42700	42700	-	-	-	10900	45000				
		Sensible Latent	kW	-	-	-	-	-	-	-	-				
				-	-	-	-	-	-	-	-				
	Current	A		0.67 ×2	0.65 ×2	0.63 ×2	6.15	5.85	5.60	-	-				
		W		65 ×2	65 ×2	65 ×2	-	-	-	-	-				
	Input power	TOTAL W		-	-	-	3.80k	3.80k	3.80k	600	4.80k				
		TOTAL kWh *4		-	-	-	-	1900	-	-	-				
	Annual consumption	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.29	3.29 / A	3.29	5.33	2.75				
		Pdesign		kW	-	-	-	-	12.5	-	-				
	ErP *6	nsc		%	-	-	-	-	254.1	-	-	-	-		
		Annual consumption	kWh		-	-	-	-	-	-	-	-	-		
			Class		-	-	-	-	-	-	-	-	-		
		Power factor		%		-	-	-	94	94	94	-	-	-	
	Noise indoor *7	dB-A (H/M/L)		47/44/40									-	-	
		Power Level dB		63/60/56									-	-	
dB-A (H/L)						55/-					-	-			
Power Level dB						73/-					-	-			
Noise outdoor	dB-A (H/L)											-	-		
	Power Level dB											-	-		
	Capacity	kW		12.5	12.5	12.5	-	-	-	3.3	15.0				
		BTU/h		42700	42700	42700	-	-	-	11300	51200				
HEATING	Current	A		0.67 ×2	0.65 ×2	0.63 ×2	5.05	4.80	4.65	-	-				
		W		65 ×2	65 ×2	65 ×2	-	-	-	-	-				
	Input power	TOTAL W		-	-	-	3.13k	3.13k	3.13k	600	4.60k				
		TOTAL kWh *5/ ("A"~"G")		-	-	-	3.99	3.99 / A	3.99	5.50	3.26				
COP/COP CLASS	Pdesign at -10°C		kW	-	-	-	-	12.5	-	-	-	-			
	Tbivalent		°C	-	-	-	-	-7	-	-	-	-			
	nsh		%	-	-	-	-	152.1	-	-	-	-			
	Annual consumption	kWh		-	-	-	-	-	-	-	-	-	-		
elbu (-10°C)		kW	-	-	-	-	2.51	-	-	-	-				
ErP *6	Class		-	-	-	-	-	-	-	-	-	-			
	Power factor		%		-	-	-	94	94	94	-	-			
	Noise indoor *7	dB-A (H/M/L)		47/44/40									-	-	
		Power Level dB		63/60/56									-	-	
Noise outdoor	dB-A (H/L)						55/-					-	-		
	Power Level dB						73/-					-	-		
LOW TEMP	Total capacity(kW)											-	-		
EXTRA	Total capacity(kW) *2						13.80					-	-		
LOW TEMP	Max Current (A) / Max Input power (W)		0.67/65 ×2	0.65/65 ×2	0.63/65 ×2	12.9 / 6.64k	12.9 / 6.94k	12.9 / 7.19k			-	-			
Starting current (A) (Cooling/Heating)				-	-	-	6.15 / 5.05	5.85 / 4.80	5.60 / 4.65			-	-		
Comp output (W)				-	-	-	2.80k	2.80k	2.80k			-	-		
Time Delay fuse max size (A)				-	-	-	20					-	-		
Network Impedance (ΩMAX.)				-	-	-						-	-		
Fan motor output (Indoor/Outdoor) W				-	30	-	120					-	-		
Moisture removal volume		L/h		3.8	(1.9 ×2)	-						-	-		
External static pressure		Pa											-	-	
Indoor Air flow *7	Cooling	m³/min (H/M/L)		21.0 ×2 / 19.0 ×2 / 16.5 ×2									-	-	
	Heating	m³/min (H/M/L)		21.0 ×2 / 19.0 ×2 / 16.5 ×2									-	-	
Outdoor Air flow	Cooling	m³/min						82.0					-	-	
	Heating	m³/min						80.0					-	-	
Refrigerant type / amount (ship) kg / amount (max) kg								R32	2.800	3.700			-	-	
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)								675	1.89	2.50			-	-
														-	-
Product dimension	Height	mm	295				996					-	-		
	Width	mm	1060				980					-	-		
	Depth	mm	249				370					-	-		
Product dimension (Panel)		H × W × D		mm								-	-		
Packing dimension	Height	mm	314				1134					-	-		
	Width	mm	1168				1095					-	-		
	Depth	mm	383				529					-	-		
Mass	(NET)	kg	14				87					-	-		
	(GROSS)	kg	16				95					-	-		
	Panel	kg										-	-		
	(NET)	kg										-	-		
Layers limit (actually)				11(12)				2 (3)					-	-	
Operation condition	Cool (DBT)			18°C~32°C				-10°C~-43°C					-	-	
	Heat (DBT)			16°C~30°C				-15°C~24°C					-	-	
Max Working Pressure HP/LP MPa				4.15/2.55									-	-	
Max Allowable Pressure MPa				4.15									-	-	
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)				(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)					-	-		
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)									-	-		
	Connecting method		flared type				flared type					-	-		
	Standard length m		5 m									-	-		
	Pipe length range m		5 ~ 50 m									-	-		
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)									-	-		
	Add gas amount g/m		45 g/m									-	-		
	Pipe length for additional gas m		30 m									-	-		

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL	S-5010PK4E (71_STD)								
		POS (EAN)	5025232978489								
PANEL		MODEL									
		MODEL									
OUTDOOR		MODEL				U-71PZ3E5A					
		POS (EAN)				5025232920891					
Branch pipe		MODEL									
Performance test condition			ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz	1Ø 50Hz			1Ø 50Hz					
		V	220V	230V	240V	220V	230V	240V	Min	Max	
COOLING	Capacity	kW	6.9	6.9	6.9	-	-	-	2.6	7.7	
		BTU/h	23500	23500	23500	-	-	-	8900	26300	
		Sensible	kW	5.3	5.3	5.3	-	-	-	-	-
				Latent	kW	1.6	1.6	1.6	-	-	-
	Current		A	0.67	0.65	0.63	9.75	9.30	8.95	-	-
	Input power		W	65	65	65	-	-	-	-	-
			TOTAL W	-	-	-	2.10k	2.10k	2.10k	520	2.78k
	Annual consumption		TOTAL kWh *4	-	-	-	-	1050	-	-	
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")	-	-	-	3.29	3.29 / A	3.29	5.00	2.77
	ErP *6	Pdesign	kW	-	-	-	-	6.9	-	-	-
		SEER	(W/W)	-	-	-	-	6.0	-	-	-
		Annual consumption	kWh	-	-	-	-	402	-	-	-
		Class	-	-	-	-	A+	-	-	-	-
	Power factor		%	-	-	-	98	98	98	-	-
	Noise indoor *7		dB-A (H/M/L)	47/44/40						-	-
			Power Level dB	63/60/56						-	-
	Noise outdoor		dB-A (H/L)				48/-			-	-
			Power Level dB				66/-			-	-
	HEATING	Capacity	kW	7.1	7.1	7.1	-	-	-	2.1	8.1
			BTU/h	24200	24200	24200	-	-	-	7200	27600
Current		A	0.67	0.65	0.63	8.00	7.70	7.35	-	-	
Input power		W	65	65	65	-	-	-	-	-	
		TOTAL W	-	-	-	1.73k	1.73k	1.73k	330	2.40k	
COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")	-	-	-	4.10	4.10 / A	4.10	6.36	3.38	
ErP *6		Pdesign at -10°C	kW	-	-	-	-	5.2	-	-	-
		Tbivalent	°C	-	-	-	-	-10	-	-	-
		SCOP	(W/W)	-	-	-	-	4.4	-	-	-
		Annual consumption	kWh	-	-	-	-	1654	-	-	-
elbu (-10°C)		kW	-	-	-	-	-	-	-	-	-
		Class	-	-	-	-	A+	-	-	-	-
Power factor		%	-	-	-	98	98	98	-	-	
Noise indoor *7		dB-A (H/M/L)	47/44/40						-	-	
		Power Level dB	63/60/56						-	-	
Noise outdoor		dB-A (H/L)				49/-			-	-	
		Power Level dB				68/-			-	-	
LOW TEMP	Total capacity(kW)										
EXTRA LOW TEMP	Total capacity(kW) *2					5.80					
Max Current (A) / Max Input power (W)			0.67/65	0.65/65	0.63/65	14.8 / 3.02k	14.8 / 3.12k	14.8 / 3.22k			
Starting current (A) (Cooling/Heating)			-	-	-	9.75 / 8.00	9.30 / 7.70	8.95 / 7.35			
Comp output (W)						2.00k	2.00k	2.00k			
Time Delay fuse max size (A)						20					
Network Impedance (ΩMAX)											
Fan motor output (Indoor/Outdoor) W			30			40					
Moisture removal volume			L/h	(2.2 ×1)							
External static pressure			Pa								
Indoor Air flow *7	Cooling	m³/min (H/M/L)	21.0 / 19.0 / 16.5						-	-	
	Heating	m³/min (H/M/L)	21.0 / 19.0 / 16.5						-	-	
Outdoor Air flow	Cooling	m³/min				44.7			-	-	
	Heating	m³/min				45.9			-	-	
Refrigerant type / amount (ship) kg / amount (max) kg						R32	1.320	1.490			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)										
					675	0.89	1.01				
Product dimension	Height	mm	295			695					
	Width	mm	1060			875					
	Depth	mm	249			320					
Product dimension (Panel)		H×W×D									
Packing dimension	Height	mm	314			761					
	Width	mm	1168			1049					
	Depth	mm	383			460					
Mass	(NET)	kg	14			50					
	(GROSS)	kg	16			54					
	Panel (NET)	kg									
Layers limit (actually)			11(12)			3(4)					
Operation condition		Cool (DBT)	18°C~32°C			-10°C~43°C					
		Heat (DBT)	16°C~30°C			-15°C~24°C					
Max Working Pressure HP/LP MPa			4.15/2.55								
Max Allowable Pressure MPa			4.55								
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø6.35 (1/4) (Gas) Ø15.88 (5/8)					
	Pipe diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø15.88 (5/8)								
	Connecting method		*Connect the liquid socket tube (Ø6.35-Ø9.52) to the liquid tubing side indoor unit								
	Standard length m		flared type			flared type					
	Pipe length range m		5 m								
	Indoor unit & Outdoor unit height difference m		3 ~ 40 m								
	Add gas amount g/m		20 m (OD located lower) / 30 m (OD located higher)								
Pipe length for additional gas m		17 g/m			30 m						

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (71 STD) *2			-			-							
PANEL		POS (EAN)		5025232978489			-			-							
		MODEL		-			-			-							
OUTDOOR		MODEL		-			U-140PZ3E5			-							
		POS (EAN)		-			5025232941070			-							
Branch pipe		MODEL					CZ-P155BK1										
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825													
COOLING	Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz									
			V		220V	230V	240V	220V	230V	240V	Min	Max					
	Capacity		kW		13.4	13.4	13.4	-	-	-	3.3	15.0					
			BTU/h		45700	45700	45700	-	-	-	11300	51200					
			Sensible		kW		-	-	-	-	-	-	-				
			Latent		kW		-	-	-	-	-	-					
	Current		A		0.67 *2	0.65 *2	0.63 *2	20.1	19.2	18.4	-	-					
	Input power		W		65 *2	65 *2	65 *2	-	-	-	-	-					
			TOTAL W					4.15k	4.15k	4.15k	620	5.60k					
	Annual consumption		TOTAL kWh *4					-	2075	-	-	-					
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")					3.23	3.23 / A	3.23	5.32	2.68					
	ErP *6	Pdesign		kW					-	13.4	-	-	-				
		ηsc		%					-	247.2	-	-	-				
		Annual consumption		kWh					-	-	-	-	-				
		Class							-	-	-	-	-				
		Power factor		%					94	94	94	-	-				
	Noise indoor *7		dB-A (H/M/L)		47/44/40								-				
			Power Level dB		63/60/56								-				
	Noise outdoor		dB-A (H/L)					56/-					-				
Power Level dB						74/-					-						
HEATING	Capacity		kW		13.4	13.4	13.4	-	-	-	3.4	16.0					
			BTU/h		45700	45700	45700	-	-	-	11600	54600					
	Current		A		0.67 *2	0.65 *2	0.63 *2	17.5	16.7	16.0	-	-					
	Input power		W		65 *2	65 *2	65 *2	-	-	-	-	-					
			TOTAL W					3.61k	3.61k	3.61k	620	5.00k					
	COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")					3.71	3.71 / A	3.71	5.48	3.20					
	ErP *6	Pdesign at -10°C		kW					-	13.6	-	-	-				
		Tbivalent		°C					-	-7	-	-	-				
		ηsh		%					-	151.0	-	-	-				
		Annual consumption		kWh					-	-	-	-	-				
		elbu(-10°C)		kW					-	2.76	-	-	-				
			Class					-	-	-	-	-					
	Power factor		%					94	94	94	-	-					
	Noise indoor *7		dB-A (H/M/L)		47/44/40								-				
			Power Level dB		63/60/56								-				
	Noise outdoor		dB-A (H/L)					56/-					-				
			Power Level dB					74/-					-				
	LOW TEMP	Total capacity(kW)											-				
	EXTRA LOW TEMP	Total capacity(kW) *2						15.00					-				
Max Current (A) / Max Input power (W)				0.67/65 *2		0.65/65 *2		0.63/65 *2		32.9 / 6.69k		32.9 / 6.94k		32.9 / 7.24k			
Starting current (A) (Cooling/Heating)										20.1 / 17.5		19.2 / 16.7		18.4 / 16.0			
Comp output (W)										3.00k		3.00k		3.00k			
Time Delay fuse max size (A)												40					
Network Impedance (QMAX.)																	
Fan motor output (Indoor/Outdoor) W						30						120					
Moisture removal volume				L/h		4.4		(2.2 *2)									
External static pressure				Pa													
Indoor Air flow *7	Cooling		m³/min (H/M/L)		21.0 *2 / 19.0 *2 / 16.5 *2												
	Heating		m³/min (H/M/L)		21.0 *2 / 19.0 *2 / 16.5 *2												
Outdoor Air flow	Cooling		m³/min								84.0						
	Heating		m³/min								82.0						
Refrigerant type / amount (ship) kg / amount (max) kg										R32		2.800		3.700			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)									675		1.89		2.50			
Product dimension		Height mm		295			996										
		Width mm		1060			980										
		Depth mm		249			370										
Product dimension (Panel)		H x W x D mm															
Packing dimension		Height mm		314			1134										
		Width mm		1168			1095										
		Depth mm		383			529										
Mass		(NET) kg		14			87										
		(GROSS) kg		16			95										
		Panel (NET) kg															
Layers limit (actually)				11(12)			2 (3)										
Operation condition		Cool (DBT)		18°C~32°C						-10°C~43°C							
		Heat (DBT)		16°C~30°C						-15°C~24°C							
Max Working Pressure HP/LP MPa				4.15/2.55													
Max Allowable Pressure MPa				4.15													
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)											
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)														
	Connecting method		flared type			flared type											
	Standard length m		5 m														
	Pipe length range m		5 ~ 50 m														
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)														
	Add gas amount g/m		45 g/m														
	Pipe length for additional gas m		30 m														

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR	MODEL		S-5010PK4E (71 STD) ×2									
	POS (EAN)		5025232978489									
PANEL	MODEL											
OUTDOOR	MODEL					U-140PZ3E8						
	POS (EAN)					5025232941087						
Branch pipe		MODEL		CZ-P155BK1								
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz					
		V		220V	230V	240V	380V	400V	415V	Min	Max	
COOLING	Capacity	kW		13.4	13.4	13.4	-	-	-	3.3	15.0	
		BTU/h		45700	45700	45700	-	-	-	11300	51200	
		Sensible	kW	-	-	-	-	-	-	-	-	
				Latent	kW	-	-	-	-	-	-	-
	Current		A	0.67 ×2	0.65 ×2	0.63 ×2	6.70	6.35	6.15	-	-	
	Input power		W		65 ×2	65 ×2	65 ×2	-	-	-	-	
			TOTAL W		-	-	-	4.15k	4.15k	4.15k	620	5.60k
	Annual consumption		TOTAL kWh *4		-	-	-	-	2075	-	-	
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.23	3.23 / A	3.23	5.32	2.68
	ErP *6	Pdesign	kW		-	-	-	-	13.4	-	-	-
			ηsc		-	-	-	-	247.2	-	-	-
		Annual consumption	kWh		-	-	-	-	-	-	-	-
			Class		-	-	-	-	-	-	-	-
	Power factor		%		-	-	-	94	94	94	-	-
	Noise indoor *7		dB-A (H/M/L)		47/44/40						-	-
			Power Level dB		63/60/56						-	-
Noise outdoor		dB-A (H/L)					56/-			-	-	
		Power Level dB					74/-			-	-	
HEATING	Capacity	kW		13.4	13.4	13.4	-	-	-	3.4	16.0	
		BTU/h		45700	45700	45700	-	-	-	11600	54600	
	Current		A	0.67 ×2	0.65 ×2	0.63 ×2	5.85	5.55	5.35	-	-	
	Input power		W		65 ×2	65 ×2	65 ×2	-	-	-	-	
			TOTAL W		-	-	-	3.61k	3.61k	3.61k	620	5.00k
	COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.71	3.71 / A	3.71	5.48	3.20
	ErP *6	Pdesign at -10°C	kW		-	-	-	-	13.6	-	-	-
			Tbivalent		-	-	-	-	-7	-	-	-
		ηsh	%		-	-	-	-	151.0	-	-	-
			Annual consumption	kWh		-	-	-	-	-	-	-
	elbu(-10°C)	kW		-	-	-	-	2.76	-	-	-	
		Class		-	-	-	-	-	-	-	-	-
	Power factor		%		-	-	-	94	94	94	-	-
	Noise indoor *7		dB-A (H/M/L)		47/44/40						-	-
			Power Level dB		63/60/56						-	-
	Noise outdoor		dB-A (H/L)					56/-			-	-
Power Level dB						74/-			-	-		
LOW TEMP	Total capacity(kW)								-	-		
EXTRA LOW TEMP	Total capacity(kW) *2					15.00						
Max Current (A) / Max Input power (W)		0.67/65 ×2		0.65/65 ×2		0.63/65 ×2		13.4 / 6.94k	13.4 / 7.29k	13.4 / 7.54k	-	
Starting current (A) (Cooling/Heating)		-		-		-		6.70 / 5.85	6.35 / 5.55	6.15 / 5.35	-	
Comp output (W)		-		-		-		3.00k	3.00k	3.00k	-	
Time Delay fuse max size (A)		-		-		-		20			-	
Network Impedance (QMAX.)		-		-		-					-	
Fan motor output (Indoor/Outdoor) W		-		30		-		120			-	
Moisture removal volume		L/h	4.4	(2.2 ×2)		-					-	
External static pressure		Pa	-		-					-	-	
Indoor Air flow *7	Cooling	m³/min (H/M/L)		21.0 ×2 / 19.0 ×2 / 16.5 ×2						-	-	
	Heating	m³/min (H/M/L)		21.0 ×2 / 19.0 ×2 / 16.5 ×2						-	-	
Outdoor Air flow	Cooling	m³/min		-			84.0			-	-	
	Heating	m³/min		-			82.0			-	-	
Refrigerant type / amount (ship) kg/ amount (max) kg					-		R32	2.800	3.700			
F-Gas	GWP /										-	
	CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					-		675	1.89	2.50	-	
Product dimension	Height	mm		295			996					
	Width	mm		1060			980					
	Depth	mm		249			370					
Product dimension (Panel)		H×W×D		mm			-					
Packing dimension	Height	mm		314			1134					
	Width	mm		1168			1095					
	Depth	mm		383			529					
Mass	(NET)	kg		14			87					
	(GROSS)	kg		16			95					
	Panel	kg		-								
	(NET)	kg		-								
Layers limit (actually)					11 (12)		2 (3)					
Operation condition		Cool (DBT)		18°C~32°C			-10°C~43°C					
		Heat (DBT)		16°C~30°C			-15°C ~ 24°C					
Max Working Pressure HP/LP MPa					4.15/2.55						-	
Max Allowable Pressure MPa					4.15						-	
PIPEING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)					-	
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)								-	
	Connecting method		flared type			flared type					-	
	Standard length m					5 m					-	
	Pipe length range m					5 ~ 50 m					-	
	Indoor unit & Outdoor unit height difference m					15 m (OD located lower) / 30 m (OD located higher)					-	
	Add gas amount g/m					45 g/m					-	
	Pipe length for additional gas m					30 m					-	
											-	
											-	

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (100 STD)							
PANEL		POS (EAN)		5025232978489							
		MODEL									
OUTDOOR		MODEL					U-100PZ3E5				
		POS (EAN)					5025232941032				
Branch pipe		MODEL									
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825							
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz				
		V		220V	230V	240V	220V	230V	240V	Min	Max
COOLING	Capacity	kW		9.0	9.0	9.0	-	-	-	3.0	9.7
		BTU/h		30700	30700	30700	-	-	-	10200	33100
		Sensible	kW	6.2	6.2	6.2	-	-	-	-	-
		Latent	kW	2.8	2.8	2.8	-	-	-	-	-
	Current	A		0.91	0.89	0.87	13.9	13.3	12.8	-	-
	Input power	W		90	90	90	-	-	-	-	-
		TOTAL W		-	-	-	2.79k	2.79k	2.79k	560	3.10k
	Annual consumption	TOTAL kWh *4		-	-	-	-	1395	-	-	-
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.23	3.23 / A	3.23	5.36	3.13
	ErP *6	Pdesign	kW	-	-	-	-	9.0	-	-	-
		SEER	(W/W)	-	-	-	-	6.2	-	-	-
		Annual consumption	kWh	-	-	-	-	508	-	-	-
		Class		-	-	-	-	A++	-	-	-
	Power factor	%		-	-	-	91	91	91	-	-
	Noise indoor *7	dB-A (H/M/L)		49/45/41						-	-
		Power Level dB		65/61/57						-	-
Noise outdoor	dB-A (H/L)					52/-			-	-	
	Power Level dB					70/-			-	-	
HEATING	Capacity	kW		9.0	9.0	9.0	-	-	-	3.0	10.5
		BTU/h		30700	30700	30700	-	-	-	10200	35800
	Current	A		0.91	0.89	0.87	11.8	11.3	10.8	-	-
	Input power	W		90	90	90	-	-	-	-	-
		TOTAL W		-	-	-	2.36k	2.36k	2.36k	560	2.95k
	COP/COP CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.81	3.81 / A	3.81	5.36	3.56
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	8.8	-	-	-
		Tbivalent	°C	-	-	-	-	-7	-	-	-
		SCOP	(W/W)	-	-	-	-	4.0	-	-	-
		Annual consumption	kWh	-	-	-	-	3080	-	-	-
	elbu(-10°C)	kW		-	-	-	-	1.13	-	-	-
		Class		-	-	-	-	A+	-	-	-
	Power factor	%		-	-	-	91	91	91	-	-
	Noise indoor *7	dB-A (H/M/L)		49/45/41						-	-
		Power Level dB		65/61/57						-	-
	Noise outdoor	dB-A (H/L)					52/-			-	-
		Power Level dB					70/-			-	-
LOW TEMP	Total capacity (kW)									-	
EXTRA LOW TEMP	Total capacity (kW) *2			-			9.70			-	
Max Current (A) / Max Input power (W)				0.91/90		0.89/90		0.87/90		27.9 / 5.69k	
Starting current (A) (Cooling/Heating)				-		-		-		13.9 / 11.8	
Comp output (W)				-		-		-		2.50k	
Time Delay fuse max size (A)				-		-		-		35	
Network Impedance (QMAX.)				-		-		-		-	
Fan motor output (Indoor/Outdoor) W				-		30		-		120	
Moisture removal volume				L/h		4.0		(4.0 x1)		-	
External static pressure				Pa		-		-		-	
Indoor Air flow *7	Cooling	m³/min (H/M/L)		22.5 / 20.0 / 17.5			-			-	-
	Heating	m³/min (H/M/L)		22.5 / 20.0 / 17.5			-			-	-
Outdoor Air flow	Cooling	m³/min		-			73.0			-	-
	Heating	m³/min		-			73.0			-	-
Refrigerant type / amount (ship) kg / amount (max) kg				-		R32		2.400		3.300	
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)			-		675		1.62		2.23	
Product dimension	Height	mm		295			996			-	
	Width	mm		1060			980			-	
	Depth	mm		249			370			-	
Product dimension (Panel)		H x W x D		mm		-		-		-	
Packing dimension	Height	mm		314			1134			-	
	Width	mm		1168			1095			-	
	Depth	mm		383			529			-	
Mass	(NET)	kg		14			83			-	
	(GROSS)	kg		16			91			-	
	Panel (NET)	kg		-			-			-	
Layers limit (actually)				11 (12)		2 (3)				-	
Operation condition	Cool (DBT)		18°C~32°C			-10°C~43°C			-		-
	Heat (DBT)		16°C~30°C			-15°C~24°C			-		-
Max Working Pressure HP/LP MPa				4.15/2.55						-	
Max Allowable Pressure MPa				4.15						-	
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			-		
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						-		
	Connecting method		flared type			flared type			-		
	Standard length m		5 m						-		
	Pipe length range m		5 ~ 50 m						-		
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)						-		
	Add gas amount g/m		45 g/m						-		
	Pipe length for additional gas m		30 m						-		

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (100 STD)								
PANEL		POS (EAN)		5025232978489								
		MODEL										
OUTDOOR		MODEL						U-100PZ3E8				
		POS (EAN)						5025232941049				
Branch pipe		MODEL										
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz					
		V		220V	230V	240V	380V	400V	415V	Min	Max	
COOLING	Capacity	kW		9.0	9.0	9.0	-	-	-	3.0	9.7	
		BTU/h		30700	30700	30700	-	-	-	10200	33100	
		Sensible	kW	6.2	6.2	6.2	-	-	-	-	-	
				Latent	kW	2.8	2.8	2.8	-	-	-	-
	Current	A		0.91	0.89	0.87	4.65	4.45	4.25	-	-	
	Input power	W		90	90	90	-	-	-	-	-	
		TOTAL W		-	-	-	2.79k	2.79k	2.79k	560	3.10k	
	Annual consumption		TOTAL kWh *4		-	-	-	-	1395	-	-	
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.23	3.23 / A	3.23	5.36	3.13
	ErP *6	Pdesign	kW	-	-	-	-	9.0	-	-	-	
		SEER	(W/W)	-	-	-	-	6.2	-	-	-	
		Annual consumption	kWh	-	-	-	-	508	-	-	-	
		Class	-	-	-	-	-	A++	-	-	-	
	Power factor	%		-	-	-	91	91	91	-	-	
	Noise indoor *7	dB-A (H/M/L)		49/45/41						-	-	
		Power Level dB		65/61/57						-	-	
Noise outdoor	dB-A (H/L)					52/-			-	-		
	Power Level dB					70/-			-	-		
HEATING	Capacity	kW		9.0	9.0	9.0	-	-	-	3.0	10.5	
		BTU/h		30700	30700	30700	-	-	-	10200	35800	
	Current	A		0.91	0.89	0.87	3.95	3.75	3.60	-	-	
	Input power	W		90	90	90	-	-	-	-	-	
		TOTAL W		-	-	-	2.36k	2.36k	2.36k	560	2.95k	
	COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.81	3.81 / A	3.81	5.36	3.56
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	8.8	-	-	-	
		Tbivalent	°C	-	-	-	-	-7	-	-	-	
		SCOP	(W/W)	-	-	-	-	4.0	-	-	-	
		Annual consumption	kWh	-	-	-	-	3080	-	-	-	
	elbu (-10°C)	kW		-	-	-	-	1.13	-	-	-	
		Class	-	-	-	-	-	A+	-	-	-	
	Power factor	%		-	-	-	91	91	91	-	-	
	Noise indoor *7	dB-A (H/M/L)		49/45/41						-	-	
		Power Level dB		65/61/57						-	-	
	Noise outdoor	dB-A (H/L)					52/-			-	-	
Power Level dB					70/-			-	-			
LOW TEMP	Total capacity (kW)											
EXTRA LOW TEMP	Total capacity (kW) *2						9.70					
Max Current (A) / Max Input power (W)				0.91/90	0.89/90	0.87/90	11.9 / 5.99k	11.9 / 6.29k	11.9 / 6.49k			
Starting current (A) (Cooling/Heating)				-	-	-	4.65 / 3.95	4.45 / 3.75	4.25 / 3.60			
Comp output (W)							2.50k	2.50k	2.50k			
Time Delay fuse max size (A)							15					
Network Impedance (ΩMAX)												
Fan motor output (Indoor/Outdoor) W				30			120					
Moisture removal volume L/h				4.0	(4.0 ×1)	-						
External static pressure Pa												
Indoor Air flow *7	Cooling	m³/min (H/M/L)	22.5 / 20.0 / 17.5						-	-		
	Heating	m³/min (H/M/L)	22.5 / 20.0 / 17.5						-	-		
Outdoor Air flow	Cooling	m³/min				73.0			-	-		
	Heating	m³/min				73.0			-	-		
Refrigerant type / amount (ship) kg / amount (max) kg							R32	2.400	3.300			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					675	1.62	2.23				
Product dimension	Height	mm	295			996						
	Width	mm	1060			980						
	Depth	mm	249			370						
Product dimension (Panel)		H × W × D	mm									
Packing dimension	Height	mm	314			1134						
	Width	mm	1168			1095						
	Depth	mm	383			529						
Mass	(NET)	kg	14			83						
	(GROSS)	kg	16			91						
	Panel (NET)	kg										
Layers limit (actually)				11 (12)			2 (3)					
Operation condition	Cool (DBT)	18°C~32°C						-10°C~43°C			-	
	Heat (DBT)	16°C~30°C						-15°C~24°C			-	
Max Working Pressure HP/LP MPa				4.15/2.55								
Max Allowable Pressure MPa				4.15								
PIPEING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)									
	Connecting method		flared type			flared type						
	Standard length m		5 m									
	Pipe length range m		5 ~ 50 m									
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)									
	Add gas amount g/m		45 g/m									
	Pipe length for additional gas m		30 m									

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season. Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-6010PK3E (60)									
PANEL		POS (EAN)		5025232914937									
		MODEL											
OUTDOOR		MODEL					U-60PZ3E5A						
		POS (EAN)					5025232920884						
Branch pipe		MODEL											
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825									
COOLING	Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz					
			V		220V	230V	240V	220V	230V	240V	Min	Max	
	Capacity		kW		6.1	6.1	6.1	-	-	-	2.0	7.1	
			BTU/h		20800	20800	20800	-	-	-	6800	24200	
			Sensible		4.8	4.8	4.8	-	-	-	-	-	
			Latent		1.3	1.3	1.3	-	-	-	-	-	
	Current		A		-	-	-	7.70	7.35	7.05	-	-	
	Input power		W		-	-	-	-	-	-	-	-	
			TOTAL W		-	-	-	1.66k	1.66k	1.66k	290	2.36k	
	Annual consumption		TOTAL kWh *4		-	-	-	-	830	-	-	-	
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.67	3.67 / A	3.67	6.90	3.01	
	ErP *6	Pdesign		kW		-	-	-	-	6.1	-	-	
		SEER		(W/W)		-	-	-	-	7.0	-	-	
		Annual consumption		kWh		-	-	-	-	305	-	-	
		Class				-	-	-	-	A++	-	-	
		Power factor		%		-	-	-	98	98	98	-	-
		Noise indoor *7		dB-A (H/M/L)		47/44/40						-	-
			Power Level dB		63/60/56						-	-	
	Noise outdoor		dB-A (H/L)					47/-			-	-	
			Power Level dB					64/-			-	-	
HEATING	Capacity		kW		6.1	6.1	6.1	-	-	-	1.8	7.0	
			BTU/h		20800	20800	20800	-	-	-	6100	23900	
	Current		A		-	-	-	6.45	6.15	5.90	-	-	
	Input power		W		-	-	-	-	-	-	-	-	
			TOTAL W		-	-	-	1.39k	1.39k	1.39k	240	2.20k	
	COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.39	4.39 / A	4.39	7.50	3.18	
	ErP *6	Pdesign at -10°C		kW		-	-	-	-	4.6	-	-	
		Tbivalent		°C		-	-	-	-	-10	-	-	
		SCOP		(W/W)		-	-	-	-	4.7	-	-	
		Annual consumption		kWh		-	-	-	-	1370	-	-	
		elbu (-10°C)		kW		-	-	-	-	0.00	-	-	
		Class				-	-	-	-	A++	-	-	
	Power factor		%		-	-	-	98	98	98	-	-	
	Noise indoor *7		dB-A (H/M/L)		47/44/40						-	-	
			Power Level dB		63/60/56						-	-	
	Noise outdoor		dB-A (H/L)					48/-			-	-	
			Power Level dB					65/-			-	-	
LOW TEMP	Total capacity (kW) / Input power (W) / COP						-	-	-				
EXTRA LOW TEMP	Total capacity (kW) / Input power (W) / COP						-	-	-				
Max Current (A) / Max Input power (W)							13.1 / 2.60k	13.1 / 2.65k	13.1 / 2.70k				
Starting current (A) (Cooling/Heating)							7.70 / 6.45	7.35 / 6.15	7.05 / 5.90				
Comp output (W)							1.70k	1.70k	1.70k				
Time Delay fuse max size (A)							20						
Network Impedance (ZMAX.)													
Fan motor output (Indoor/Outdoor) W				54			40						
Moisture removal volume				L/h		2.0	(2.0 × 1)						
External static pressure				Pa									
Indoor Air flow *7	Cooling		m³/min (H/M/L)		20.0 / 17.5 / 14.5						-	-	
	Heating		m³/min (H/M/L)		20.0 / 17.5 / 14.5						-	-	
Outdoor Air flow	Cooling		m³/min					42.6			-	-	
	Heating		m³/min					41.5			-	-	
Refrigerant type / amount (ship) kg / amount (max) kg							R32	1.150	1.300				
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)						675	0.78	0.88				
Product dimension		Height	mm	302			695						
		Width	mm	1120			875						
		Depth	mm	236			320						
Product dimension (Panel)		H × W × D	mm										
Packing dimension		Height	mm	282			761						
		Width	mm	1190			1049						
		Depth	mm	378			460						
Mass	(NET)		kg	14			42						
	(GROSS)		kg	17			46						
	Panel (NET)		kg										
Layers limit (actually)				11 (12)			3(4)						
Operation condition		Cool (DBT)		18°C~32°C			-10°C ~ 43°C						
		Heat (DBT)		16°C~30°C			-15°C ~ 24°C						
Max Working Pressure HP/LP MPa				4.15/2.55									
Max Allowable Pressure MPa				4.55									
PIPING	Pipe port diameter mm (inch)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)						
	Pipe diameter mm (inch)			(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)									
				*Connect the gas socket tube (Ø12.7-Ø15.88) to the gas tubing side indoor unit									
				*Connect the liquid socket tube (Ø6.35-Ø9.52) to the liquid tubing side indoor unit									
	Connecting method			flared type			flared type						
	Standard length m			5 m									
	Pipe length range m			3 ~ 40 m									
	Indoor unit & Outdoor unit height difference m			15 m (OD located lower) / 30 m (OD located higher)									
Add gas amount g/m				15 g/m									
Pipe length for additional gas m				30 m									

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-2545PK4E (25) *2						-		-					
PANEL		POS (EAN)		5025232978472						-		-					
		MODEL		-						-		-					
OUTDOOR		MODEL		-						U-50PZH3E5		-					
		POS (EAN)		-						5025232915514		-					
Branch pipe		MODEL					CZ-P155BK1						-				
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825													
COOLING	Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz									
	Capacity		V		220V	230V	240V	220V	230V	240V	Min	Max					
			kW		5.0	5.0	5.0	-	-	-	1.2	5.6					
			BTU/h		17100	17100	17100	-	-	-	4100	19100					
			Sensible Latent kW kW		-	-	-	-	-	-	-	-					
	Current		A		0.29 *2	0.28 *2	0.27 *2	5.80	5.55	5.30	-	-					
	Input power		W		28 *2	28 *2	28 *2	-	-	-	-	-					
	Annual consumption		TOTAL W		-	-	-	1.22k	1.22k	1.22k	220	1.85k					
			TOTAL kWh *4		-	-	-	-	610	-	-	-					
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.10	4.10 / A	4.10	5.45	3.03					
	ErP *6	Pdesign		kW		-	-	-	-	5.0	-	-	-				
		SEER		(W/W)		-	-	-	-	8.0	-	-	-				
		Annual consumption		kWh		-	-	-	-	219	-	-	-				
		Class				-	-	-	-	A++	-	-	-				
	Power factor		%		-	-	-	96	96	96	-	-	-				
	Noise indoor *7		dB-A (H/M/L)		39/34/29						-		-				
		Power Level dB		55/50/45						-		-					
Noise outdoor		dB-A (H/L)		-						46/-		-					
		Power Level dB		-						64/-		-					
HEATING	Capacity		kW		5.6	5.6	5.6	-	-	-	1.2	6.5					
			BTU/h		19100	19100	19100	-	-	-	4100	22200					
	Current		A		0.29 *2	0.28 *2	0.27 *2	6.60	6.30	6.05	-	-					
	Input power		W		28 *2	28 *2	28 *2	-	-	-	-	-					
			TOTAL W		-	-	-	1.39k	1.39k	1.39k	220	2.10k					
	COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.03	4.03 / A	4.03	5.45	3.10					
	ErP *6	Pdesign at -10°C		kW		-	-	-	-	4.5	-	-	-				
		Tbivalent		°C		-	-	-	-	-10	-	-	-				
		SCOP		(W/W)		-	-	-	-	4.6	-	-	-				
		Annual consumption		kWh		-	-	-	-	1369	-	-	-				
		elbu (-10°C)		kW		-	-	-	-	-	-	-	-				
			Class				-	-	-	-	-	-	-				
	Power factor		%		-	-	-	96	96	96	-	-	-				
	Noise indoor *7		dB-A (H/M/L)		39/34/29						-		-				
			Power Level dB		55/50/45						-		-				
	Noise outdoor		dB-A (H/L)		-						48/-		-				
		Power Level dB		-						67/-		-					
LOW TEMP	Total capacity(kW)			-			-			-			-				
EXTRA LOW TEMP	Total capacity(kW) *2			-			5.00			-			-				
Max Current (A) / Max Input power (W)				0.29/28 *2		0.28/28 *2		0.27/28 *2		12.0 / 2.46k		12.0 / 2.57k		12.0 / 2.68k			
Starting current (A) (Cooling/Heating)				-		-		-		5.80 / 6.60		5.55 / 6.30		5.30 / 6.05			
Comp output (W)				-		-		-		0.90k		0.90k		0.90k			
Time Delay fuse max size (A)				-		-		-		20		-		-			
Network Impedance (QMAX)				-		-		-		-		-		-			
Fan motor output (Indoor/Outdoor) W				-		30		-		40		-		-			
Moisture removal volume				L/h		0.8		(0.4 *2)		-		-		-			
External static pressure				Pa		-		-		-		-		-			
Indoor	Cooling	m³/min (H/M/L)		10.5 *2 / 9.0 *2 / 7.0 *2			-			-		-		-			
Air flow *7	Heating	m³/min (H/M/L)		10.5 *2 / 9.0 *2 / 7.0 *2			-			-		-		-			
Outdoor	Cooling	m³/min		-			-			42.0		-		-			
Air flow	Heating	m³/min		-			-			42.0		-		-			
Refrigerant type / amount (ship) kg / amount (max) kg				-			R32		1.130		1.280		-		-		
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)			-			675		0.76		0.86		-		-		
Product dimension		Height	mm	290			695			-			-		-		
		Width	mm	765			875			-			-		-		
		Depth	mm	214			320			-			-		-		
Product dimension (Panel)		H x W x D	mm	-			-			-			-		-		
Packing dimension		Height	mm	260			761			-			-		-		
		Width	mm	847			1049			-			-		-		
		Depth	mm	364			460			-			-		-		
Mass		(NET)	kg	9			42			-			-		-		
		(GROSS)	kg	10			46			-			-		-		
		Panel (NET)	kg	-			-			-			-		-		
Layers limit (actually)				11 (12)			3(4)			-			-		-		
Operation condition		Cool (DBT)	18°C~32°C			-			-15°C~46°C			-		-		-	
		Heat (DBT)	16°C~30°C			-			-20°C~24°C			-		-		-	
Max Working Pressure HP/LP MPa				4.15/2.55			-			-			-		-		
Max Allowable Pressure MPa				4.55			-			-			-		-		
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			-			-		-		-	
	Pipe diameter mm (inch)		(Liquid) Ø6.35(1/4) (Gas) Ø12.7(1/2)			-			-			-		-		-	
	Connecting method		flared type			flared type			-			-		-		-	
	Standard length m		5 m			-			-			-		-		-	
	Pipe length range m		3 ~ 40 m			-			-			-		-		-	
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)			-			-			-		-		-	
	Add gas amount g/m		15 g/m			-			-			-		-		-	
	Pipe length for additional gas m		30 m			-			-			-		-		-	
						-			-			-		-		-	

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-2545PK4E (25) ×3								
PANEL		POS (EAN)		5025232978472								
		MODEL										
OUTDOOR		MODEL					U-71PZH4E5					
		POS (EAN)					5025232945429					
Branch pipe		MODEL					CZ-P3HPC2					
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz					
COOLING	Capacity	V		220V	230V	240V	220V	230V	240V	Min	Max	
		kW		7.1	7.1	7.1	-	-	-	2.2	9.0	
		BTU/h		24200	24200	24200	-	-	-	7500	30700	
		Sensible	kW	-	-	-	-	-	-	-	-	
	Latent	kW	-	-	-	-	-	-	-	-		
	Current	A		0.29 ×3	0.28 ×3	0.27 ×3	9.55	9.15	8.75	-	-	
	Input power	W		28 ×3	28 ×3	28 ×3	-	-	-	-	-	
		TOTAL W		-	-	-	1.89k	1.89k	1.89k	380	3.35k	
	Annual consumption	TOTAL kWh *4		-	-	-	-	945	-	-	-	
	EER/EER CLASS	TOTAL (W/W) *5/ (*A~*G*)		-	-	-	3.76	3.76 / A	3.76	5.79	2.69	
	ErP *6	Pdesign	kW	-	-	-	-	7.1	-	-	-	
		SEER	(W/W)	-	-	-	-	6.6	-	-	-	
		Annual consumption	kWh	-	-	-	-	377	-	-	-	
		Class	-	-	-	-	-	A++	-	-	-	
	Power factor	%		-	-	-	90	90	90	-	-	
	Noise indoor *7	dB-A (H/M/L)		39/34/29						-	-	
Power Level dB		55/50/45						-	-			
dB-A (H/L)					48/-			-	-			
Power Level dB					65/-			-	-			
Noise outdoor									-	-		
									-	-		
									-	-		
									-	-		
HEATING	Capacity	kW		7.8	7.8	7.8	-	-	-	2.0	9.0	
		BTU/h		26600	26600	26600	-	-	-	6800	30700	
	Current	A		0.29 ×3	0.28 ×3	0.27 ×3	9.85	9.40	9.05	-	-	
	Input power	W		28 ×3	28 ×3	28 ×3	-	-	-	-	-	
		TOTAL W		-	-	-	1.95k	1.95k	1.95k	360	2.85k	
	COP/COP CLASS	TOTAL (W/W) *5/ (*A~*G*)		-	-	-	4.00	4.00 / A	4.00	5.56	3.16	
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	5.2	-	-	-	
		Tbivalent	°C	-	-	-	-	-10	-	-	-	
		SCOP	(W/W)	-	-	-	-	4.6	-	-	-	
		Annual consumption	kWh	-	-	-	-	1583	-	-	-	
	elbu (-10°C)	kW		-	-	-	-	-	-	-	-	
		Class		-	-	-	-	A++	-	-	-	
	Power factor	%		-	-	-	90	90	90	-	-	
	Noise indoor *7	dB-A (H/M/L)		39/34/29						-	-	
		Power Level dB		55/50/45						-	-	
		dB-A (H/L)					50/-			-	-	
Power Level dB					67/-			-	-			
LOW TEMP	Total capacity(kW)											
EXTRA LOW TEMP	Total capacity(kW) *2						5.80					
Max Current (A) / Max Input power (W)				0.29/28 ×3	0.28/28 ×3	0.27/28 ×3	20.4 / 4.07k	20.4 / 4.22k	20.4 / 4.42k			
Starting current (A) (Cooling/Heating)				-	-	-	9.55 / 9.85	9.15 / 9.40	8.75 / 9.05			
Comp output (W)				-	-	-	2.00k	2.00k	2.00k			
Time Delay fuse max size (A)				-	-	-	25					
Network Impedance (QMAX.)				-	-	-						
Fan motor output (Indoor/Outdoor) W				-	30	-	120					
Moisture removal volume				L/h	1.2	(0.4 ×3)						
External static pressure				Pa								
Indoor Air flow *7	Cooling	m³/min (H/M/L)		10.5 ×3 / 9.0 ×3 / 7.0 ×3						-	-	
	Heating	m³/min (H/M/L)		10.5 ×3 / 9.0 ×3 / 7.0 ×3						-	-	
	Cooling	m³/min					62.0			-	-	
	Heating	m³/min					66.0			-	-	
Refrigerant type / amount (ship) kg / amount (max) kg							R32	1.950	2.850			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)						675	1.32	1.92			
Product dimension	Height	mm		290			996					
	Width	mm		765			980					
	Depth	mm		214			370					
Product dimension (Panel)		H × W × D										
Packing dimension	Height	mm		260			1134					
	Width	mm		847			1095					
	Depth	mm		364			529					
	(NET)	kg		9			66					
Mass	(GROSS)	kg		10			74					
	Panel	kg										
	(NET)	kg										
Layers limit (actually)				11 (12)			1 (2)					
Operation condition	Cool (DBT)		18°C-32°C			-15°C-52°C						
	Heat (DBT)		16°C-30°C			-20°C ~ 24°C						
Max Working Pressure HP/LP MPa				4.15/2.55								
Max Allowable Pressure MPa				4.15								
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)									
	Connecting method		flared type			flared type						
	Standard length m		5 m									
	Pipe length range m		5 ~ 60 m									
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)									
	Add gas amount g/m		30 g/m									
	Pipe length for additional gas m		30 m									

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-2545PK4E (25) *3									
PANEL		POS (EAN)		5025232978472									
		MODEL											
OUTDOOR		MODEL					U-71PZH4E8						
		POS (EAN)					5025232945436						
Branch pipe		MODEL					CZ-P3HPC2						
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825									
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz						
		V		220V	230V	240V	380V	400V	415V	Min	Max		
COOLING	Capacity	kW		7.1	7.1	7.1	-	-	-	2.2	9.0		
		BTU/h		24200	24200	24200	-	-	-	7500	30700		
		Sensible	kW	-	-	-	-	-	-	-	-		
				-	-	-	-	-	-	-			
	Current	A		0.29 *3	0.28 *3	0.27 *3	3.20	3.05	2.90	-	-		
	Input power	W		28 *3	28 *3	28 *3	-	-	-	-	-		
		TOTAL W		-	-	-	1.89k	1.89k	1.89k	380	3.35k		
	Annual consumption	TOTAL kWh *4		-	-	-	-	945	-	-	-		
	EER/EER CLASS	TOTAL (W/W) *5/ (°A~°G°)		-	-	-	3.76	3.76 / A	3.76	5.79	2.69		
	ErP *6	Pdesign	kW	-	-	-	-	7.1	-	-	-		
		SEER	(W/W)	-	-	-	-	6.6	-	-	-		
		Annual consumption	kWh	-	-	-	-	377	-	-	-		
		Class		-	-	-	-	A++	-	-	-		
		Power factor	%	-	-	-	90	90	90	-	-		
		Noise indoor *7	dB-A (H/M/L)		39/34/29			-			-	-	
Power Level dB			55/50/45			-			-	-			
dB-A (H/L)			-			48/-			-	-			
Power Level dB			-			65/-			-	-			
HEATING	Capacity	kW		7.8	7.8	7.8	-	-	-	2.0	9.0		
		BTU/h		26600	26600	26600	-	-	-	6800	30700		
		A		0.29 *3	0.28 *3	0.27 *3	3.30	3.15	3.00	-	-		
		W		28 *3	28 *3	28 *3	-	-	-	-	-		
	Input power	TOTAL W		-	-	-	1.95k	1.95k	1.95k	360	2.85k		
	COP/COP CLASS	TOTAL (W/W) *5/ (°A~°G°)		-	-	-	4.00	4.00 / A	4.00	5.56	3.16		
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	5.2	-	-	-		
		Tbivalent	°C	-	-	-	-	-10	-	-	-		
		SCOP	(W/W)	-	-	-	-	4.6	-	-	-		
		Annual consumption	kWh	-	-	-	-	1583	-	-	-		
		elbu (-10°C)	kW	-	-	-	-	-	-	-	-		
		Class		-	-	-	-	A++	-	-	-		
	Power factor	%	-	-	-	90	90	90	-	-			
	Noise indoor *7	dB-A (H/M/L)		39/34/29			-			-	-		
		Power Level dB		55/50/45			-			-	-		
dB-A (H/L)		-			50/-			-	-				
Power Level dB		-			67/-			-	-				
LOW TEMP	Total capacity(kW)		-			-			-				
EXTRA LOW TEMP	Total capacity(kW) *2		-			5.80			-				
Max Current (A) / Max Input power (W)				0.29/28 *3	0.28/28 *3	0.27/28 *3	6.90 / 4.17k	6.90 / 4.32k	6.90 / 4.47k	-			
Starting current (A) (Cooling/Heating)				-	-	-	3.20 / 3.30	3.05 / 3.15	2.90 / 3.00	-			
Comp output (W)				-	-	-	2.00k	2.00k	2.00k	-			
Time Delay fuse max size (A)				-	-	-	-	15	-	-			
Network Impedance (QMAX)				-	-	-	-	-	-	-			
Fan motor output (Indoor/Outdoor) W				-	30	-	-	120	-	-			
Moisture removal volume				L/h	1.2	(0.4 *3)	-	-	-	-			
External static pressure				Pa	-	-	-	-	-	-			
Indoor Air flow *7	Cooling	m³/min (H/M/L)	10.5 *3 / 9.0 *3 / 7.0 *3			-			-	-	-		
	Heating	m³/min (H/M/L)	10.5 *3 / 9.0 *3 / 7.0 *3			-			-	-	-		
	Cooling	m³/min	-			62.0			-	-	-		
Outdoor Air flow	Cooling	m³/min	-			66.0			-	-	-		
	Heating	m³/min	-			-			-	-	-		
Refrigerant type / amount(ship) kg/ amount(max) kg				-			R32	1.950	2.850	-			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)		-			675	1.32	1.92	-				
Product dimension	Height	mm	290			996			-				
	Width	mm	765			980			-				
	Depth	mm	214			370			-				
Product dimension (Panel)		H * W * D	mm			-			-				
Packing dimension	Height	mm	260			1134			-				
	Width	mm	847			1095			-				
	Depth	mm	364			529			-				
Mass	(NET)	kg	9			66			-				
	(GROSS)	kg	10			74			-				
	Panel (NET)	kg	-			-			-				
Layers limit (actually)				11 (12)			1 (2)			-			
Operation condition		Cool (DBT)	18°C~32°C			-15°C~52°C			-				
		Heat (DBT)	16°C~30°C			-20°C ~ 24°C			-				
Max Working Pressure HP/LP MPa				4.15/2.55			-			-			
Max Allowable Pressure MPa				4.15			-			-			
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			-				
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			-			-				
	Connecting method		flared type			flared type			-				
	Standard length m		5 m			-			-				
	Pipe length range m		5 ~ 60 m			-			-				
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)			-			-				
	Add gas amount g/m		30 g/m			-			-				
	Pipe length for additional gas m		30 m			-			-				

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-2545PK4E (25) x4									
		POS (EAN)		5025232978472									
PANEL		MODEL											
		MODEL											
OUTDOOR		MODEL					U-100PZH4E5						
		POS (EAN)					5025232945368						
Branch pipe		MODEL					CZ-P155BK1x3						
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825									
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz						
		V		220V	230V	240V	220V	230V	240V	Min	Max		
COOLING	Capacity	kW		9.5	9.5	9.5	-	-	-	3.1	10.5		
		BTU/h		32400	32400	32400	-	-	-	10600	35800		
		Sensible	kW	-	-	-	-	-	-	-	-		
				Latent	kW	-	-	-	-	-	-	-	
	Current	A		0.29 x4	0.28 x4	0.27 x4	13.8	13.2	12.6	-	-		
	Input power	W		28 x4	28 x4	28 x4	-	-	-	-	-		
		TOTAL W		-	-	-	2.79k	2.79k	2.79k	580	3.40k		
	Annual consumption	TOTAL kWh *4		-	-	-	-	1395	-	-	-		
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.41	3.41 / A	3.41	5.34	3.09		
	ErP *6	Pdesign	kW	-	-	-	-	9.5	-	-	-		
		SEER	(W/W)	-	-	-	-	6.6	-	-	-		
		Annual consumption	kWh	-	-	-	-	504	-	-	-		
		Class		-	-	-	-	A++	-	-	-		
	Power factor	%		-	-	-	92	92	92	-	-		
	Noise indoor *7	dB-A (H/M/L)		39/34/29						-	-		
Power Level dB		55/50/45						-	-				
dB-A (H/L)					52/-			-	-				
Power Level dB					69/-			-	-				
HEATING	Capacity	kW		9.5	9.5	9.5	-	-	-	3.1	11.5		
		BTU/h		32400	32400	32400	-	-	-	10600	39200		
		A		0.29 x4	0.28 x4	0.27 x4	12.1	11.5	11.1	-	-		
		W		28 x4	28 x4	28 x4	-	-	-	-	-		
	Input power	TOTAL W		-	-	-	2.44k	2.44k	2.44k	580	3.83k		
		COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")	-	-	-	3.89	3.89 / A	3.89	5.34	3.00	
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	8.0	-	-	-		
		Tbivalent	°C	-	-	-	-	-10	-	-	-		
		SCOP	(W/W)	-	-	-	-	4.1	-	-	-		
		Annual consumption	kWh	-	-	-	-	2731	-	-	-		
	Noise indoor *7	elbu (-10°C)		kW	-	-	-	-	-	-	-		
		Class			-	-	-	A+	-	-	-		
		Power factor	%		-	-	-	92	92	92	-	-	
		dB-A (H/M/L)		39/34/29						-	-		
	Noise indoor *7	Power Level dB		55/50/45						-	-		
dB-A (H/L)					52/-			-	-				
Power Level dB					69/-			-	-				
Power Level dB								-	-				
LOW TEMP	Total capacity (kW)								-	-			
EXTRA LOW TEMP	Total capacity (kW) *2					8.90			-	-			
Max Current (A) / Max Input power (W)				0.29/28 x4	0.28/28 x4	0.27/28 x4	28.3 / 5.80k	28.3 / 6.00k	28.3 / 6.25k				
Starting current (A) (Cooling/Heating)				-	-	-	13.8 / 12.1	13.2 / 11.5	12.6 / 11.1				
Comp output (W)				-	-	-	2.50k	2.50k	2.50k				
Time Delay fuse max size (A)				-	-	-	-	35	-				
Network Impedance (QMAX.)				-	-	-	-	-	-				
Fan motor output (Indoor/Outdoor) W				-	30	-	-	120	-				
Moisture removal volume				L/h	1.6	(0.4 x4)	-	-	-				
External static pressure				Pa	-	-	-	-	-				
Indoor Air flow *7	Cooling	m³/min (H/M/L)		10.5 x4 / 9.0 x4 / 7.0 x4						-	-		
	Heating	m³/min (H/M/L)		10.5 x4 / 9.0 x4 / 7.0 x4						-	-		
Outdoor Air flow	Cooling	m³/min					76.0			-	-		
	Heating	m³/min					70.0			-	-		
Refrigerant type / amount (ship) kg / amount (max) kg							R32	2.700	5.975				
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					675	1.82	4.03					
	CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					-	-	-					
Product dimension		Height	mm	290			996						
		Width	mm	765			980						
		Depth	mm	214			370						
Product dimension (Panel)		H x W x D	mm										
Packing dimension		Height	mm	260			1134						
		Width	mm	847			1095						
		Depth	mm	364			529						
		(NET)	kg	9			84						
Mass	(GROSS)	kg	10			92							
	Panel	kg											
	(NET)	kg											
Layers limit (actually)		11 (12)			1 (2)								
Operation condition		Cool (DBT)	18°C~32°C			-15°C (*8-20°C)~52°C							
		Heat (DBT)	16°C~30°C			-20°C ~24°C							
Max Working Pressure HP/LP MPa				4.15/2.55									
Max Allowable Pressure MPa				4.15									
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)							
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)										
	Connecting method		flared type			flared type							
	Standard length m		5 m										
	Pipe length range m		5 ~ 100 m										
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)										
	Add gas amount (20~85)g/m		40 g/m										
	Add gas amount (85~100)g/m		40 g/m										
	Pipe length for additional gas m		20 m										

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V(400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-2545PK4E (25) x4						-	-	
PANEL		POS (EAN)		5025232978472						-	-	
		MODEL								-	-	
OUTDOOR		MODEL					U-100PZH4E8			-	-	
		POS (EAN)					5025232945375			-	-	
Branch pipe		MODEL					CZ-P155BK1x3			-	-	
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz					
COOLING	Capacity	V		220V	230V	240V	380V	400V	415V	Min	Max	
		kW		9.5	9.5	9.5	-	-	-	3.1	10.5	
		BTU/h		32400	32400	32400	-	-	-	10600	35800	
		Sensible	kW	-	-	-	-	-	-	-	-	
	Current	Latent		kW	-	-	-	-	-	-	-	
		A		0.29 x4	0.28 x4	0.27 x4	4.65	4.45	4.20	-	-	
	Input power	W		28 x4	28 x4	28 x4	-	-	-	-	-	
		TOTAL W		-	-	-	2.79k	2.79k	2.79k	580	3.40k	
	Annual consumption		TOTAL kWh *4		-	-	-	-	1395	-	-	
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.41	3.41 / A	3.41	5.34	3.09
	ErP *6	Pdesign		kW	-	-	-	-	9.5	-	-	-
		SEER		(W/W)	-	-	-	-	6.6	-	-	-
		Annual consumption		kWh	-	-	-	-	504	-	-	-
		Class		-	-	-	-	A++	-	-	-	-
	Power factor		%		-	-	-	91	91	92	-	-
	Noise indoor *7	dB-A (H/M/L)		39/34/29						-	-	-
		Power Level dB		55/50/45						-	-	-
	Noise outdoor	dB-A (H/L)					52/-			-	-	-
		Power Level dB					69/-			-	-	-
HEATING	Capacity	kW		9.5	9.5	9.5	-	-	-	3.1	11.5	
		BTU/h		32400	32400	32400	-	-	-	10600	39200	
	Current	A		0.29 x4	0.28 x4	0.27 x4	4.05	3.85	3.70	-	-	
		W		28 x4	28 x4	28 x4	-	-	-	-	-	
	Input power	TOTAL W		-	-	-	2.44k	2.44k	2.44k	580	3.83k	
		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.89	3.89 / A	3.89	5.34	3.00	
	ErP *6	Pdesign at -10°C		kW	-	-	-	-	8.0	-	-	-
		Tbivalent		°C	-	-	-	-	-10	-	-	-
		SCOP		(W/W)	-	-	-	-	4.1	-	-	-
		Annual consumption		kWh	-	-	-	-	2731	-	-	-
	elbu (-10°C)	kW		-	-	-	-	-	-	-	-	-
		Class		-	-	-	-	A+	-	-	-	-
	Power factor		%		-	-	-	91	91	92	-	-
	Noise indoor *7	dB-A (H/M/L)		39/34/29						-	-	-
		Power Level dB		55/50/45						-	-	-
	Noise outdoor	dB-A (H/L)					52/-			-	-	-
		Power Level dB					69/-			-	-	-
	LOW TEMP	Total capacity (kW)									-	-
EXTRA LOW TEMP	Total capacity (kW) *2						8.90			-	-	
Max Current (A) / Max Input power (W)				0.29/28 x4	0.28/28 x4	0.27/28 x4	9.90 / 6.05k	9.90 / 6.30k	9.90 / 6.50k	-	-	
Starting current (A) (Cooling/Heating)				-	-	-	4.65 / 4.05	4.45 / 3.85	4.20 / 3.70	-	-	
Comp output (W)				-	-	-	2.50k	2.50k	2.50k	-	-	
Time Delay fuse max size (A)				-	-	-	-	15	-	-	-	
Network Impedance (ΩMAX)				-	-	-	-	-	-	-	-	
Fan motor output (Indoor/Outdoor) W				-	30	-	-	120	-	-	-	
Moisture removal volume				L/h	1.6	(0.4 x4)	-	-	-	-	-	
External static pressure				Pa	-	-	-	-	-	-	-	
Indoor Air flow *7	Cooling	m³/min (H/M/L)		10.5 x4 / 9.0 x4 / 7.0 x4						-	-	
	Heating	m³/min (H/M/L)		10.5 x4 / 9.0 x4 / 7.0 x4						-	-	
Outdoor Air flow	Cooling	m³/min					76.0			-	-	
	Heating	m³/min					70.0			-	-	
Refrigerant type / amount (ship) kg / amount (max) kg							R32	2.700	5.975	-	-	
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)						675	1.82	4.03	-	-	
										-	-	
Product dimension	Height	mm		290			996			-	-	
		mm		765			980			-	-	
		mm		214			370			-	-	
Product dimension (Panel)		H x W x D		mm						-	-	
Packing dimension	Height	mm		260			1134			-	-	
		mm		847			1095			-	-	
		mm		364			529			-	-	
		(NET) kg		9			82			-	-	
Mass	(GROSS)		kg		10		90		-	-	-	
	Panel		kg						-	-	-	
	(NET)		kg						-	-	-	
Layers limit (actually)				11 (12)			1 (2)			-	-	
Operation condition	Cool (DBT)		18°C~32°C			-15°C (*8~20°C)~52°C			-	-	-	
	Heat (DBT)		16°C~30°C			-20°C ~ 24°C			-	-	-	
Max Working Pressure HP/LP MPa				4.15/2.55						-	-	
Max Allowable Pressure MPa				4.15						-	-	
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			-	-	-	
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						-	-	-	
	Connecting method		flared type			flared type			-	-	-	
	Standard length m		5 m						-	-	-	
	Pipe length range m		5 ~ 100 m						-	-	-	
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)						-	-	-	
	Add gas amount (20~85)g/m		40 g/m						-	-	-	
	Add gas amount (85~100)g/m		40 g/m						-	-	-	
	Pipe length for additional gas m		20 m						-	-	-	

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V(400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-2545PK4E (36)						-			-								
PANEL		POS (EAN)		5025232978472						-			-								
		MODEL		-						-			-								
OUTDOOR		MODEL		-						U-36PZH3E5			-								
		POS (EAN)		-						5025232915507			-								
Branch pipe		MODEL																			
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825																	
COOLING		Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz		240V		Min		Max						
				V		220V		230V		240V		220V		230V		240V					
		Capacity		kW		3.5		3.5		3.5		-		-		1.2		4.0			
				BTU/h		11900		11900		11900		-		-		4100		13600			
				Sensible kW		2.8		2.8		2.8		-		-		-		-			
				Latent kW		0.7		0.7		0.7		-		-		-		-			
		Current		A		0.34		0.33		0.32		3.90		3.75		3.60		-			
		Input power		W		33		33		33		-		-		-		-			
				TOTAL W		-		-		-		0.790k		0.790k		0.790k		220		0.96k	
		Annual consumption		TOTAL kWh *4		-		-		-		-		395		-		-		-	
		EER/EER CLASS		TOTAL (W/W) *5/ ('A'~'G')		-		-		-		4.43		4.43 / A		4.43		5.45		4.17	
		ErP *6		Pdesign kW		-		-		-		-		3.5		-		-		-	
				SEER (W/W)		-		-		-		-		7.7		-		-		-	
				Annual consumption kWh		-		-		-		-		160		-		-		-	
				Class		-		-		-		-		A++		-		-		-	
		Power factor		%		-		-		-		92		92		92		-		-	
Noise indoor *7		dB-A (H/M/L)		-		41/36/30		-		-		92		92		92		-			
		Power Level dB		-		57/52/46		-		-		-		-		-		-			
Noise outdoor		dB-A (H/L)		-		-		-		-		43/-		-		-		-			
		Power Level dB		-		-		-		-		62/-		-		-		-			
HEATING		Capacity		kW		4.0		4.0		4.0		-		-		1.2		5.0			
				BTU/h		13600		13600		13600		-		-		4100		17100			
		Current		A		0.34		0.33		0.32		4.60		4.40		4.20		-			
		Input power		W		33		33		33		-		-		-		-			
				TOTAL W		-		-		-		0.940k		0.940k		0.940k		220		1.50k	
		COP/COP CLASS		TOTAL (W/W) *5/ ('A'~'G')		-		-		-		4.26		4.26 / A		4.26		5.45		3.33	
		ErP *6		Pdesign at -10°C kW		-		-		-		-		3.1		-		-		-	
				Tbivalent °C		-		-		-		-		-10		-		-		-	
				SCOP (W/W)		-		-		-		-		4.7		-		-		-	
				Annual consumption kWh		-		-		-		-		924		-		-		-	
				elbu (-10°C) kW		-		-		-		-		-		-		-		-	
				Class		-		-		-		-		A++		-		-		-	
		Power factor		%		-		-		-		93		93		93		-		-	
		Noise indoor *7		dB-A (H/M/L)		-		41/36/30		-		-		-		-		-		-	
				Power Level dB		-		57/52/46		-		-		-		-		-		-	
		Noise outdoor		dB-A (H/L)		-		-		-		-		44/-		-		-		-	
Power Level dB				-		-		-		-		64/-		-		-		-			
LOW TEMP	Total capacity (kW)				-		-		-		-		-		-		-				
EXTRA LOW TEMP	Total capacity (kW) *2				-		-		-		3.40		-		-		-				
Max Current (A) / Max Input power (W)				0.34/33		0.33/33		0.32/33		11.0 / 2.20k		11.0 / 2.30k		11.0 / 2.40k		-		-			
Starting current(A) (Cooling/Heating)				-		-		-		3.90 / 4.60		3.75 / 4.40		3.60 / 4.20		-		-			
Comp output (W)				-		-		-		0.90k		0.90k		0.90k		-		-			
Time Delay fuse max size (A)				-		-		-		-		20		-		-		-			
Network Impedance (QMAX.)				-		-		-		-		-		-		-		-			
Fan motor output (Indoor/Outdoor) W				-		30		-		-		40		-		-		-			
Moisture removal volume L/h				1.0		(1.0 ×1)		-		-		-		-		-		-			
External static pressure Pa				-		-		-		-		-		-		-		-			
Indoor Air flow *7	Cooling	m³/min (H/M/L)	11.5 / 9.5 / 7.0		-		-		-		-		-		-		-				
	Heating	m³/min (H/M/L)	11.5 / 9.5 / 7.0		-		-		-		-		-		-		-				
Outdoor Air flow	Cooling	m³/min	-		-		-		-		34.1		-		-		-				
	Heating	m³/min	-		-		-		-		36.4		-		-		-				
Refrigerant type / amount (ship) kg / amount (max) kg				-		-		-		R32		1.130		1.280		-		-			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)		-		-		-		675		0.76		0.86		-		-				
Product dimension		Height mm	290		-		-		695		-		-		-		-				
		Width mm	765		-		-		875		-		-		-		-				
		Depth mm	214		-		-		320		-		-		-		-				
Product dimension (Panel)		H × W × D mm	-		-		-		-		-		-		-		-				
Packing dimension		Height mm	260		-		-		761		-		-		-		-				
		Width mm	847		-		-		1049		-		-		-		-				
		Depth mm	364		-		-		460		-		-		-		-				
Mass		(NET) kg	9		-		-		42		-		-		-		-				
		(GROSS) kg	10		-		-		46		-		-		-		-				
		Panel (NET) kg	-		-		-		-		-		-		-		-				
Layers limit (actually)				11(12)		-		-		3(4)		-		-		-					
Operation condition		Cool (DBT)	18°C~32°C		-		-		-		-15°C ~46°C		-		-		-				
		Heat (DBT)	16°C~30°C		-		-		-		-20°C ~ 24°C		-		-		-				
Max Working Pressure HP/LP MPa				-		4.15/2.55		-		-		-		-		-		-			
Max Allowable Pressure MPa				-		4.55		-		-		-		-		-		-			
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)		-		-		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)		-		-		-		-				
	Pipe diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)		-		-		-		-		-		-		-				
	Connecting method		flared type		-		-		flared type		-		-		-		-				
	Standard length m		5 m		-		-		-		-		-		-		-				
	Pipe length range m		3 ~ 40 m		-		-		-		-		-		-		-				
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)		-		-		-		-		-		-		-				
	Add gas amount g/m		15 g/m		-		-		-		-		-		-		-				
	Pipe length for additional gas m		30 m		-		-		-		-		-		-		-				
			-		-		-		-		-		-		-		-				

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-2545PK4E (36) *2								
PANEL		POS (EAN)		5025232978472								
		MODEL										
OUTDOOR		MODEL					U-71PZH4E5					
		POS (EAN)					5025232945429					
Branch pipe		MODEL					CZ-P155BK1					
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		10 50Hz			10 50Hz					
		V		220V	230V	240V	220V	230V	240V	Min	Max	
Capacity		kW		7.1	7.1	7.1	-	-	-	2.2	9.0	
		BTU/h		24200	24200	24200	-	-	-	7500	30700	
		Sensible	kW	-	-	-	-	-	-	-	-	
		Latent	kW	-	-	-	-	-	-	-	-	
Current		A		0.34 ×2	0.33 ×2	0.32 ×2	9.55	9.15	8.75	-	-	
Input power		W		33 ×2	33 ×2	33 ×2	-	-	-	-	-	
		TOTAL W		-	-	-	1.89k	1.89k	1.89k	380	3.35k	
Annual consumption		TOTAL kWh *4		-	-	-	-	945	-	-	-	
EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.76	3.76 / A	3.76	5.79	2.69	
ErP *6	Pdesign	kW		-	-	-	-	7.1	-	-	-	
	SEER	(W/W)		-	-	-	-	6.6	-	-	-	
	Annual consumption	kWh		-	-	-	-	377	-	-	-	
	Class			-	-	-	-	A++	-	-	-	
	Power factor	%		-	-	-	90	90	90	-	-	
	Noise indoor *7	dB-A (H/M/L)		41/36/30						-	-	
		Power Level dB		57/52/46						-	-	
		dB-A (H/L)					48/-			-	-	
Noise outdoor		Power Level dB					65/-			-	-	
Capacity		kW		7.8	7.8	7.8	-	-	-	2.0	9.0	
		BTU/h		26600	26600	26600	-	-	-	6800	30700	
Current		A		0.34 ×2	0.33 ×2	0.32 ×2	9.85	9.40	9.05	-	-	
Input power		W		33 ×2	33 ×2	33 ×2	-	-	-	-	-	
		TOTAL W		-	-	-	1.95k	1.95k	1.95k	360	2.85k	
COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.00	4.00 / A	4.00	5.56	3.16	
ErP *6	Pdesign at -10°C	kW		-	-	-	-	5.2	-	-	-	
	Tbivalent	°C		-	-	-	-	-10	-	-	-	
	SCOP	(W/W)		-	-	-	-	4.6	-	-	-	
	Annual consumption	kWh		-	-	-	-	1583	-	-	-	
	elbu (-10°C)	kW		-	-	-	-	-	-	-	-	
	Class			-	-	-	-	A++	-	-	-	
Power factor		%		-	-	-	90	90	90	-	-	
Noise indoor *7		dB-A (H/M/L)		41/36/30						-	-	
		Power Level dB		57/52/46						-	-	
		dB-A (H/L)					50/-			-	-	
Noise outdoor		Power Level dB					67/-			-	-	
LOW TEMP	Total capacity (kW)									-		
EXTRA	Total capacity (kW) *2						5.80			-		
LOW TEMP	Max Current (A) / Max Input power (W)			0.34/33 ×2	0.33/33 ×2	0.32/33 ×2	20.4 / 4.07k	20.4 / 4.22k	20.4 / 4.42k	-		
Starting current (A) (Cooling/Heating)				-	-	-	9.55 / 9.85	9.15 / 9.40	8.75 / 9.05	-		
Comp output (W)				-	-	-	2.00k	2.00k	2.00k	-		
Time Delay fuse max size (A)				-	-	-	-	25	-	-		
Network Impedance (ΩMAX.)				-	-	-	-	-	-	-		
Fan motor output (Indoor/Outdoor) W				-	30	-	-	120	-	-		
Moisture removal volume L/h				2.0	(1.0 ×2)	-	-	-	-	-		
External static pressure Pa				-	-	-	-	-	-	-		
Indoor Air flow *7	Cooling	m³/min (H/M/L)		11.5 ×2 / 9.5 ×2 / 7.0 ×2						-	-	
		m³/min (H/M/L)		11.5 ×2 / 9.5 ×2 / 7.0 ×2						-	-	
	Outdoor Air flow	Cooling	m³/min					62.0			-	-
			Heating	m³/min					66.0			-
Refrigerant type / amount (ship) kg / amount (max) kg				-			R32	1.950	2.850	-		
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)			-			675	1.32	1.92	-		
Product dimension	Height	mm		290			996			-		
	Width	mm		765			980			-		
	Depth	mm		214			370			-		
Product dimension (Panel)		H × W × D mm		-			-			-		
Packing dimension	Height	mm		260			1134			-		
	Width	mm		847			1095			-		
	Depth	mm		364			529			-		
Mass	(NET)	kg		9			66			-		
	(GROSS)	kg		10			74			-		
	Panel (NET)	kg		-			-			-		
	Layers limit (actually)		11 (12)			1 (2)			-			
Operation condition		Cool (DBT)		18°C~32°C			-15°C ~52°C			-		
		Heat (DBT)		16°C~30°C			-20°C ~24°C			-		
Max Working Pressure HP/LP MPa				4.15/2.55						-		
Max Allowable Pressure MPa				4.15						-		
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			-			
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						-			
	Connecting method		flared type			flared type			-			
	Standard length m		5 m						-			
	Pipe length range m		5 ~ 60 m						-			
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)						-			
	Add gas amount g/m		30 g/m						-			
	Pipe length for additional gas m		30 m						-			

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season. Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-2545PK4E (36) x2									
PANEL		POS (EAN)		5025232978472									
		MODEL											
OUTDOOR		MODEL					U-71PZH4E8						
		POS (EAN)					5025232945436						
Branch pipe		MODEL					CZ-P155BK1						
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825									
COOLING		Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz				
				V		220V	230V	240V	380V	400V	415V	Min	Max
		Capacity		kW		7.1	7.1	7.1	-	-	-	2.2	9.0
				BTU/h		24200	24200	24200	-	-	-	7500	30700
				Sensible Latent kW		-	-	-	-	-	-	-	-
		Current		A		0.34 x2	0.33 x2	0.32 x2	3.20	3.05	2.90	-	-
		Input power		W		33 x2	33 x2	33 x2	-	-	-	-	-
				TOTAL W		-	-	-	1.89k	1.89k	1.89k	380	3.35k
		Annual consumption		TOTAL kWh *4		-	-	-	-	945	-	-	-
		EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.76	3.76 / A	3.76	5.79	2.69
		ErP *6		Pdesign kW		-	-	-	-	7.1	-	-	-
				SEER (W/W)		-	-	-	-	6.6	-	-	-
				Annual consumption kWh		-	-	-	-	377	-	-	-
				Class		-	-	-	-	A++	-	-	-
		Power factor		%		-	-	-	90	90	90	-	-
		Noise indoor *7		dB-A (H/M/L)		41/36/30						-	-
				Power Level dB		57/52/46						-	-
				dB-A (H/L)					48/-			-	-
Noise outdoor							65/-			-	-		
		Power Level dB								-	-		
HEATING		Capacity		kW		7.8	7.8	7.8	-	-	-	2.0	9.0
				BTU/h		26600	26600	26600	-	-	-	6800	30700
		Current		A		0.34 x2	0.33 x2	0.32 x2	3.30	3.15	3.00	-	-
		Input power		W		33 x2	33 x2	33 x2	-	-	-	-	-
				TOTAL W		-	-	-	1.95k	1.95k	1.95k	360	2.85k
		COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.00	4.00 / A	4.00	5.56	3.16
		ErP *6		Pdesign at -10°C kW		-	-	-	-	5.2	-	-	-
				Tbivalent °C		-	-	-	-	-10	-	-	-
				SCOP (W/W)		-	-	-	-	4.6	-	-	-
				Annual consumption kWh		-	-	-	-	1583	-	-	-
				elbu(-10°C) kW		-	-	-	-	-	-	-	-
				Class		-	-	-	-	A++	-	-	-
		Power factor		%		-	-	-	90	90	90	-	-
		Noise indoor *7		dB-A (H/M/L)		41/36/30						-	-
				Power Level dB		57/52/46						-	-
				dB-A (H/L)					50/-			-	-
Noise outdoor							67/-			-	-		
		Power Level dB								-	-		
LOW TEMP		Total capacity (kW)											
EXTRA LOW TEMP		Total capacity (kW) *2					5.80						
Max Current (A) / Max Input power (W)				0.34/33 x2	0.33/33 x2	0.32/33 x2	6.90 / 4.17k	6.90 / 4.32k	6.90 / 4.47k				
Starting current (A) (Cooling/Heating)				-	-	-	3.20 / 3.30	3.05 / 3.15	2.90 / 3.00				
Comp output (W)				-	-	-	2.00k	2.00k	2.00k				
Time Delay fuse max size (A)				-	-	-	-	15	-				
Network Impedance (ΩMAX.)				-	-	-	-	-	-				
Fan motor output (Indoor/Outdoor) W				-	30	-	-	120	-				
Moisture removal volume		L/h		2.0	(1.0 x2)	-	-	-	-				
External static pressure		Pa		-	-	-	-	-	-				
Indoor Air flow *7		Cooling	m³/min (H/M/L)	11.5 x2 / 9.5 x2 / 7.0 x2						-	-		
		Heating	m³/min (H/M/L)	11.5 x2 / 9.5 x2 / 7.0 x2						-	-		
Outdoor Air flow		Cooling	m³/min				62.0			-	-		
		Heating	m³/min				66.0			-	-		
Refrigerant type / amount (ship) kg / amount (max) kg							R32	1.950	2.850				
F-Gas		GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					675	1.32	1.92				
Product dimension		Height	mm	290			996						
		Width	mm	765			980						
		Depth	mm	214			370						
Product dimension (Panel)		H x W x D	mm										
Packing dimension		Height	mm	260			1134						
		Width	mm	847			1095						
		Depth	mm	364			529						
Mass		(NET)	kg	9			66						
		(GROSS)	kg	10			74						
		Panel (NET)	kg										
Layers limit (actually)				11 (12)			1 (2)						
Operation condition		Cool (DBT)		18°C~32°C			-15°C ~52°C						
		Heat (DBT)		16°C~30°C			-20°C ~24°C						
Max Working Pressure HP/LP MPa				4.15/2.55									
Max Allowable Pressure MPa				4.15									
PIPING		Pipe port diameter mm (inch)	(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)							
		Pipe diameter mm (inch)	(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)										
		Connecting method	flared type			flared type							
		Standard length m	5 m										
		Pipe length range m	5 ~ 60 m										
		Indoor unit & Outdoor unit height difference m	15 m (OD located lower) / 30 m (OD located higher)										
		Add gas amount g/m	30 g/m										
		Pipe length for additional gas m	30 m										

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-2545PK4E (36) ×3								
PANEL		POS (EAN)		5025232978472								
		MODEL										
OUTDOOR		MODEL					U-100PZH4E5					
		POS (EAN)					5025232945368					
Branch pipe		MODEL					CZ-P3HPC2					
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz					
		V		220V	230V	240V	220V	230V	240V	Min	Max	
COOLING	Capacity	kW		9.5	9.5	9.5	-	-	-	3.1	10.5	
		BTU/h		32400	32400	32400	-	-	-	10600	35800	
		Sensible	kW	-	-	-	-	-	-	-	-	
		Latent	kW	-	-	-	-	-	-	-	-	
	Current	A		0.34 ×3	0.33 ×3	0.32 ×3	13.8	13.2	12.6	-	-	
	Input power	W		33 ×3	33 ×3	33 ×3	-	-	-	-	-	
		TOTAL W		-	-	-	2.79k	2.79k	2.79k	580	3.40k	
	Annual consumption	TOTAL kWh *4		-	-	-	-	1395	-	-	-	
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.41	3.41 / A	3.41	5.34	3.09	
	ErP *6	Pdesign	kW	-	-	-	-	9.5	-	-	-	
		SEER	(W/W)	-	-	-	-	6.6	-	-	-	
		Annual consumption	kWh	-	-	-	-	504	-	-	-	
		Class	-	-	-	-	A++	-	-	-	-	
	Power factor	%		-	-	-	92	92	92	-	-	
	Noise indoor *7	dB-A (H/M/L)		41/36/30								-
		Power Level dB		57/52/46								-
		dB-A (H/L)					52/-					-
	Noise outdoor	Power Level dB										-
							69/-					-
HEATING	Capacity	kW		9.5	9.5	9.5	-	-	-	3.1	11.5	
		BTU/h		32400	32400	32400	-	-	-	10600	39200	
	Current	A		0.34 ×3	0.33 ×3	0.32 ×3	12.1	11.5	11.1	-	-	
	Input power	W		33 ×3	33 ×3	33 ×3	-	-	-	-	-	
		TOTAL W		-	-	-	2.44k	2.44k	2.44k	580	3.83k	
	COP/COP CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.89	3.89 / A	3.89	5.34	3.00	
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	8.0	-	-	-	
		Tbivalent	°C	-	-	-	-	-10	-	-	-	
		SCOP	(W/W)	-	-	-	-	4.1	-	-	-	
		Annual consumption	kWh	-	-	-	-	2731	-	-	-	
	elbu (-10°C)	kW	-	-	-	-	-	-	-	-	-	
			-	-	-	-	-	-	-	-	-	
		Class	-	-	-	-	A+	-	-	-	-	
	Power factor	%		-	-	-	92	92	92	-	-	
	Noise indoor *7	dB-A (H/M/L)		41/36/30								-
		Power Level dB		57/52/46								-
		dB-A (H/L)					52/-					-
	Noise outdoor	Power Level dB										-
							69/-					-
LOW TEMP	Total capacity (kW)										-	
EXTRA	Total capacity (kW) *2					8.90					-	
LOW TEMP	Max Current (A) / Max Input power (W)		0.34/33 ×3	0.33/33 ×3	0.32/33 ×3	28.3 / 5.80k	28.3 / 6.00k	28.3 / 6.25k			-	
Starting current (A) (Cooling/Heating)				-	-	-	13.8 / 12.1	13.2 / 11.5	12.6 / 11.1			
Comp output (W)				-	-	-	2.50k	2.50k	2.50k			
Time Delay fuse max size (A)				-	-	-	35				-	
Network Impedance (ΩMAX.)				-	-	-					-	
Fan motor output (Indoor/Outdoor) W				-	30	-	120				-	
Moisture removal volume L/h		3.0		(1.0 ×3)	-	-					-	
External static pressure Pa				-	-	-					-	
Indoor Air flow *7	Cooling	m³/min (H/M/L)	11.5 ×3 / 9.5 ×3 / 7.0 ×3								-	
	Heating	m³/min (H/M/L)	11.5 ×3 / 9.5 ×3 / 7.0 ×3								-	
	Cooling	m³/min				76.0					-	
	Heating	m³/min				70.0					-	
Outdoor Air flow	Refrigerant type / amount (ship) kg / amount (max) kg					R32	2.700	5.975			-	
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					675	1.82	4.03			-	
											-	
Product dimension	Height	mm	290			996					-	
	Width	mm	765			980					-	
	Depth	mm	214			370					-	
Product dimension (Panel)	H × W × D	mm									-	
Packing dimension	Height	mm	260			1134					-	
	Width	mm	847			1095					-	
	Depth	mm	364			529					-	
	(NET)	kg	9			84					-	
Mass	(GROSS)	kg	10			92					-	
	Panel	kg									-	
	(NET)	kg									-	
Layers limit (actually)		11 (12)			1 (2)							
Operation condition	Cool (DBT)	18°C~32°C			-15°C (*8-20°C)~52°C							
	Heat (DBT)	16°C~30°C			-20°C ~ 24°C							
Max Working Pressure HP/LP MPa					4.15/2.55							
Max Allowable Pressure MPa					4.15							
PIPING	Pipe port diameter mm (inch)	(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)							
	Pipe diameter mm (inch)				(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)							
	Connecting method	flared type			flared type							
	Standard length m				5 m							
	Pipe length range m				5 ~ 100 m							
	Indoor unit & Outdoor unit height difference m				15 m (OD located lower) / 30 m (OD located higher)							
	Add gas amount (20~85)g/m				40 g/m							
	Add gas amount (85~100)g/m				40 g/m							
	Pipe length for additional gas m				20 m							

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V(400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-2545PK4E (36) ×3								
PANEL		POS (EAN)		5025232978472								
		MODEL										
OUTDOOR		MODEL					U-100PZH4E8					
		POS (EAN)					5025232945375					
Branch pipe		MODEL					CZ-P3HPC2					
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz					
COOLING	Capacity	V		220V	230V	240V	380V	400V	415V	Min	Max	
		kW		9.5	9.5	9.5	-	-	-	3.1	10.5	
		BTU/h		32400	32400	32400	-	-	-	10600	35800	
		Sensible	kW	-	-	-	-	-	-	-	-	
	Current	Latent	kW	-	-	-	-	-	-	-	-	
		A		0.34 ×3	0.33 ×3	0.32 ×3	4.65	4.45	4.20	-	-	
	Input power	W		33 ×3	33 ×3	33 ×3	-	-	-	-	-	
		TOTAL W		-	-	-	2.79k	2.79k	2.79k	580	3.40k	
	Annual consumption		TOTAL kWh *4		-	-	-	-	1395	-	-	
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.41	3.41 / A	3.41	5.34	3.09
	ErP *6	Pdesign	kW	-	-	-	-	9.5	-	-	-	
		SEER	(W/W)	-	-	-	-	6.6	-	-	-	
		Annual consumption	kWh	-	-	-	-	504	-	-	-	
		Class		-	-	-	-	A++	-	-	-	
		Power factor	%	-	-	-	91	91	92	-	-	
		Noise indoor *7	dB-A (H/M/L)	41/36/30						-	-	-
Power Level dB	57/52/46						-	-	-			
Noise outdoor	dB-A (H/L)							52/-	-	-		
	Power Level dB							69/-	-	-		
HEATING	Capacity	kW	9.5	9.5	9.5	-	-	-	3.1	11.5		
		BTU/h	32400	32400	32400	-	-	-	10600	39200		
	Current	A	0.34 ×3	0.33 ×3	0.32 ×3	4.05	3.85	3.70	-	-		
		W	33 ×3	33 ×3	33 ×3	-	-	-	-	-		
	Input power	TOTAL W					2.44k	2.44k	2.44k	580	3.83k	
		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.89	3.89 / A	3.89	5.34	3.00	
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	8.0	-	-	-	
		Tbivalent	°C	-	-	-	-	-10	-	-	-	
		SCOP	(W/W)	-	-	-	-	4.1	-	-	-	
		Annual consumption	kWh	-	-	-	-	2731	-	-	-	
		elbu (-10°C)	kW	-	-	-	-	-	-	-	-	
		Class		-	-	-	-	A+	-	-	-	
	Power factor	%	-	-	-	91	91	92	-	-		
	Noise indoor *7	dB-A (H/M/L)	41/36/30						-	-	-	
		Power Level dB	57/52/46						-	-	-	
	Noise outdoor	dB-A (H/L)							52/-	-	-	
Power Level dB								69/-	-	-		
LOW TEMP	Total capacity (kW)											
EXTRA LOW TEMP	Total capacity (kW) *2											
Max Current (A) / Max Input power (W)		0.34/33 ×3		0.33/33 ×3		0.32/33 ×3		9.90 / 6.05k	9.90 / 6.30k	9.90 / 6.50k	-	
Starting current (A) (Cooling/Heating)		-		-		-		4.65 / 4.05	4.45 / 3.85	4.20 / 3.70	-	
Comp output (W)		-		-		-		2.50k	2.50k	2.50k	-	
Time Delay fuse max size (A)		-		-		-		15			-	
Network Impedance (QMAX)		-		-		-					-	
Fan motor output (Indoor/Outdoor) W		-		30		-		120			-	
Moisture removal volume		L/h	3.0	(1.0 ×3)		-		-			-	
External static pressure		Pa	-		-		-		-			-
Indoor Air flow *7	Cooling	m³/min (H/M/L)	11.5 ×3 / 9.5 ×3 / 7.0 ×3						-	-	-	
	Heating	m³/min (H/M/L)	11.5 ×3 / 9.5 ×3 / 7.0 ×3						-	-	-	
Outdoor Air flow	Cooling	m³/min	-						76.0	-	-	
	Heating	m³/min	-						70.0	-	-	
Refrigerant type / amount(ship) kg/ amount(max) kg		-		-		R32		2.700	5.975	-		
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)	-		-		675		1.82	4.03	-		
	Product dimension	Height mm	290						996	-		
Product dimension (Panel)	Width mm	765						980	-			
	Depth mm	214						370	-			
	H × W × D mm	-						-	-			
Packing dimension	Height mm	260						1134	-			
	Width mm	847						1095	-			
	Depth mm	364						529	-			
Mass	(NET) kg	9						82	-			
	(GROSS) kg	10						90	-			
	Panel (NET) kg	-						-	-			
	Layers limit (actually)	11 (12)						1 (2)	-			
Operation condition	Cool (DBT)	18°C~32°C						-15°C (*8-20°C)~52°C	-			
	Heat (DBT)	16°C~30°C						-20°C ~ 24°C	-			
Max Working Pressure HP/LP MPa		4.15/2.55						-				
Max Allowable Pressure MPa		4.15						-				
PIPING	Pipe port diameter mm (inch)	(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			-				
	Pipe diameter mm (inch)	(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						-				
	Connecting method	flared type			flared type			-				
	Standard length m	5 m						-				
	Pipe length range m	5 ~ 100 m						-				
	Indoor unit & Outdoor unit height difference m	15 m (OD located lower) / 30 m (OD located higher)						-				
	Add gas amount (20~85)g/m	40 g/m						-				
	Add gas amount (85~100)g/m	40 g/m						-				
	Pipe length for additional gas m	20 m						-				

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V(400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season. Other fiche data indicates in an attached sheet.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-2545PK4E (36) ×4								
PANEL		POS (EAN)		5025232978472								
		MODEL										
OUTDOOR		MODEL					U-125PZH4E5					
		POS (EAN)					5025232945382					
Branch pipe		MODEL					CZ-P155BK1×3					
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz					
		V		220V	230V	240V	220V	230V	240V	Min	Max	
		kW		12.5	12.5	12.5	-	-	-	3.2	14.0	
Capacity		BTU/h		42700	42700	42700	-	-	-	10900	47800	
		Sensible	kW	-	-	-	-	-	-	-	-	
		Latent	kW	-	-	-	-	-	-	-	-	
Current		A		0.34 ×4	0.33 ×4	0.32 ×4	18.2	17.4	16.7	-	-	
Input power		W		33 ×4	33 ×4	33 ×4	-	-	-	-	-	
		TOTAL W		-	-	-	3.72k	3.72k	3.72k	600	4.70k	
Annual consumption		TOTAL kWh *4		-	-	-	-	1860	-	-	-	
EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.36	3.36 / A	3.36	5.33	2.98	
ErP *6	Pdesign	kW		-	-	-	-	12.5	-	-	-	
	ηsc	%		-	-	-	-	272.1	-	-	-	
	Annual consumption	kWh		-	-	-	-	-	-	-	-	
	Class			-	-	-	-	-	-	-	-	
	Power factor	%		-	-	-	93	93	93	-	-	
	Noise indoor *7	dB-A (H/M/L)		41/36/30						-	-	
	Power Level dB		57/52/46						-	-		
Noise outdoor	dB-A (H/L)					55/-			-	-		
	Power Level dB					73/-			-	-		
Capacity		kW		14.0	14.0	14.0	-	-	-	3.2	16.0	
		BTU/h		47800	47800	47800	-	-	-	10900	54600	
Current		A		0.34 ×4	0.33 ×4	0.32 ×4	16.7	16.0	15.3	-	-	
Input power		W		33 ×4	33 ×4	33 ×4	-	-	-	-	-	
		TOTAL W		-	-	-	3.42k	3.42k	3.42k	580	5.10k	
COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.09	4.09 / A	4.09	5.52	3.14	
ErP *6	Pdesign at -10°C	kW		-	-	-	-	9.5	-	-	-	
	Tbivalent	°C		-	-	-	-	-10	-	-	-	
	ηsh	%		-	-	-	-	170.0	-	-	-	
	Annual consumption	kWh		-	-	-	-	-	-	-	-	
	elbu (-10°C)	kW		-	-	-	-	-	-	-	-	
	Class			-	-	-	-	-	-	-	-	
Power factor	%		-	-	-	93	93	93	-	-		
Noise indoor *7	dB-A (H/M/L)		41/36/30						-	-		
	Power Level dB		57/52/46						-	-		
Noise outdoor	dB-A (H/L)					55/-			-	-		
	Power Level dB					73/-			-	-		
LOW TEMP	Total capacity (kW)								-	-		
EXTRA	Total capacity (kW) *2					10.50			-	-		
LOW TEMP	Max Current (A) / Max Input power (W)		0.34/33 ×4	0.33/33 ×4	0.32/33 ×4	32.7 / 6.60k	32.7 / 6.85k	32.7 / 7.15k	-	-		
Starting current (A) (Cooling/Heating)		-		-	-	18.2 / 16.7	17.4 / 16.0	16.7 / 15.3	-	-		
Comp output (W)		-		-	-	2.80k	2.80k	2.80k	-	-		
Time Delay fuse max size (A)		-		-	-	40			-	-		
Network Impedance (ΩMAX.)		-		-	-				-	-		
Fan motor output (Indoor/Outdoor) W		-		30	-	120			-	-		
Moisture removal volume		L/h	4.0	(1.0 ×4)	-				-	-		
External static pressure		Pa	-						-	-		
Indoor Air flow *7	Cooling	m³/min (H/M/L)	11.5 ×4 / 9.5 ×4 / 7.0 ×4						-	-		
	Heating	m³/min (H/M/L)	11.5 ×4 / 9.5 ×4 / 7.0 ×4						-	-		
Outdoor Air flow	Cooling	m³/min				86.0			-	-		
	Heating	m³/min				78.0			-	-		
Refrigerant type / amount (ship) kg / amount (max) kg					-	R32	3.000	5.975	-	-		
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					675	2.03	4.03	-	-		
Product dimension		Height mm	290			996			-	-		
		Width mm	765			980			-	-		
		Depth mm	214			370			-	-		
Product dimension (Panel)		H × W × D mm							-	-		
Packing dimension		Height mm	260			1134			-	-		
		Width mm	847			1095			-	-		
		Depth mm	364			529			-	-		
Mass		(NET) kg	9			86			-	-		
		(GROSS) kg	10			94			-	-		
		Panel (NET) kg							-	-		
Layers limit (actually)		11 (12)			1 (2)			-	-			
Operation condition		Cool (DBT)	18°C~32°C			-15°C (*8~20°C)~52°C			-	-		
		Heat (DBT)	16°C~30°C			-20°C ~ 24°C			-	-		
Max Working Pressure HP/LP MPa		4.15/2.55						-	-			
Max Allowable Pressure MPa		4.15						-	-			
PIPING	Pipe port diameter mm (inch)	(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			-	-			
	Pipe diameter mm (inch)	(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						-	-			
	Connecting method	flared type			flared type			-	-			
	Standard length m	5 m						-	-			
	Pipe length range m	5 ~ 100 m						-	-			
	Indoor unit & Outdoor unit height difference m	15 m (OD located lower) / 30 m (OD located higher)						-	-			
	Add gas amount (20~85)g/m	40 g/m						-	-			
	Add gas amount (85~100)g/m	25 g/m						-	-			
	Pipe length for additional gas m	20 m						-	-			
								-	-			

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-2545PK4E (36) ×4									
PANEL		POS (EAN)		5025232978472									
		MODEL											
OUTDOOR		MODEL						U-125PZH4E8					
		POS (EAN)						5025232945399					
Branch pipe		MODEL						CZ-P155BK1×3					
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825									
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz						
		V		220V	230V	240V	380V	400V	415V	Min	Max		
COOLING	Capacity	kW		12.5	12.5	12.5	-	-	-	3.2	14.0		
		BTU/h		42700	42700	42700	-	-	-	10900	47800		
		Sensible	kW	-	-	-	-	-	-	-	-		
				Latent	kW	-	-	-	-	-	-	-	
	Current		A	0.34 ×4	0.33 ×4	0.32 ×4	6.15	5.85	5.65	-	-		
	Input power		W		33 ×4	33 ×4	33 ×4	-	-	-	-	-	
			TOTAL W		-	-	-	3.72k	3.72k	3.72k	600	4.70k	
	Annual consumption		TOTAL kWh *4		-	-	-	-	1860	-	-	-	
	EER/EER CLASS		TOTAL (W/W) *5/ (*A~*G*)		-	-	-	3.36	3.36 / A	3.36	5.33	2.98	
	ErP *6	Pdesign	kW	-	-	-	-	12.5	-	-	-	-	
			nsc	%	-	-	-	-	272.1	-	-	-	-
		Annual consumption		kWh	-	-	-	-	-	-	-	-	-
		Class	-	-	-	-	-	-	-	-	-	-	-
	Power factor		%	-	-	-	92	92	92	-	-	-	-
	Noise indoor *7	dB-A (H/M/L)		41/36/30						-	-	-	-
		Power Level dB		57/52/46						-	-	-	-
	Noise outdoor	dB-A (H/L)								55/-	-	-	-
		Power Level dB								73/-	-	-	-
	HEATING	Capacity	kW	14.0	14.0	14.0	-	-	-	3.2	16.0		
BTU/h			47800	47800	47800	-	-	-	10900	54600			
Current		A	0.34 ×4	0.33 ×4	0.32 ×4	5.70	5.40	5.25	-	-			
Input power		W		33 ×4	33 ×4	33 ×4	-	-	-	-	-		
		TOTAL W		-	-	-	3.42k	3.42k	3.42k	580	5.10k		
COP/COP CLASS		TOTAL (W/W) *5/ (*A~*G*)		-	-	-	4.09	4.09 / A	4.09	5.52	3.14		
ErP *6		Pdesign at -10°C	kW	-	-	-	-	9.5	-	-	-	-	
			Tbivalent	°C	-	-	-	-	-10	-	-	-	-
		ηsh	%	-	-	-	-	170.0	-	-	-	-	-
			Annual consumption		kWh	-	-	-	-	-	-	-	-
		elbu (-10°C)	kW	-	-	-	-	-	-	-	-	-	-
			Class	-	-	-	-	-	-	-	-	-	-
Power factor		%	-	-	-	91	91	91	-	-	-	-	
Noise indoor *7		dB-A (H/M/L)		41/36/30						-	-	-	-
		Power Level dB		57/52/46						-	-	-	-
Noise outdoor		dB-A (H/L)								55/-	-	-	-
		Power Level dB								73/-	-	-	-
LOW TEMP	Total capacity (kW)												
EXTRA LOW TEMP	Total capacity (kW) *2						10.50						
Max Current (A) / Max Input power (W)				0.34/33 ×4	0.33/33 ×4	0.32/33 ×4	11.4 / 6.85k	11.4 / 7.15k	11.4 / 7.40k				
Starting current (A) (Cooling/Heating)				-	-	-	6.15 / 5.70	5.85 / 5.40	5.65 / 5.25				
Comp output (W)				-	-	-	2.80k	2.80k	2.80k				
Time Delay fuse max size (A)				-	-	-	-	15	-				
Network Impedance (ZMAX)				-	-	-	-	-	-				
Fan motor output (Indoor/Outdoor) W				-	30	-	-	120	-				
Moisture removal volume			L/h	4.0	(1.0 ×4)	-	-	-					
External static pressure			Pa	-	-	-	-	-					
Indoor Air flow *7	Cooling	m³/min (H/M/L)		11.5 ×4 / 9.5 ×4 / 7.0 ×4						-	-		
	Heating	m³/min (H/M/L)		11.5 ×4 / 9.5 ×4 / 7.0 ×4						-	-		
Outdoor Air flow	Cooling	m³/min								86.0	-		
	Heating	m³/min								78.0	-		
Refrigerant type / amount (ship) kg / amount (max) kg							R32	3.000	5.975				
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					-	675	2.03	4.03				
						-	-	-	-				
Product dimension		Height	mm	290			996						
		Width	mm	765			980						
		Depth	mm	214			370						
Product dimension (Panel)		H × W × D	mm										
Packing dimension		Height	mm	260			1134						
		Width	mm	847			1095						
		Depth	mm	364			529						
Mass	(NET)	kg	9			84							
	(GROSS)	kg	10			92							
	Panel (NET)	kg											
Layers limit (actually)				11 (12)			1 (2)						
Operation condition		Cool (DBT)	18°C-32°C			-15°C (*8-20°C)-52°C							
		Heat (DBT)	16°C-30°C			-20°C-24°C							
Max Working Pressure HP/LP MPa				4.15/2.55									
Max Allowable Pressure MPa				4.15									
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)							
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)										
	Connecting method		flared type			flared type							
	Standard length m		5 m										
	Pipe length range m		5 ~ 100 m										
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)										
	Add gas amount (20~85)g/m		40 g/m										
	Add gas amount (85~100)g/m		25 g/m										
	Pipe length for additional gas m		20 m										

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-2545PK4E (45) *3										
		POS (EAN)		5025232978472										
PANEL		MODEL												
OUTDOOR		MODEL					U-125PZH4E5							
		POS (EAN)					5025232945382							
Branch pipe		MODEL					CZ-P3HPC2							
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825										
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz							
		V		220V	230V	240V	220V	230V	240V	Min	Max			
COOLING	Capacity	kW		12.2	12.2	12.2	-	-	-	3.2	14.0			
		BTU/h		41600	41600	41600	-	-	-	10900	47800			
		Sensible	kW	-	-	-	-	-	-	-	-			
				Latent	kW	-	-	-	-	-	-	-		
	Current	A				0.42 *3	0.41 *3	0.40 *3	18.5	17.7	16.9	-	-	
	Input power	W		41 *3	41 *3	41 *3	-	-	-	-	-			
		TOTAL W		-	-	-	3.78k	3.78k	3.78k	670	5.35k			
	Annual consumption	TOTAL kWh *4		-	-	-	-	1890	-	-	-			
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.23	3.23 / A	3.23	4.78	2.62			
	ErP *6	Pdesign	kW	-	-	-	-	12.2	-	-	-			
			ηsc	%	-	-	-	-	241.2	-	-	-		
		Annual consumption	kWh	-	-	-	-	-	-	-	-	-		
			Class	-	-	-	-	-	-	-	-	-		
	Power factor	%		-	-	-	-	93	93	93	-	-		
	Noise indoor *7	dB-A (H/M/L)	44/38/32									-	-	
			Power Level dB		60/54/48									
		dB-A (H/L)				55/-						-	-	
			Power Level dB					73/-					-	-
	Noise outdoor												-	-
													-	-
HEATING	Capacity	kW	13.2	13.2	13.2	-	-	-	3.2	16.0				
		BTU/h	45000	45000	45000	-	-	-	10900	54600				
	Current	A		0.42 *3	0.41 *3	0.40 *3	17.4	16.6	15.9	-	-			
	Input power	W		41 *3	41 *3	41 *3	-	-	-	-	-			
		TOTAL W		-	-	-	3.56k	3.56k	3.56k	580	5.10k			
	COP/COP CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.71	3.71 / A	3.71	5.52	3.14			
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	9.5	-	-	-			
			Tbivalent	°C	-	-	-	-	-10	-	-	-		
		ηsh	%	-	-	-	-	148.6	-	-	-	-		
			Annual consumption	kWh	-	-	-	-	-	-	-	-	-	
	elbu (-10°C)	kW		-	-	-	-	-	-	-	-	-		
		Class	-	-	-	-	-	-	-	-	-	-		
	Power factor	%		-	-	-	93	93	93	-	-			
	Noise indoor *7	dB-A (H/M/L)	44/38/32									-	-	
			Power Level dB		60/54/48									
		dB-A (H/L)				55/-						-	-	
			Power Level dB					73/-					-	-
	LOW TEMP	Total capacity (kW)											-	-
	EXTRA LOW TEMP	Total capacity (kW) *2					10.50						-	-
	Max Current (A) / Max Input power (W)		0.42/41 *3		0.41/41 *3		0.40/41 *3		32.7 / 6.60k	32.7 / 6.85k	32.7 / 7.15k			-
Starting current (A) (Cooling/Heating)								18.5 / 17.4	17.7 / 16.6	16.9 / 15.9			-	
Comp output (W)								2.80k	2.80k	2.80k			-	
Time Delay fuse max size (A)								40					-	
Network Impedance (QMAX.)													-	
Fan motor output (Indoor/Outdoor) W				30				120					-	
Moisture removal volume		L/h	4.5	(1.5 *3)									-	
External static pressure		Pa										-	-	
Indoor Air flow *7	Cooling	m³/min (H/M/L)	12.5 *3 / 10.5 *3 / 8.0 *3									-	-	
	Heating	m³/min (H/M/L)	12.5 *3 / 10.5 *3 / 8.0 *3									-	-	
Outdoor Air flow	Cooling	m³/min							86.0					-
	Heating	m³/min							78.0					-
Refrigerant type / amount (ship) kg / amount (max) kg						R32		3.000	5.975				-	
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)						675	2.03	4.03				-	
													-	
Product dimension		Height	mm	290			996						-	
		Width	mm	765			980						-	
		Depth	mm	214			370						-	
Product dimension (Panel)		H * W * D	mm									-	-	
Packing dimension		Height	mm	260			1134						-	
		Width	mm	847			1095						-	
		Depth	mm	364			529						-	
		(NET)	kg	9			86						-	
Mass	(GROSS)	kg	10			94						-	-	
	Panel (NET)	kg										-	-	
	Layers limit (actually)		11 (12)			1 (2)								-
Operation condition		Cool (DBT)	18°C~32°C			-15°C (*8~20°C)~52°C								-
		Heat (DBT)	16°C~30°C			-20°C ~ 24°C								-
Max Working Pressure HP/LP MPa		4.15/2.55												-
Max Allowable Pressure MPa		4.15												-
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52(3/8) (Gas) Ø15.88 (5/8)								-
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)											-
	Connecting method		flared type			flared type								-
	Standard length m		5 m											-
	Pipe length rang m		5 ~ 100 m											-
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)											-
	Add gas amount (20~85)g/m		40 g/m											-
	Add gas amount (85~100)g/m		25 g/m											-
	Pipe length for additional gas m		20 m											-
														-

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-2545PK4E (45) ×3								
PANEL		POS (EAN)		5025232978472								
		MODEL										
OUTDOOR		MODEL								U-125PZH4E8		
		POS (EAN)								5025232945399		
Branch pipe		MODEL		CZ-P3HPC2								
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
COOLING	Power supply		Ø, Hz	1Ø 50Hz			3Ø 50Hz					
			V	220V	230V	240V	380V	400V	415V	Min	Max	
	Capacity		kW	12.2	12.2	12.2	-	-	-	3.2	14.0	
			BTU/h	41600	41600	41600	-	-	-	10900	47800	
			Sensible	kW	-	-	-	-	-	-	-	-
			Latent	kW	-	-	-	-	-	-	-	
	Current		A	0.42 ×3	0.41 ×3	0.40 ×3	6.25	5.95	5.70	-	-	
	Input power		W	41 ×3	41 ×3	41 ×3	-	-	-	-	-	
			TOTAL W	-	-	-	3.78k	3.78k	3.78k	670	5.35k	
	Annual consumption		TOTAL kWh *4	-	-	-	-	1890	-	-	-	
	EER/EER CLASS		TOTAL (W/W) *5/ (°A°~°G°)	-	-	-	3.23	3.23 / A	3.23	4.78	2.62	
	ErP *6	Pdesign		kW	-	-	-	-	12.2	-	-	-
				nsc	%	-	-	-	-	241.2	-	-
		Annual consumption		kWh	-	-	-	-	-	-	-	-
		Class		-	-	-	-	-	-	-	-	-
		Power factor		%	-	-	-	92	92	92	-	-
		Noise indoor *7		dB-A (H/M/L)	44/38/32						-	-
				Power Level dB	60/54/48						-	-
		Noise outdoor		dB-A (H/L)				55/-			-	-
				Power Level dB				73/-			-	-
		HEATING	Capacity		kW	13.2	13.2	13.2	-	-	-	3.2
			BTU/h	45000	45000	45000	-	-	-	10900	54600	
	Current		A	0.42 ×3	0.41 ×3	0.40 ×3	5.95	5.65	5.45	-	-	
Input power			W	41 ×3	41 ×3	41 ×3	-	-	-	-	-	
			TOTAL W	-	-	-	3.56k	3.56k	3.56k	580	5.10k	
COP/COP CLASS			TOTAL (W/W) *5/ (°A°~°G°)	-	-	-	3.71	3.71 / A	3.71	5.52	3.14	
ErP *6	Pdesign at -10°C		kW	-	-	-	-	9.5	-	-	-	
	Tbivalent		°C	-	-	-	-	-10	-	-	-	
	nsh		%	-	-	-	-	148.6	-	-	-	
	Annual consumption		kWh	-	-	-	-	-	-	-	-	
	elbu (-10°C)		kW	-	-	-	-	-	-	-	-	
	Class		-	-	-	-	-	-	-	-	-	
	Power factor		%	-	-	-	91	91	91	-	-	
	Noise indoor *7		dB-A (H/M/L)	44/38/32						-	-	
			Power Level dB	60/54/48						-	-	
	Noise outdoor		dB-A (H/L)				55/-			-	-	
Power Level dB						73/-			-	-		
LOW TEMP	Total capacity (kW)											
EXTRA LOW TEMP	Total capacity (kW) *2						10.50					
Max Current (A) / Max Input power (W)				0.42/41 ×3	0.41/41 ×3	0.40/41 ×3	11.4 / 6.85k	11.4 / 7.15k	11.4 / 7.40k			
Starting current (A) (Cooling/Heating)				-	-	-	6.25 / 5.95	5.95 / 5.65	5.70 / 5.45			
Comp output (W)				-	-	-	2.80k	2.80k	2.80k			
Time Delay fuse max size (A)				-	-	-	15					
Network Impedance (ΩMAX.)				-	-	-						
Fan motor output (Indoor/Outdoor) W				-	30	-	120					
Moisture removal volume			L/h	4.5	(1.5 ×3)							
External static pressure			Pa	-	-							
Indoor Air flow *7	Cooling	m³/min (H/M/L)	12.5 ×3 / 10.5 ×3 / 8.0 ×3						-	-		
	Heating	m³/min (H/M/L)	12.5 ×3 / 10.5 ×3 / 8.0 ×3						-	-		
Outdoor Air flow	Cooling	m³/min				86.0			-	-		
	Heating	m³/min				78.0			-	-		
Refrigerant type / amount (ship) kg / amount (max) kg							R32	3.000	5.975			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)						675	2.03	4.03			
Product dimension		Height	mm	290			996					
		Width	mm	765			980					
		Depth	mm	214			370					
Product dimension (Panel)		H × W × D	mm									
Packing dimension		Height	mm	260			1134					
		Width	mm	847			1095					
		Depth	mm	364			529					
		(NET)	kg	9			84					
Mass		(GROSS)	kg	10			92					
		Panel (NET)	kg									
Layers limit (actually)				11 (12)			1 (2)					
Operation condition		Cool (DBT)	18°C~32°C			-15°C (*8-20°C)~52°C						
		Heat (DBT)	16°C~30°C			-20°C ~ 24°C						
Max Working Pressure HP/LP MPa				4.15/2.55								
Max Allowable Pressure MPa				4.15								
PIPING	Pipe port diameter mm (inch)			(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)					
	Pipe diameter mm (inch)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)								
	Connecting method			flared type			flared type					
	Standard length m			5 m								
	Pipe length range m			5 ~ 100 m								
	Indoor unit & Outdoor unit height difference m			15 m (OD located lower) / 30 m (OD located higher)								
	Add gas amount (20~85)g/m			40 g/m								
	Add gas amount (85~100)g/m			25 g/m								
	Pipe length for additional gas m			20 m								

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-5010PK4E (50)									
PANEL		POS (EAN)		5025232978489									
		MODEL											
OUTDOOR		POS (EAN)					U-50PZH3E5						
Branch pipe		MODEL					5025232915514						
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825									
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz						
		V		220V			230V			240V			
		kW		5.0			5.0			5.0			
Capacity		BTU/h		17100			17100			17100			
		Sensible		3.9			3.9			3.9			
		Latent		1.1			1.1			1.1			
Current		A		0.35			0.34			0.33			
Input power		W		34			34			34			
		TOTAL W											
Annual consumption		TOTAL kWh *4											
EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")											
ErP *6	Pdesign	kW											
	SEER	(W/W)											
	Annual consumption	kWh											
	Class												
	Power factor	%											
	Noise indoor *7	dB-A (H/M/L)		41/36/31									
	Power Level dB		57/52/47										
	dB-A (H/L)												
Noise outdoor	Power Level dB												
	kW		5.6			5.6			5.6				
Capacity	BTU/h		19100			19100			19100				
Current	A		0.35			0.34			0.33				
Input power	W		34			34			34				
	TOTAL W												
COP/COP CLASS	TOTAL (W/W) *5/ ("A"~"G")												
ErP *6	Pdesign at -10°C	kW											
	Tbivalent	°C											
	SCOP	(W/W)											
	Annual consumption	kWh											
	elbu (-10°C)	kW											
	Class												
Power factor	%												
Noise indoor *7	dB-A (H/M/L)		41/36/31										
	Power Level dB		57/52/47										
	dB-A (H/L)												
Noise outdoor	Power Level dB												
LOW TEMP	Total capacity (kW)												
EXTRA LOW TEMP	Total capacity (kW) *2						5.00						
Max Current (A) / Max Input power (W)		0.35/34			0.34/34			0.33/34			12.0 / 2.46k		
Starting current (A) (Cooling/Heating)											5.80 / 6.60		
Comp output (W)											0.90k		
Time Delay fuse max size (A)											20		
Network Impedance (ΩMAX.)													
Fan motor output (Indoor/Outdoor) W					30						40		
Moisture removal volume L/h		1.6			(1.6 ×1)								
External static pressure Pa													
Indoor Air flow *7	Cooling	m³/min (H/M/L)		17.0 / 15.5 / 12.0									
	Heating	m³/min (H/M/L)		17.0 / 15.5 / 12.0									
Outdoor Air flow	Cooling	m³/min								42.0			
	Heating	m³/min								42.0			
Refrigerant type / amount (ship) kg / amount (max) kg								R32			1.130		
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)							675			0.76		
											0.86		
Product dimension	Height	mm		295			695						
	Width	mm		1060			875						
	Depth	mm		249			320						
Product dimension (Panel)	H × W × D	mm											
Packing dimension	Height	mm		314			761						
	Width	mm		1168			1049						
	Depth	mm		383			460						
Mass	(NET)	kg		14			42						
	(GROSS)	kg		16			46						
	Panel (NET)	kg											
Layers limit (actually)					11 (12)			3 (4)					
Operation condition	Cool (DBT)				18°C~32°C			-15°C~46°C					
	Heat (DBT)				16°C~30°C			-20°C ~ 24°C					
Max Working Pressure HP/LP MPa				4.15/2.55									
Max Allowable Pressure MPa				4.55									
Pipe port diameter mm (inch)				(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)						
PIPEING	Pipe diameter mm (inch)				(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)								
	Connecting method				flared type			flared type					
	Standard length m				5 m								
	Pipe length range m				3 ~ 40 m								
	Indoor unit & Outdoor unit height difference m				15 m (OD located lower) / 30 m (OD located higher)								
	Add gas amount g/m				15 g/m								
	Pipe length for additional gas m				30 m								

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (50) ×3									
PANEL		POS (EAN)		5025232978489									
		MODEL		-									
OUTDOOR		MODEL		-			U-140PZH4E5						
		POS (EAN)		-			5025232945405						
Branch pipe		MODEL					CZ-P3HPC2						
Performance test condition													
ISO5151 / EN14511 / EN12102 / EN14825													
COOLING	Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz					
			V		220V	230V	240V	220V	230V	240V	Min	Max	
	Capacity		kW		13.4	13.4	13.4	-	-	-	3.3	16.0	
			BTU/h		45700	45700	45700	-	-	-	11300	54600	
			Sensible		kW	-	-	-	-	-	-	-	-
			Latent		kW	-	-	-	-	-	-	-	
	Current		A		0.35 ×3	0.34 ×3	0.33 ×3	19.3	18.4	17.7	-	-	
	Input power		W		34 ×3	34 ×3	34 ×3	-	-	-	-	-	
			TOTAL W		-			3.94k	3.94k	3.94k	620	6.00k	
	Annual consumption		TOTAL kWh *4		-			-	1970	-	-	-	
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-			3.40	3.40 / A	3.40	5.32	2.67	
	ErP *6	Pdesign		kW		-			-	13.4	-	-	-
		ηsc		%		-			-	269.0	-	-	-
		Annual consumption		kWh		-			-	-	-	-	-
		Class				-			-	-	-	-	-
	Power factor		%		-			93	93	93	-	-	
	Noise indoor *7		dB-A (H/M/L)		41/36/31						-		-
			Power Level dB		57/52/47						-		-
	Noise outdoor		dB-A (H/L)		-			56/-			-		-
			Power Level dB		-			74/-			-		-
	HEATING	Capacity		kW		15.2	15.2	15.2	-	-	-	3.3	18.0
		BTU/h		51900	51900	51900	-	-	-	11300	61400		
Current		A		0.35 ×3	0.34 ×3	0.33 ×3	20.0	19.2	18.4	-	-		
Input power		W		34 ×3	34 ×3	34 ×3	-	-	-	-	-		
		TOTAL W		-			4.10k	4.10k	4.10k	600	5.90k		
COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.71	3.71 / A	3.71	5.50	3.05		
ErP *6		Pdesign at -10°C		kW		-			-	10.6	-	-	-
		Tbivalent		°C		-			-	-10	-	-	-
		ηsh		%		-			-	169.4	-	-	-
		Annual consumption		kWh		-			-	-	-	-	-
		elbu (-10°C)		kW		-			-	-	-	-	-
		Class		-			-	-	-	-	-		
Power factor		%		-			93	93	93	-	-		
Noise indoor *7		dB-A (H/M/L)		41/36/31						-		-	
		Power Level dB		57/52/47						-		-	
Noise outdoor		dB-A (H/L)		-			56/-			-		-	
		Power Level dB		-			74/-			-		-	
LOW TEMP	Total capacity (kW)								-			-	
EXTRA LOW TEMP	Total capacity (kW) *2								11.80			-	
Max Current (A) / Max Input power (W)		0.35/34 ×3		0.34/34 ×3		0.33/34 ×3		32.7 / 6.70k	32.7 / 6.95k	32.7 / 7.20k	-		
Starting current (A) (Cooling/Heating)		-		-		-		19.3 / 20.0	18.4 / 19.2	17.7 / 18.4	-		
Comp output (W)				-		-		3.00k	3.00k	3.00k	-		
Time Delay fuse max size (A)				-		-		40			-		
Network Impedance (ΩMAX)				-		-					-		
Fan motor output (Indoor/Outdoor) W				30				120			-		
Moisture removal volume		L/h		4.8		(1.6 ×3)					-		
External static pressure		Pa									-		
Indoor Air flow *7	Cooling	m³/min (H/M/L)		17.0 ×3 / 15.5 ×3 / 12.0 ×3							-	-	
	Heating	m³/min (H/M/L)		17.0 ×3 / 15.5 ×3 / 12.0 ×3							-	-	
Outdoor Air flow	Cooling	m³/min		-				89.0			-	-	
	Heating	m³/min		-				83.0			-	-	
Refrigerant type / amount (ship) kg / amount (max) kg				-				R32	3.000	5.975	-		
F-Gas	CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)				-		675		2.03	4.03	-		
Product dimension	Height	mm		295				996			-		
	Width	mm		1060				980			-		
	Depth	mm		249				370			-		
Product dimension (Panel)		H × W × D		mm							-		
Packing dimension	Height	mm		314				1134			-		
	Width	mm		1168				1095			-		
	Depth	mm		383				529			-		
Mass	(NET)	kg		14				86			-		
	(GROSS)	kg		16				94			-		
	Panel (NET)	kg		-				-			-		
Layers limit (actually)				11 (12)				1 (2)			-		
Operation condition	Cool (DBT)			18°C~32°C				-15°C (*8~20°C)~52°C			-		
	Heat (DBT)			16°C~30°C				-20°C ~ 24°C			-		
Max Working Pressure HP/LP MPa						4.15/2.55					-		
Max Allowable Pressure MPa						4.15					-		
PIPING	Pipe port diameter mm (inch)				(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)					-	
	Pipe diameter mm (inch)						(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)					-	
	Connecting method				flared type		flared type					-	
	Standard length m						5 m					-	
	Pipe length range m						5 ~ 100 m					-	
	Indoor unit & Outdoor unit height difference m				15 m (OD located lower) / 30 m (OD located higher)							-	
	Add gas amount (20~85)g/m						40 g/m					-	
	Add gas amount (85~100)g/m						25 g/m					-	
	Pipe length for additional gas m						20 m					-	
												-	

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-5010PK4E (50) ×3							
PANEL		POS (EAN)		5025232978489							
		MODEL									
OUTDOOR		MODEL					U-140PZH4E8				
		POS (EAN)					5025232945412				
Branch pipe		MODEL					CZ-P3HPC2				
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825							
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz				
COOLING	Capacity	V		220V	230V	240V	380V	400V	415V	Min	Max
		kW		13.4	13.4	13.4	-	-	-	3.3	16.0
		BTU/h		45700	45700	45700	-	-	-	11300	54600
		Sensible	kW	-	-	-	-	-	-	-	-
	Current	A		0.35 ×3	0.34 ×3	0.33 ×3	6.50	6.20	5.95	-	-
		W		34 ×3	34 ×3	34 ×3	-	-	-	-	-
	Input power	TOTAL W		-	-	-	3.94k	3.94k	3.94k	620	6.00k
		TOTAL kWh *4		-	-	-	-	1970	-	-	-
	Annual consumption	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.40	3.40 / A	3.40	5.32	2.67
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.40	3.40 / A	3.40	5.32	2.67
		Pdesign	kW	-	-	-	-	13.4	-	-	-
		ηsc	%	-	-	-	-	269.0	-	-	-
		Annual consumption	kWh	-	-	-	-	-	-	-	-
	Class	Class		-	-	-	-	-	-	-	-
		Power factor	%	-	-	-	92	92	92	-	-
	Noise indoor *7	dB-A (H/M/L)		41/36/31			-			-	-
		Power Level dB		57/52/47			-			-	-
	Noise outdoor	dB-A (H/L)		-			56/-			-	-
		Power Level dB		-			74/-			-	-
	HEATING	Capacity	kW		15.2	15.2	15.2	-	-	-	3.3
BTU/h			51900	51900	51900	-	-	-	11300	61400	
Current		A		0.35 ×3	0.34 ×3	0.33 ×3	6.85	6.50	6.20	-	-
		W		34 ×3	34 ×3	34 ×3	-	-	-	-	-
Input power		TOTAL W		-	-	-	4.10k	4.10k	4.10k	600	5.90k
		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.71	3.71 / A	3.71	5.50	3.05
COP/COP CLASS		Pdesign at -10°C	kW	-	-	-	-	10.6	-	-	-
		Tbivalent	°C	-	-	-	-	-10	-	-	-
		ηsh	%	-	-	-	-	169.4	-	-	-
		Annual consumption	kWh	-	-	-	-	-	-	-	-
ErP *6		elbu (-10°C)	kW	-	-	-	-	-	-	-	-
		Class		-	-	-	-	-	-	-	-
Power factor		%		-	-	-	91	91	92	-	-
		dB-A (H/M/L)		41/36/31			-			-	-
Noise indoor *7		Power Level dB		57/52/47			-			-	-
		dB-A (H/L)		-			56/-			-	-
Noise outdoor		Power Level dB		-			74/-			-	-
	Power Level dB		-			-			-	-	
LOW TEMP	Total capacity (kW)		-			-			-		
EXTRA LOW TEMP	Total capacity (kW) *2		-			11.80			-		
Max Current (A) / Max Input power (W)		0.35/34 ×3		0.34/34 ×3		0.33/34 ×3		11.4 / 7.00k	11.4 / 7.35k	11.4 / 7.60k	-
Starting current (A) (Cooling/Heating)		-		-		-		6.50 / 6.85	6.20 / 6.50	5.95 / 6.20	-
Comp output (W)		-		-		-		3.00k	3.00k	3.00k	-
Time Delay fuse max size (A)		-		-		-		15			-
Network Impedance (ΩMAX.)		-		-		-		-			-
Fan motor output (Indoor/Outdoor) W		-		30		-		120			-
Moisture removal volume		L/h		4.8		(1.6 ×3)		-			-
External static pressure		Pa		-		-		-			-
Indoor Air flow *7	Cooling	m³/min (H/M/L)		17.0 ×3 / 15.5 ×3 / 12.0 ×3		-		-			-
	Heating	m³/min (H/M/L)		17.0 ×3 / 15.5 ×3 / 12.0 ×3		-		-			-
Outdoor Air flow	Cooling	m³/min		-		-		89.0			-
	Heating	m³/min		-		-		83.0			-
Refrigerant type / amount (ship) kg / amount (max) kg		-		-		R32		3.000	5.975	-	
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)		-		-		675	2.03	4.03	-	
Product dimension	Height	mm		295		996		-			-
	Width	mm		1060		980		-			-
	Depth	mm		249		370		-			-
Product dimension (Panel)		H × W × D mm		-		-		-			-
Packing dimension	Height	mm		314		1134		-			-
	Width	mm		1168		1095		-			-
	Depth	mm		383		529		-			-
Mass	(NET)	kg		14		84		-			-
	(GROSS)	kg		16		92		-			-
	Panel (NET)	kg		-		-		-			-
Layers limit (actually)		11 (12)		1 (2)		-					
Operation condition	Cool (DBT)	18°C~32°C		-		-15°C (*8-20°C)~52°C					
	Heat (DBT)	16°C~30°C		-		-20°C ~ 24°C					
Max Working Pressure HP/LP MPa		4.15/2.55		-							
Max Allowable Pressure MPa		4.15		-							
PIPING	Pipe port diameter mm (inch)	(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)		-					
	Pipe diameter mm (inch)	(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)		-		-					
	Connecting method	flared type		flared type		-					
	Standard length m	5 m		-							
	Pipe length range m	5 ~ 100 m		-							
	Indoor unit & Outdoor unit height difference m	15 m (OD located lower) / 30 m (OD located higher)		-							
	Add gas amount (20~85)g/m	40 g/m		-							
	Add gas amount (85~100)g/m	25 g/m		-							
	Pipe length for additional gas m	20 m		-							
		-		-							

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-5010PK4E (50) ×4								
PANEL		POS (EAN)		5025232978489								
		MODEL										
OUTDOOR		MODEL					U-200PZH4E8					
		POS (EAN)					5025232954469					
Branch pipe		MODEL		CZ-P680BK2								
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz					
COOLING	Capacity	V		220V	230V	240V	380V	400V	415V	Min	Max	
		kW		19.0	19.0	19.0	-	-	-	5.7	20.0	
		BTU/h		64800	64800	64800	-	-	-	19400	68200	
		Sensible	kW	-	-	-	-	-	-	-	-	
	Current	Latent		kW	0.35 ×4	0.35 ×4	0.35 ×4	9.25	8.75	8.45	-	-
		A		34 ×4	34 ×4	34 ×4	-	-	-	-	-	
	Input power	W		TOTAL W	-	-	-	5.59k	5.59k	5.59k	1.24k	7.20k
		Annual consumption		TOTAL kWh *4	-	-	-	-	2795	-	-	-
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.40	3.40 / A	3.40	4.60	2.78	
		ErP *6	Pdesign	kW	-	-	-	-	19.0	-	-	-
	ηsc		%	-	-	-	-	281.0	-	-	-	
	Annual consumption		kWh	-	-	-	-	-	-	-	-	
	Class		-	-	-	-	-	-	-	-	-	
	Power factor	%		-	-	-	92	92	92	-	-	
	Noise indoor *7	dB-A (H/M/L)		41/36/31			-			-	-	
		Power Level dB		57/52/47			-			-	-	
	Noise outdoor	dB-A (H/L)		-			57/-			-	-	
		Power Level dB		-			76/-			-	-	
	HEATING	Capacity	kW		22.4	22.4	22.4	-	-	-	5.0	24.5
			BTU/h		76400	76400	76400	-	-	-	17100	83600
Current		A		0.35 ×4	0.35 ×4	0.33 ×4	9.72	9.25	8.90	-	-	
		W		34 ×4	34 ×4	34 ×4	-	-	-	-	-	
Input power		TOTAL W		-	-	-	5.90k	5.90k	5.90k	1.05k	7.50k	
		COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")	-	-	-	3.80	3.80 / A	3.80	4.76	3.27
ErP *6		Pdesign at -10°C	kW	-	-	-	-	15.7	-	-	-	
		Tbivalent	°C	-	-	-	-	-10	-	-	-	
		ηsh	%	-	-	-	-	154.5	-	-	-	
		Annual consumption	kWh	-	-	-	-	-	-	-	-	
		elbu (-10°C)	kW	-	-	-	-	-	-	-	-	
Power factor		%		-	-	-	92	92	92	-	-	
		Noise indoor *7	dB-A (H/M/L)		41/36/31			-			-	-
Power Level dB			57/52/47			-			-	-		
Noise outdoor		dB-A (H/L)		-			61/-			-	-	
		Power Level dB		-			80/-			-	-	
LOW TEMP		Total capacity (kW)			-			-			-	
EXTRA LOW TEMP	Total capacity (kW) *2			-			17.40			-		
Max Current (A) / Max Input power (W)				0.35/34 ×4	0.34/34 ×4	0.33/34 ×4	15.0 / 9.08k	15.0 / 9.56k	15.0 / 9.92k	-		
Starting current (A) (Cooling/Heating)				-	-	-	9.25 / 9.75	8.75 / 9.25	8.45 / 8.90	-		
Comp output (W)				-	-	-	4.20k	4.20k	4.20k	-		
Time Delay fuse max size (A)				-	-	-	-	30	-	-		
Network Impedance (QMAX.)				-	-	-	-	-	-	-		
Fan motor output (Indoor/Outdoor) W				-	30	-	-	600	-	-		
Moisture removal volume			L/h	6.4	(1.6 ×4)	-	-	-	-	-		
External static pressure			Pa	-	-	-	-	-	-	-		
Indoor Air flow *7	Cooling	m³/min (H/M/L)		17.0 ×4 / 15.5 ×4 / 12.0 ×4			-			-	-	
	Heating	m³/min (H/M/L)		17.0 ×4 / 15.5 ×4 / 12.0 ×4			-			-	-	
Outdoor Air flow	Cooling	m³/min		-			116.0			-	-	
	Heating	m³/min		-			148.0			-	-	
Refrigerant type / amount (ship) kg / amount (max) kg				-			R32	4.800	10.400	-		
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)			-			675	3.24	7.02	-		
	Product dimension	Height	mm	295			996			-		
Width		mm	1060			1140			-			
Depth		mm	249			460			-			
Product dimension (Panel)		H × W × D	mm	-			-			-		
Packing dimension	Height	mm	314			1135			-			
	Width	mm	1168			1252			-			
	Depth	mm	383			616			-			
Mass	(NET)	kg	14			109			-			
	(GROSS)	kg	16			117			-			
	Panel	kg	-			-			-			
	(NET)	kg	-			-			-			
Layers limit (actually)				11 (12)			1 (2)			-		
Operation condition	Cool (DBT)		18°C~32°C			-15°C~52°C			-			
	Heat (DBT)		16°C~30°C			-20°C~35°C			-			
Max Working Pressure HP/LP MPa				4.15/2.55			-			-		
Max Allowable Pressure MPa				4.15			-			-		
PIPING	Pipe port diameter mm (inch)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø12.7 (1/2) (Gas) Ø22.22 (7/8)			-		
	Pipe diameter mm (inch)			(Liquid) Ø12.7 (1/2) (Gas) Ø22.22 (7/8)			-			-		
	Connecting method			flared type			(Liquid) flared type (Gas) brazing connection			-		
	Standard length m			7.5 m			-			-		
	Pipe length range m			5 ~ 100 m			-			-		
	Indoor unit & Outdoor unit height difference m			30 m (OD located lower) / 30 m (OD located higher)			-			-		
	Add gas amount (20~85)g/m			80 g/m			-			-		
	Add gas amount (85~100)g/m			80 g/m			-			-		
	Pipe length for additional gas m			30 m			-			-		
										-		

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (50) *2						-	-				
PANEL		POS (EAN)		5025232978489						-	-				
		MODEL								-	-				
OUTDOOR		MODEL					U-100PZH4E5			-	-				
		POS (EAN)					5025232945368			-	-				
Branch pipe		MODEL		CZ-P155BK1								-	-		
Performance test condition												ISO5151 / EN14511 / EN12102 / EN14825			
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz								
COOLING	Capacity	V		220V	230V	240V	380V	400V	415V	Min	Max				
		kW		9.5	9.5	9.5	-	-	-	3.1	10.5				
		BTU/h		32400	32400	32400	-	-	-	10600	35800				
		Sensible	kW	-	-	-	-	-	-	-	-				
	Current	A		0.35 ×2	0.34 ×2	0.33 ×2	13.8	13.2	12.6	-	-				
		W		34 ×2	34 ×2	34 ×2	-	-	-	-	-				
	Input power	TOTAL W		-	-	-	2.79k	2.79k	2.79k	580	3.40k				
	Annual consumption	TOTAL kWh *4		-	-	-	-	1395	-	-	-				
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.41	3.41 / A	3.41	5.34	3.09				
	ErP *6	Pdesign	kW	-	-	-	-	9.5	-	-	-				
		SEER	%	-	-	-	-	6.6	-	-	-				
		Annual consumption	kWh	-	-	-	-	504	-	-	-				
		Class	-	-	-	-	-	A++	-	-	-				
	Power factor	%		-	-	-	92	92	92	-	-				
	Noise indoor *7	dB-A (H/M/L)		41/36/31						-	-				
Power Level dB		57/52/47						-	-						
dB-A (H/L)					52/-			-	-						
Power Level dB					69/-			-	-						
HEATING	Capacity	kW	9.5	9.5	9.5	-	-	-	3.1	11.5					
		BTU/h	32400	32400	32400	-	-	-	10600	39200					
	Current	A	0.35 ×2	0.34 ×2	0.33 ×2	12.2	11.7	11.2	-	-					
	Input power	W	34 ×2	34 ×2	34 ×2	-	-	-	-	-					
		TOTAL W	-	-	-	2.44k	2.44k	2.44k	580	3.83k					
	COP/COP CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.89	3.89 / A	3.89	5.34	3.00				
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	8.0	-	-	-				
		Tbivalent	°C	-	-	-	-	-10	-	-	-				
		SCOP	(W/W)	-	-	-	-	4.1	-	-	-				
		Annual consumption	kWh	-	-	-	-	2731	-	-	-				
	elbu (-10°C)	kW	-	-	-	-	-	-	-	-	-				
		Class	-	-	-	-	-	A+	-	-	-				
	Power factor	%		-	-	-	91	91	91	-	-				
	Noise indoor *7	dB-A (H/M/L)		41/36/31						-	-				
		Power Level dB		57/52/47						-	-				
dB-A (H/L)					52/-			-	-						
Power Level dB					69/-			-	-						
LOW TEMP	Total capacity (kW)			-			-			-					
EXTRA LOW TEMP	Total capacity (kW) *2			-			8.90			-					
Max Current (A) / Max Input power (W)			0.35/34 ×2	0.34/34 ×2	0.33/34 ×2	28.3 / 5.80k	28.3 / 6.00k	28.3 / 6.25k	-						
Starting current (A) (Cooling/Heating)			-	-	-	13.8 / 12.2	13.2 / 11.7	12.6 / 11.2	-						
Comp output (W)			-	-	-	2.50k	2.50k	2.50k	-						
Time Delay fuse max size (A)			-	-	-	35			-						
Network Impedance (ΩMAX.)			-	-	-	-			-						
Fan motor output (Indoor/Outdoor) W			-	30	-	120			-						
Moisture removal volume		L/h	3.2	(1.6 ×2)	-	-			-						
External static pressure		Pa	-	-	-	-			-						
Indoor Air flow *7	Cooling	m³/min (H/M/L)	17.0 ×2 / 15.5 ×2 / 12.0 ×2			-			-	-					
	Heating	m³/min (H/M/L)	17.0 ×2 / 15.5 ×2 / 12.0 ×2			-			-	-					
Outdoor Air flow	Cooling	m³/min	-			76.0			-	-					
	Heating	m³/min	-			70.0			-	-					
Refrigerant type / amount (ship) kg / amount (max) kg			-			R32	2.700	5.975	-						
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)		-			675	1.82	4.03	-						
Product dimension	Height	mm	295			996			-						
	Width	mm	1060			980			-						
	Depth	mm	249			370			-						
Product dimension (Panel)	H × W × D		mm			-			-						
Packing dimension	Height	mm	314			1134			-						
	Width	mm	1168			1095			-						
	Depth	mm	383			529			-						
Mass	(NET)	kg	14			84			-						
	(GROSS)	kg	16			92			-						
	Panel	kg	-			-			-						
	(NET)	kg	-			-			-						
Layers limit (actually)			11 (12)			1 (2)			-						
Operation condition	Cool (DBT)	18°C~32°C			-15°C (*8-20°C)~52°C			-							
	Heat (DBT)	16°C~30°C			-20°C ~ 24°C			-							
Max Working Pressure HP/LP MPa			4.15/2.55			-			-						
Max Allowable Pressure MPa			4.15			-			-						
PIPING	Pipe port diameter mm (inch)	(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø12.7 (1/2) (Gas) Ø15.88 (5/8)			-							
	Pipe diameter mm (inch)	(Liquid) Ø12.7 (1/2) (Gas) Ø15.88 (5/8)			-			-							
	Connecting method	flared type			flared type			-							
	Standard length	m			5 m			-							
	Pipe length range	m			5 ~ 100 m			-							
	Indoor unit & Outdoor unit height difference	m			15 m (OD located lower) / 30 m (OD located higher)			-							
	Add gas amount (20~85)g/m	40 g/m			-			-							
	Add gas amount (85~100)g/m	40 g/m			-			-							
	Pipe length for additional gas	m			30 m			-							
								-							

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V(400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-5010PK4E (50) ×2								
PANEL		POS (EAN)		5025232978489								
		MODEL										
		MODEL										
OUTDOOR		POS (EAN)					U-100PZH4E8					
							5025232945375					
Branch pipe		MODEL		CZ-P155BK1								
		Performance test condition		ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz					
COOLING	Capacity	V		220V	230V	240V	380V	400V	415V	Min	Max	
		kW		9.5	9.5	9.5	-	-	-	3.1	10.5	
		BTU/h		32400	32400	32400	-	-	-	10600	35800	
		Sensible	kW	-	-	-	-	-	-	-	-	
	Current	Latent		kW	-	-	-	-	-	-	-	
		A		0.35 ×2	0.34 ×2	0.33 ×2	4.65	4.45	4.20	-	-	
	Input power	W		34 ×2	34 ×2	34 ×2	-	-	-	-	-	
		TOTAL W		-	-	-	2.79k	2.79k	2.79k	580	3.40k	
	Annual consumption	TOTAL kWh *4		-	-	-	-	1395	-	-	-	
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.41	3.41 / A	3.41	5.34	3.09	
	ErP *6	Pdesign	kW	-	-	-	-	9.5	-	-	-	
		SEER	(W/W)	-	-	-	-	6.6	-	-	-	
		Annual consumption	kWh	-	-	-	-	504	-	-	-	
		Class		-	-	-	-	A++	-	-	-	
	Power factor	%		-	-	-	91	91	92	-	-	
Noise indoor *7	dB-A (H/M/L)		41/36/31						-	-		
	Power Level dB		57/52/47						-	-		
Noise outdoor	dB-A (H/L)					52/-			-	-		
	Power Level dB					69/-			-	-		
HEATING	Capacity	kW		9.5	9.5	9.5	-	-	-	3.1	11.5	
		BTU/h		32400	32400	32400	-	-	-	10600	39200	
	Current	A		0.35 ×2	0.34 ×2	0.33 ×2	4.05	3.85	3.70	-	-	
		W		34 ×2	34 ×2	34 ×2	-	-	-	-	-	
	Input power	TOTAL W					2.44k	2.44k	2.44k	580	3.83k	
		COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	3.89	3.89 / A	3.89	5.34	3.00
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	8.0	-	-	-	
		Tbivalent	°C	-	-	-	-	-10	-	-	-	
		SCOP	(W/W)	-	-	-	-	4.1	-	-	-	
		Annual consumption	kWh	-	-	-	-	2731	-	-	-	
		elbu (-10°C)	kW	-	-	-	-	-	-	-	-	
		Class		-	-	-	-	A+	-	-	-	
	Power factor	%		-	-	-	91	91	92	-	-	
	Noise indoor *7	dB-A (H/M/L)		41/36/31						-	-	
		Power Level dB		57/52/47						-	-	
Noise outdoor	dB-A (H/L)					52/-			-	-		
	Power Level dB					69/-			-	-		
LOW TEMP	Total capacity (kW)									-	-	
EXTRA LOW TEMP	Total capacity (kW) *2						8.90					
Max Current (A) / Max Input power (W)				0.35/34 ×2	0.34/34 ×2	0.33/34 ×2	9.90 / 6.05k	9.90 / 6.30k	9.90 / 6.50k			
Starting current (A) (Cooling/Heating)				-	-	-	4.65 / 4.05	4.45 / 3.85	4.20 / 3.70			
Comp output (W)							2.50k	2.50k	2.50k			
Time Delay fuse max size(A)							15					
Network Impedance (QMAX.)												
Fan motor output (Indoor/Outdoor) W				30			120					
Moisture removal volume				L/h	3.2	(1.6 ×2)						
External static pressure				Pa								
Indoor Air flow *7	Cooling	m³/min (H/M/L)		17.0 ×2 / 15.5 ×2 / 12.0 ×2						-	-	
	Heating	m³/min (H/M/L)		17.0 ×2 / 15.5 ×2 / 12.0 ×2						-	-	
Outdoor Air flow	Cooling	m³/min					76.0			-	-	
	Heating	m³/min					70.0			-	-	
Refrigerant type / amount (ship) kg / amount (max) kg							R32	2.700	5.975			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)						675	1.82	4.03			
Product dimension		Height	mm	295			996					
		Width	mm	1060			980					
		Depth	mm	249			370					
Product dimension (Panel)		H×W×D	mm									
Packing dimension		Height	mm	314			1134					
		Width	mm	1168			1095					
		Depth	mm	383			529					
Mass	(NET)	kg	14			82						
	(GROSS)	kg	16			90						
	Panel	kg										
	(NET)	kg										
Layers limit (actually)					11 (12)			1 (2)			-	
Operation condition	Cool (DBT)				18°C-32°C			-15°C (*8-20°C)-52°C			-	
					16°C-30°C			-20°C ~ 24°C			-	
Max Working Pressure HP/LP MPa							4.15/2.55					
Max Allowable Pressure MPa							4.15					
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						
	Pipe diameter mm (inch)					(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						
	Connecting method		flared type			flared type						
	Standard length m					5 m						
	Pipe length range m					5 ~ 100 m						
	Indoor unit & Outdoor unit height difference m					15 m (OD located lower) / 30 m (OD located higher)						
	Add gas amount (20~85)g/m					40 g/m						
	Add gas amount (85~100)g/m					40 g/m						
	Pipe length for additional gas m					30 m						

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V(400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-5010PK4E (60)																	
PANEL		POS (EAN)		5025232978489																	
		MODEL																			
OUTDOOR		MODEL					U-60PZH3E5														
		POS (EAN)					5025232915521														
Branch pipe		MODEL																			
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825																	
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz														
		V		220V		230V		240V		220V		230V		240V		Min		Max			
		kW		6.1		6.1		6.1		-		-		-		1.2		7.1			
Capacity		BTU/h		20800		20800		20800		-		-		-		4100		24200			
		Sensible		kW		4.8		4.8		4.8		-		-		-		-			
		Latent		kW		1.3		1.3		1.3		-		-		-		-			
Current		A		0.67		0.65		0.63		7.65		7.30		7.00		-		-			
Input power		W		65		65		65		-		-		-		-		-			
		TOTAL W		-		-		-		1.63k		1.63k		1.63k		220		2.35k			
Annual consumption		TOTAL kWh *4		-		-		-		-		815		-		-		-			
EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-		-		-		3.74		3.74 / A		3.74		5.45		3.02			
ErP *6		Pdesign		kW		-		-		-		6.1		-		-		-			
		SEER		(W/W)		-		-		-		7.1		-		-		-			
		Annual consumption		kWh		-		-		-		301		-		-		-			
		Class		-		-		-		-		A++		-		-		-			
Power factor		%		-		-		-		97		97		97		-		-			
Noise indoor *7		dB-A (H/M/L)		-		47/44/40		-		-		-		-		-		-			
		Power Level dB		-		63/60/56		-		-		-		-		-		-			
		dB-A (H/L)		-		-		-		-		47/-		-		-		-			
Noise outdoor		dB-A (H/L)		-		-		-		-		-		-		-		-			
		Power Level dB		-		-		-		-		65/-		-		-		-			
HEATING		Capacity		kW		7.0		7.0		7.0		-		-		1.2		8.0			
				BTU/h		23900		23900		23900		-		-		4100		27300			
		Current		A		0.67		0.65		0.63		7.90		7.55		7.25		-			
		Input power		W		65		65		65		-		-		-		-			
				TOTAL W		-		-		-		1.70k		1.70k		1.70k		220			
		COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-		-		-		4.12		4.12 / A		4.12		5.45			
		ErP *6		Pdesign at -10°C		kW		-		-		-		4.6		-		-			
				Tbivalent		°C		-		-		-		-10		-		-			
				SCOP		(W/W)		-		-		-		4.7		-		-			
				Annual consumption		kWh		-		-		-		1370		-		-			
				elbu (-10°C)		kW		-		-		-		-		-		-			
				Class		-		-		-		-		A++		-		-			
		Power factor		%		-		-		-		98		98		98		-			
		Noise indoor *7		dB-A (H/M/L)		-		47/44/40		-		-		-		-		-		-	
				Power Level dB		-		63/60/56		-		-		-		-		-		-	
				dB-A (H/L)		-		-		-		-		50/-		-		-		-	
Noise outdoor		dB-A (H/L)		-		-		-		-		-		-		-		-			
		Power Level dB		-		-		-		-		69/-		-		-		-			
LOW TEMP		Total capacity (kW)		-		-		-		-		-		-		-		-			
EXTRA		Total capacity (kW) *2		-		-		-		-		5.10		-		-		-			
LOW TEMP		Max Current (A) / Max Input power (W)		0.67/65		0.65/65		0.63/65		16.4 / 3.25k		16.4 / 3.39k		16.4 / 3.54k		-		-			
		Starting current (A) (Cooling/Heating)		-		-		-		7.65 / 7.90		7.30 / 7.55		7.00 / 7.25		-		-			
		Comp output (W)		-		-		-		0.90k		0.90k		0.90k		-		-			
		Time Delay fuse max size (A)		-		-		-		-		25		-		-		-			
		Network Impedance (ΩMAX.)		-		-		-		-		-		-		-		-			
		Fan motor output (Indoor/Outdoor) W		-		30		-		-		40		-		-		-			
		Moisture removal volume		L/h		1.9		(1.9 ×1)		-		-		-		-		-			
		External static pressure		Pa		-		-		-		-		-		-		-			
Indoor Air flow *7		Cooling		m³/min (H/M/L)		21.0 / 19.0 / 16.5		-		-		-		-		-		-			
		Heating		m³/min (H/M/L)		21.0 / 19.0 / 16.5		-		-		-		-		-		-			
		Cooling		m³/min		-		-		-		42.0		-		-		-			
		Heating		m³/min		-		-		-		42.0		-		-		-			
Outdoor Air flow		Cooling		m³/min		-		-		-		42.0		-		-		-			
		Heating		m³/min		-		-		-		42.0		-		-		-			
		Refrigerant type / amount (ship) kg / amount (max) kg		-		-		-		R32		1.150		1.300		-		-			
F-Gas		GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)		-		-		-		675		0.78		0.88		-		-			
Product dimension		Height		mm		295		-		695		-		-		-		-			
		Width		mm		1060		-		875		-		-		-		-			
		Depth		mm		249		-		320		-		-		-		-			
		H × W × D		mm		-		-		-		-		-		-		-			
Product dimension (Panel)		Height		mm		314		-		761		-		-		-		-			
		Width		mm		1168		-		1049		-		-		-		-			
		Depth		mm		383		-		460		-		-		-		-			
		(NET)		kg		14		-		43		-		-		-		-			
Mass		(GROSS)		kg		16		-		47		-		-		-		-			
		Panel		kg		-		-		-		-		-		-		-			
		(NET)		kg		-		-		-		-		-		-		-			
		Layers limit (actually)		-		11 (12)		-		3 (4)		-		-		-		-			
Operation condition		Cool (DBT)		-		18°C~32°C		-		-		-15°C~46°C		-		-		-			
		Heat (DBT)		-		16°C~30°C		-		-		-20°C ~ 24°C		-		-		-			
		Max Working Pressure HP/LP MPa		-		4.15/2.55		-		-		-		-		-		-			
		Max Allowable Pressure MPa		-		4.55		-		-		-		-		-		-			
		Pipe port diameter mm (inch)		-		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)		-		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)		-		-		-		-			
PIPING		Pipe diameter mm (inch)		-		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)		-		-		-		-		-		-			
						*Connect the gas socket tube (Ø12.7-Ø15.88) to the gas tubing side indoor unit		-		-		-		-		-		-			
						*Connect the liquid socket tube (Ø6.35-Ø9.52) to the liquid tubing side indoor unit		-		-		-		-		-		-			
		Connecting method		-		flared type		-		flared type		-		-		-		-			
		Standard length m		-		5 m		-		-		-		-		-		-			
		Pipe length range m		-		3 ~ 40 m		-		-		-		-		-		-			
		Indoor unit & Outdoor unit height difference m		-		15 m (OD located lower) / 30 m (OD located higher)		-		-		-		-		-		-			
		Add gas amount g/m		-		15 g/m		-		-		-		-		-		-			
		Pipe length for additional gas m		-		30 m		-		-		-		-		-		-			

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (60) ×2									
PANEL		POS (EAN)		5025232978489									
		MODEL											
OUTDOOR		MODEL					U-125PZH4E5						
		POS (EAN)					5025232945382						
Branch pipe		MODEL					CZ-P155BK1						
Performance test condition										ISO5151 / EN14511 / EN12102 / EN14825			
COOLING	Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz					
	Capacity		V		220V	230V	240V	220V	230V	240V	Min	Max	
			kW		12.5	12.5	12.5	-	-	-	3.2	14.0	
			BTU/h		42700	42700	42700	-	-	-	10900	47800	
			Sensible		kW		-	-	-	-	-		
			Latent		kW		-	-	-	-	-		
	Current		A		0.67 ×2	0.65 ×2	0.63 ×2	18.2	17.4	16.7	-	-	
	Input power		W		65 ×2	65 ×2	65 ×2	-	-	-	-	-	
			TOTAL W					3.72k	3.72k	3.72k	600	4.70k	
	Annual consumption		TOTAL kWh *4					-	1860	-	-	-	
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")					3.36	3.36 / A	3.36	5.33	2.98	
	ErP *6	Pdesign		kW					-	12.5	-	-	
		ηsc		%					-	272.1	-	-	
		Annual consumption		kWh					-	-	-	-	
		Class							-	-	-	-	
	Power factor		%					93	93	93	-	-	
	Noise indoor *7		dB-A (H/M/L)		47/44/40						-	-	
Power Level dB			63/60/56						-	-			
Noise outdoor		dB-A (H/L)					55/-			-	-		
		Power Level dB					73/-			-	-		
HEATING	Capacity		kW		14.0	14.0	14.0	-	-	-	3.2	16.0	
			BTU/h		47800	47800	47800	-	-	-	10900	54600	
	Current		A		0.67 ×2	0.65 ×2	0.63 ×2	16.7	16.0	15.3	-	-	
	Input power		W		65 ×2	65 ×2	65 ×2	-	-	-	-	-	
			TOTAL W					3.42k	3.42k	3.42k	580	5.10k	
	COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.09	4.09 / A	4.09	5.52	3.14	
	ErP *6	Pdesign at -10°C		kW		-	-	-	-	9.5	-	-	
		Tbivalent		°C		-	-	-	-	-10	-	-	
		ηsh		%		-	-	-	-	170.0	-	-	
		Annual consumption		kWh		-	-	-	-	-	-	-	
	elbu (-10°C)		kW		-	-	-	-	-	-	-	-	
	Class				-	-	-	-	-	-	-	-	
	Power factor		%		-	-	-	93	93	93	-	-	
	Noise indoor *7		dB-A (H/M/L)		47/44/40						-	-	
			Power Level dB		63/60/56						-	-	
	Noise outdoor		dB-A (H/L)					55/-			-	-	
			Power Level dB					73/-			-	-	
LOW TEMP	Total capacity (kW)												
EXTRA LOW TEMP	Total capacity (kW) *2						10.50						
Max Current (A) / Max Input power (W)				0.67/65 ×2	0.65/65 ×2	0.63/65 ×2	32.7 / 6.60k	32.7 / 6.85k	32.7 / 7.15k				
Starting current (A) (Cooling/Heating)				-	-	-	18.2 / 16.7	17.4 / 16.0	16.7 / 15.3				
Comp output (W)							2.80k	2.80k	2.80k				
Time Delay fuse max size (A)							40						
Network Impedance (ΩMAX)													
Fan motor output (Indoor/Outdoor) W				30			120						
Moisture removal volume				L/h	3.8	(1.9 ×2)							
External static pressure				Pa									
Indoor Air flow *7	Cooling	m³/min (H/M/L)	21.0 ×2 / 19.0 ×2 / 16.5 ×2						-	-			
	Heating	m³/min (H/M/L)	21.0 ×2 / 19.0 ×2 / 16.5 ×2						-	-			
Outdoor Air flow	Cooling	m³/min				86.0			-	-			
	Heating	m³/min				78.0			-	-			
Refrigerant type / amount (ship) kg / amount (max) kg							R32	3.000	5.975				
F-Gas	CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)						675	2.03	4.03				
Product dimension	Height	mm	295			996							
	Width	mm	1060			980							
	Depth	mm	249			370							
Product dimension (Panel)		H × W × D											
Packing dimension	Height	mm	314			1134							
	Width	mm	1168			1095							
	Depth	mm	383			529							
Mass	(NET)	kg	14			86							
	(GROSS)	kg	16			94							
	Panel (NET)	kg											
Layers limit (actually)				11 (12)			1 (2)						
Operation condition		Cool (DBT)		18°C~32°C			-15°C (*8~20°C)~52°C						
		Heat (DBT)		16°C~30°C			-20°C ~ 24°C						
Max Working Pressure HP/LP MPa							4.15/2.55						
Max Allowable Pressure MPa							4.15						
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)				(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						
	Pipe diameter mm (inch)		(Liquid)Ø9.52(3/8) (Gas)Ø15.88(5/8)										
	Connecting method		flared type				flared type						
	Standard length m		5 m										
	Pipe length range m		5 ~ 100 m										
	Indoor unit & Outdoor unit height difference m		15 m(OD located lower) / 30 m(OD located higher)										
	Add gas amount (20~85)g/m		40 g/m										
	Add gas amount (85~100)g/m		40 g/m										
Pipe length for additional gas m		30 m											

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-5010PK4E (60) *2							-			-		
PANEL		POS (EAN)		5025232978489							-			-		
		MODEL		-							-			-		
OUTDOOR		MODEL		-							U-125PZH4E8			-		
		POS (EAN)		-							5025232945399			-		
Branch pipe		MODEL						CZ-P155BK1								
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825												
Power supply		Ø, Hz		1Ø 50Hz				3Ø 50Hz								
COOLING	Capacity	V		220V	230V	240V	380V	400V	415V	Min		Max				
		kW		12.5	12.5	12.5	-	-	-	3.2		14.0				
		BTU/h		42700	42700	42700	-	-	-	10900		47800				
		Sensible	kW	-	-	-	-	-	-	-		-				
	Current	Latent	kW	-	-	-	-	-	-	-		-				
		A		0.67 *2	0.65 *2	0.63 *2	6.15	5.85	5.65	-		-				
	Input power	W		65 *2	65 *2	65 *2	-	-	-	-		-				
		TOTAL W		-	-	-	3.72k	3.72k	3.72k	600		4.70k				
	Annual consumption	TOTAL kWh *4		-	-	-	-	1860	-	-		-				
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.36	3.36 / A	3.36	5.33		2.98				
	ErP *6	Pdesign	kW	-	-	-	-	12.5	-	-		-				
			ηsc	%	-	-	-	-	272.1	-	-					
		Annual consumption	kWh	-	-	-	-	-	-	-		-				
			Class	-	-	-	-	-	-	-	-		-			
	Power factor	%		-	-	-	92	92	92	-		-				
	Noise indoor *7	dB-A (H/M/L)		47/44/40							-		-			
		Power Level dB		63/60/56							-		-			
Noise outdoor	dB-A (H/L)		-				55/-			-		-				
	Power Level dB		-				73/-			-		-				
HEATING	Capacity	kW	14.0	14.0	14.0	-	-	-	3.2		16.0					
		BTU/h	47800	47800	47800	-	-	-	10900		54600					
		A		0.67 *2	0.65 *2	0.63 *2	5.70	5.40	5.25	-		-				
		W		65 *2	65 *2	65 *2	-	-	-	-		-				
	Input power	TOTAL W		-	-	-	3.42k	3.42k	3.42k	580		5.10k				
		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.09	4.09 / A	4.09	5.52		3.14				
	COP/COP CLASS	Pdesign at -10°C	kW	-	-	-	-	9.5	-	-		-				
			Tbivalent	°C	-	-	-	-	-10	-	-		-			
		Annual consumption	ηsh	%	-	-	-	-	170.0	-	-		-			
			kWh	-	-	-	-	-	-	-	-		-			
	EER/EER CLASS	elbu (-10°C)	kW	-	-	-	-	-	-	-		-				
			Class	-	-	-	-	-	-	-	-		-			
	Power factor	%		-	-	-	91	91	91	-		-				
	Noise indoor *7	dB-A (H/M/L)		47/44/40							-		-			
		Power Level dB		63/60/56							-		-			
	Noise outdoor	dB-A (H/L)		-				55/-			-		-			
		Power Level dB		-				73/-			-		-			
LOW TEMP	Total capacity (kW)		-				-			-		-				
EXTRA LOW TEMP	Total capacity (kW) *2		-				10.50			-		-				
Max Current (A) / Max Input power (W)			0.67/65 *2	0.65/65 *2	0.63/65 *2	11.4 / 6.85k	11.4 / 7.15k	11.4 / 7.40k	-		-					
Starting current (A) (Cooling/Heating)			-	-	-	6.15 / 5.70	5.85 / 5.40	5.65 / 5.25	-		-					
Comp output (W)			-	-	-	2.80k	2.80k	2.80k	-		-					
Time Delay fuse max size (A)			-	-	-	15			-		-					
Network Impedance (QMAX)			-	-	-	-			-		-					
Fan motor output (Indoor/Outdoor) W			-	30	-	120			-		-					
Moisture removal volume		L/h	3.8	(1.9 *2)	-	-			-		-					
External static pressure		Pa	-	-	-	-			-		-					
Indoor Air flow *7	Cooling	m³/min (H/M/L)	21.0 *2 / 19.0 *2 / 16.5 *2				-			-		-				
	Heating	m³/min (H/M/L)	21.0 *2 / 19.0 *2 / 16.5 *2				-			-		-				
Outdoor Air flow	Cooling	m³/min	-				86.0			-		-				
	Heating	m³/min	-				78.0			-		-				
Refrigerant type / amount (ship) kg / amount (max) kg			-				R32	3.000	5.975	-		-				
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)		-				675	2.03	4.03	-		-				
Product dimension	Height	mm	295				996			-		-				
	Width	mm	1060				980			-		-				
	Depth	mm	249				370			-		-				
Product dimension (Panel)		H * W * D	mm				mm			-		-				
Packing dimension	Height	mm	314				1134			-		-				
	Width	mm	1168				1095			-		-				
	Depth	mm	383				529			-		-				
Mass	(NET)	kg	14				84			-		-				
	(GROSS)	kg	16				92			-		-				
	Panel (NET)	kg	-				-			-		-				
Layers limit (actually)		11 (12)				1 (2)			-		-					
Operation condition	Cool (DBT)	18°C~32°C				-15°C (*8-20°C)~52°C			-		-					
	Heat (DBT)	16°C~30°C				-20°C ~ 24°C			-		-					
Max Working Pressure HP/LP MPa			4.15/2.55							-		-				
Max Allowable Pressure MPa			4.15							-		-				
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)				(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			-		-				
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)							-		-				
	Connecting method		flared type				flared type			-		-				
	Standard length m		5 m							-		-				
	Pipe length range m		5 ~ 100 m							-		-				
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)							-		-				
	Add gas amount (20~85)g/m		40 g/m							-		-				
	Add gas amount (85~100)g/m		40 g/m							-		-				
	Pipe length for additional gas m		30 m							-		-				

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-5010PK4E (60) ×4								
PANEL		POS (EAN)		5025232978489								
		MODEL										
OUTDOOR		MODEL						U-250PZH4E8				
		POS (EAN)						5025232954476				
Branch pipe		MODEL		CZ-P680BK2 + CZ-P155BK1×2								
		Performance test condition		ISO5151 / EN14511 / EN12102 / EN14825								
COOLING	Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz				
			V		220V	230V	240V	380V	400V	415V	Min	Max
			kW		22.0	22.0	22.0	-	-	-	6.1	25.6
			BTU/h		75100	75100	75100	-	-	-	20800	87300
	Capacity		Sensible									
			Latent									
	Current		A		0.67 ×4	0.65 ×4	0.63 ×4	10.9	10.4	10.00	-	-
			W		65 ×4	65 ×4	65 ×4	-	-	-	-	-
	Input power		TOTAL W					6.67k	6.67k	6.67k	1.25k	10.30k
			TOTAL kWh *4					-	3335	-	-	-
	Annual consumption		TOTAL (W/W) *5/ ("A"~"G")					3.30	3.30 / A	3.30	4.88	2.49
	ErP *6		Pdesign		kW							
			ηsc		%							
			Annual consumption		kWh							
			Class									
	Power factor		%									
dB-A (H/M/L)			47/44/40									
Power Level dB			63/60/56									
dB-A (H/L)												
Noise outdoor		Power Level dB										
Capacity		kW		24.0	24.0	24.0	-	-	-	5.5	27.6	
		BTU/h		81900	81900	81900	-	-	-	18800	94200	
		A		0.67 ×4	0.65 ×4	0.63 ×4	10.3	9.80	9.45	-	-	
		W		65 ×4	65 ×4	65 ×4	-	-	-	-	-	
Input power		TOTAL W					6.32k	6.32k	6.32k	1.15k	9.00k	
		TOTAL (W/W) *5/ ("A"~"G")					3.80	3.80 / A	3.80	4.78	3.07	
ErP *6		Pdesign at -10°C		kW								
		Tbivalent		°C								
		ηsh		%								
		Annual consumption		kWh								
		elbu (-10°C)		kW								
		Class										
		Power factor		%								
		Noise indoor *7		dB-A (H/M/L)		47/44/40						
Noise outdoor		Power Level dB		63/60/56								
		dB-A (H/L)										
		Power Level dB										
Capacity		kW		24.0	24.0	24.0	-	-	-	5.5	27.6	
		BTU/h		81900	81900	81900	-	-	-	18800	94200	
		A		0.67 ×4	0.65 ×4	0.63 ×4	10.3	9.80	9.45	-	-	
		W		65 ×4	65 ×4	65 ×4	-	-	-	-	-	
Input power		TOTAL W					6.32k	6.32k	6.32k	1.15k	9.00k	
		TOTAL (W/W) *5/ ("A"~"G")					3.80	3.80 / A	3.80	4.78	3.07	
ErP *6		Pdesign at -10°C		kW								
		Tbivalent		°C								
		ηsh		%								
		Annual consumption		kWh								
		elbu (-10°C)		kW								
		Class										
		Power factor		%								
		Noise indoor *7		dB-A (H/M/L)		47/44/40						
Noise outdoor		Power Level dB		63/60/56								
		dB-A (H/L)										
		Power Level dB										
LOW TEMP		Total capacity (kW)										
EXTRA		Total capacity (kW) *2					18.50					
LOW TEMP		Total capacity (kW) *2					18.50					
Max Current (A) / Max Input power (W)		0.67/65 ×4		0.65/65 ×4		0.63/65 ×4		18.5 / 11.3k	18.5 / 11.9k	18.5 / 12.4k	-	
Starting current (A) (Cooling/Heating)								10.9 / 10.3	10.4 / 9.80	10.00 / 9.45	-	
Comp output(W)								5.50k	5.50k	5.50k	-	
Time Delay fuse max size (A)								30			-	
Network Impedance (ΩMAX.)											-	
Fan motor output (Indoor/Outdoor) W				30				600			-	
Moisture removal volume		L/h		7.6		(1.9 ×4)					-	
External static pressure		Pa									-	
Indoor Air flow *7		Cooling	m³/min (H/M/L)	21.0 ×4 / 19.0 ×4 / 16.5 ×4						-	-	
Heating		m³/min (H/M/L)	21.0 ×4 / 19.0 ×4 / 16.5 ×4						-	-		
Outdoor Air flow		Cooling	m³/min				116.0			-	-	
Heating		m³/min				155.0			-	-		
Refrigerant type / amount (ship) kg / amount (max) kg								R32	4.800	10.400	-	
F-Gas		GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)						675	3.24	7.02	-	
Product dimension		Height	mm	295			996					
		Width	mm	1060			1140					
		Depth	mm	249			460					
Product dimension (Panel)		H×W×D	mm									
Packing dimension		Height	mm	314			1135					
		Width	mm	1168			1252					
		Depth	mm	383			616					
Mass		(NET)	kg	14			109					
		(GROSS)	kg	16			117					
		Panel (NET)	kg									
Layers limit (actually)				11 (12)			1 (2)					
Operation condition		Cool (DBT)	18°C~32°C			-15°C ~52°C						
		Heat (DBT)	16°C~30°C			-20°C ~35°C						
Max Working Pressure HP/LP MPa				4.15/2.55								
Max Allowable Pressure MPa				4.15								
PIPING		Pipe port diameter mm (inch)	(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø12.7 (1/2) (Gas) Ø22.22 (7/8)						
		Pipe diameter mm (inch)	(Liquid) Ø12.7 (1/2) (Gas) Ø22.22 (7/8)									
		Connecting method	flared type			(Liquid) flared type (Gas) brazing connection						
		Standard length m	7.5 m									
		Pipe length range m	5 ~ 100 m									
		Indoor unit & Outdoor unit height difference m	30 m (OD located lower) / 30 m (OD located higher)									
		Add gas amount (20~85)g/m	80 g/m									
		Add gas amount (85~100)g/m	80 g/m									
		Pipe length for additional gas m	30 m									

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (71)								
PANEL		POS (EAN)		5025232978489								
		MODEL										
OUTDOOR		MODEL					U-71PZH4E5					
		POS (EAN)					5025232945429					
Branch pipe		MODEL										
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, V		1Ø 50Hz			1Ø 50Hz					
		V		220V	230V	240V	220V	230V	240V	Min	Max	
COOLING	Capacity	kW		7.1	7.1	7.1	-	-	-	2.2	9.0	
		BTU/h		24200	24200	24200	-	-	-	7500	30700	
		Sensible	kW	5.4	5.4	5.4	-	-	-	-	-	
		Latent	kW	1.7	1.7	1.7	-	-	-	-	-	
	Current	A		0.67	0.65	0.63	9.55	9.15	8.75	-	-	
	Input power	W		65	65	65	-	-	-	-	-	
		TOTAL W		-	-	-	1.89k	1.89k	1.89k	380	3.35k	
	Annual consumption	TOTAL kWh *4		-	-	-	-	945	-	-	-	
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.76	3.76 / A	3.76	5.79	2.69	
	ErP *6	Pdesign	kW		-	-	-	-	7.1	-	-	-
SEER		(W/W)		-	-	-	-	6.6	-	-	-	
Annual consumption		kWh		-	-	-	-	377	-	-	-	
Class				-	-	-	-	A++	-	-	-	
Power factor	%		-	-	-	90	90	90	-	-	-	
Noise indoor *7	dB-A (H/M/L)		47/44/40						-	-	-	
	Power Level dB		63/60/56						-	-	-	
Noise outdoor	dB-A (H/L)					48/-			-	-	-	
	Power Level dB					65/-			-	-	-	
HEATING	Capacity	kW		7.8	7.8	7.8	-	-	-	2.0	9.0	
		BTU/h		26600	26600	26600	-	-	-	6800	30700	
	Current	A		0.67	0.65	0.63	9.85	9.40	9.05	-	-	
	Input power	W		65	65	65	-	-	-	-	-	
		TOTAL W		-	-	-	1.95k	1.95k	1.95k	360	2.85k	
	COP/COP CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.00	4.00 / A	4.00	5.56	3.16	
	ErP *6	Pdesign at -10°C	kW		-	-	-	-	5.2	-	-	-
		Tbivalent	°C		-	-	-	-	-10	-	-	-
		SCOP	(W/W)		-	-	-	-	4.6	-	-	-
		Annual consumption	kWh		-	-	-	-	1583	-	-	-
		elbu (-10°C)	kW		-	-	-	-	-	-	-	-
	Class			-	-	-	-	A++	-	-	-	
	Power factor	%		-	-	-	90	90	90	-	-	-
	Noise indoor *7	dB-A (H/M/L)		47/44/40						-	-	-
		Power Level dB		63/60/56						-	-	-
	Noise outdoor	dB-A (H/L)					50/-			-	-	-
Power Level dB					67/-			-	-	-		
LOW TEMP	Total capacity (kW)											
EXTRA LOW TEMP	Total capacity (kW) *2						5.80					
Max Current (A) / Max Input power (W)				0.67/65	0.65/65	0.63/65	20.4 / 4.07k	20.4 / 4.22k	20.4 / 4.42k			
Starting current (A) (Cooling/Heating)				-	-	-	9.55 / 9.85	9.15 / 9.40	8.75 / 9.05			
Comp output (W)							2.00k	2.00k	2.00k			
Time Delay fuse max size (A)							25					
Network Impedance (QMAX)												
Fan motor output (Indoor/Outdoor) W				30			120					
Moisture removal volume L/h				2.4	(2.4 ×1)							
External static pressure Pa												
Indoor Air flow *7	Cooling	m³/min (H/M/L)		21.0 / 19.0 / 16.5						-	-	
	Heating	m³/min (H/M/L)		21.0 / 19.0 / 16.5						-	-	
Outdoor Air flow	Cooling	m³/min					62.0			-	-	
	Heating	m³/min					66.0			-	-	
Refrigerant type / amount (ship) kg / amount (max) kg							R32	1.950	2.850			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					675	1.32	1.92				
Product dimension	Height	mm		295			996					
	Width	mm		1060			980					
	Depth	mm		249			370					
Product dimension (Panel)		H×W×D mm										
Packing dimension	Height	mm		314			1134					
	Width	mm		1168			1095					
	Depth	mm		383			529					
	Mass	(NET)	kg		14			66				
(GROSS)		kg		16			74					
Panel (NET)		kg										
Layers limit (actually)				11 (12)			1 (2)					
Operation condition	Cool (DBT)		18°C~32°C			-15°C~52°C						
	Heat (DBT)		16°C~30°C			-20°C~24°C						
Max Working Pressure HP/LP MPa				4.15/2.55								
Max Allowable Pressure MPa				4.15								
PIPEING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)									
	Connecting method		flared type			flared type						
	Standard length m		5 m									
	Pipe length range m		5 ~ 60 m									
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)									
	Add gas amount g/m		30 g/m									
	Pipe length for additional gas m		30 m									

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (71)								
PANEL		POS (EAN)		5025232978489								
		MODEL										
OUTDOOR		MODEL					U-71PZH4E8					
		POS (EAN)					5025232945436					
Branch pipe		MODEL										
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz					
		V		220V	230V	240V	380V	400V	415V	Min	Max	
COOLING	Capacity	kW		7.1	7.1	7.1	-	-	-	2.2	9.0	
		BTU/h		24200	24200	24200	-	-	-	7500	30700	
		Sensible	kW	5.4	5.4	5.4	-	-	-	-	-	
		Latent	kW	1.7	1.7	1.7	-	-	-	-	-	
	Current	A		0.67	0.65	0.63	3.20	3.05	2.90	-	-	
	Input power	W		65	65	65	-	-	-	-	-	
		TOTAL W		-	-	-	1.89k	1.89k	1.89k	380	3.35k	
	Annual consumption	TOTAL kWh *4		-	-	-	-	945	-	-	-	
	EER/EER CLASS	TOTAL (W/W) *5/ (*A*~*G*)		-	-	-	3.76	3.76 / A	3.76	5.79	2.69	
	ErP *6	Pdesign	kW	-	-	-	-	7.1	-	-	-	
		SEER	(W/W)	-	-	-	-	6.6	-	-	-	
		Annual consumption	kWh	-	-	-	-	377	-	-	-	
		Class		-	-	-	-	A++	-	-	-	
	Power factor	%		-	-	-	90	90	90	-	-	
	Noise indoor *7	dB-A (H/M/L)		47/44/40						-	-	
		Power Level dB		63/60/56						-	-	
	Noise outdoor	dB-A (H/L)					48/-			-	-	
		Power Level dB					65/-			-	-	
	HEATING	Capacity	kW		7.8	7.8	7.8	-	-	-	2.0	9.0
		BTU/h		26600	26600	26600	-	-	-	6800	30700	
Current		A		0.67	0.65	0.63	3.30	3.15	3.00	-	-	
Input power		W		65	65	65	-	-	-	-	-	
		TOTAL W		-	-	-	1.95k	1.95k	1.95k	360	2.85k	
COP/COP CLASS		TOTAL (W/W) *5/ (*A*~*G*)		-	-	-	4.00	4.00 / A	4.00	5.56	3.16	
ErP *6		Pdesign at -10°C	kW	-	-	-	-	5.2	-	-	-	
		Tbivalent	°C	-	-	-	-	-10	-	-	-	
		SCOP	(W/W)	-	-	-	-	4.6	-	-	-	
		Annual consumption	kWh	-	-	-	-	1583	-	-	-	
		elbu (-10°C)	kW	-	-	-	-	-	-	-	-	
		Class		-	-	-	-	A++	-	-	-	
Power factor		%		-	-	-	90	90	90	-	-	
Noise indoor *7		dB-A (H/M/L)		47/44/40						-	-	
		Power Level dB		63/60/56						-	-	
Noise outdoor		dB-A (H/L)					50/-			-	-	
		Power Level dB					67/-			-	-	
LOW TEMP	Total capacity (kW)											
EXTRA LOW TEMP	Total capacity (kW) *2					5.80						
Max Current (A) / Max Input power (W)				0.67/65	0.65/65	0.63/65	6.90 / 4.17k	6.90 / 4.32k	6.90 / 4.47k			
Starting current (A) (Cooling/Heating)				-	-	-	3.20 / 3.30	3.05 / 3.15	2.90 / 3.00			
Comp output (W)				-	-	-	2.00k	2.00k	2.00k			
Time Delay fuse max size (A)				-	-	-	15					
Network Impedance (QMAX)				-	-	-						
Fan motor output (Indoor/Outdoor) W				-	30	-	120					
Moisture removal volume		L/h	2.4	(2.4 ×1)		-						
External static pressure		Pa			-	-						
Indoor Air flow *7	Cooling	m³/min (H/M/L)	21.0 / 19.0 / 16.5						-	-		
	Heating	m³/min (H/M/L)	21.0 / 19.0 / 16.5						-	-		
	Cooling	m³/min				62.0			-	-		
	Heating	m³/min				66.0			-	-		
Outdoor Air flow	Cooling	m³/min				62.0			-	-		
	Heating	m³/min				66.0			-	-		
Refrigerant type / amount (ship) kg / amount (max) kg							R32	1.950	2.850			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					-	675	1.32	1.92			
Product dimension	Height	mm	295			996						
	Width	mm	1060			980						
	Depth	mm	249			370						
Product dimension (Panel)		H × W × D mm										
Packing dimension	Height	mm	314			1134						
	Width	mm	1168			1095						
	Depth	mm	383			529						
	(NET)	kg	14			66						
Mass	(GROSS)	kg	16			74						
	Panel (NET)	kg										
Layers limit (actually)				11 (12)			1 (2)					
Operation condition	Cool (DBT)			18°C~32°C			-15°C~52°C					
	Heat (DBT)			16°C~30°C			-20°C ~ 24°C					
Max Working Pressure HP/LP MPa				4.15/2.55								
Max Allowable Pressure MPa				4.15								
PIPING	Pipe port diameter mm (inch)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)					
	Pipe diameter mm (inch)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)								
	Connecting method			flared type			flared type					
	Standard length m			5 m								
	Pipe length range m			5 ~ 60 m								
	Indoor unit & Outdoor unit height difference m			15 m (OD located lower) / 30 m (OD located higher)								
	Add gas amount g/m			30 g/m								
	Pipe length for additional gas m			30 m								

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V (400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (71) ×2				-			-										
PANEL		POS (EAN)		5025232978489				-			-										
		MODEL		-				-			-										
OUTDOOR		MODEL		-				U-140PZH4E5			-										
		POS (EAN)		-				5025232945405			-										
Branch pipe		MODEL						CZ-P155BK1													
		Performance test condition						ISO5151 / EN14511 / EN12102 / EN14825													
COOLING	Power supply		Ø, Hz		1Ø 50Hz				1Ø 50Hz												
			V		220V		230V		240V		220V		230V		240V		Min		Max		
			kW		13.4		13.4		13.4		-		-		-		3.3		16.0		
	Capacity		BTU/h		45700		45700		45700		-		-		-		11300		54600		
			Sensible		-		-		-		-		-		-		-		-		
			Latent		-		-		-		-		-		-		-		-		
			kW		-		-		-		-		-		-		-		-		
	Current		A		0.67 ×2		0.65 ×2		0.63 ×2		19.3		18.4		17.7		-		-		
	Input power		W		65 ×2		65 ×2		65 ×2		-		-		-		-		-		
			TOTAL W		-		-		-		3.94k		3.94k		3.94k		620		6.00k		
	Annual consumption		TOTAL kWh *4		-		-		-		-		1970		-		-		-		
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-		-		-		3.40		3.40 / A		3.40		5.32		2.67		
	ErP *6	Pdesign		kW		-		-		-		-		13.4		-		-		-	
		ηsc		%		-		-		-		-		269.0		-		-		-	
		Annual consumption		kWh		-		-		-		-		-		-		-		-	
		Class		-		-		-		-		-		-		-		-		-	
		Power factor		%		-		-		-		93		93		93		-		-	
Noise indoor *7		dB-A (H/M/L)		-		47/44/40		-		-		-		-		-		-			
		Power Level dB		-		63/60/56		-		-		-		-		-		-			
		dB-A (H/L)		-		-		-		56/-		-		-		-		-			
Noise outdoor		Power Level dB		-		-		-		-		74/-		-		-		-			
		kW		15.2		15.2		15.2		-		-		-		3.3		18.0			
Capacity		BTU/h		51900		51900		51900		-		-		-		11300		61400			
Current		A		0.67 ×2		0.65 ×2		0.63 ×2		20.0		19.2		18.4		-		-			
Input power		W		65 ×2		65 ×2		65 ×2		-		-		-		-		-			
		TOTAL W		-		-		-		4.10k		4.10k		4.10k		600		5.90k			
COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")		-		-		-		3.71		3.71 / A		3.71		5.50		3.05			
ErP *6	Pdesign at -10°C		kW		-		-		-		-		10.6		-		-		-		
	Tbivalent		°C		-		-		-		-		-10		-		-		-		
	ηsh		%		-		-		-		-		169.4		-		-		-		
	Annual consumption		kWh		-		-		-		-		-		-		-		-		
	elbu (-10°C)		kW		-		-		-		-		-		-		-		-		
	Class		-		-		-		-		-		-		-		-		-		
	Power factor		%		-		-		-		93		93		93		-		-		
	Noise indoor *7		dB-A (H/M/L)		-		47/44/40		-		-		-		-		-		-		
			Power Level dB		-		63/60/56		-		-		-		-		-		-		
			dB-A (H/L)		-		-		-		56/-		-		-		-		-		
Noise outdoor		Power Level dB		-		-		-		-		74/-		-		-		-			
LOW TEMP	Total capacity (kW)			-				-				-									
EXTRA LOW TEMP	Total capacity (kW) *2			-				11.80				-									
Max Current (A) / Max Input power (W)				0.67/65 ×2		0.65/65 ×2		0.63/65 ×2		32.7 / 6.70k		32.7 / 6.95k		32.7 / 7.20k		-					
Starting current (A) (Cooling/Heating)				-		-		-		19.3 / 20.0		18.4 / 19.2		17.7 / 18.4		-					
Comp output (W)				-		-		-		3.00k		3.00k		3.00k		-					
Time Delay fuse max size (A)				-		-		-		-		40		-		-					
Network Impedance (ΩMAX.)				-		-		-		-		-		-		-					
Fan motor output (Indoor/Outdoor) W				-		30		-		-		120		-		-					
Moisture removal volume				L/h		4.8		(2.4 ×2)		-		-		-		-					
External static pressure				Pa		-		-		-		-		-		-					
Indoor Air flow *7	Cooling	m³/min (H/M/L)		21.0 ×2 / 19.0 ×2 / 16.5 ×2				-				-									
	Heating	m³/min (H/M/L)		21.0 ×2 / 19.0 ×2 / 16.5 ×2				-				-									
	Cooling	m³/min		-				89.0				-									
	Heating	m³/min		-				83.0				-									
Outdoor Air flow	Cooling	m³/min		-				89.0				-									
	Heating	m³/min		-				83.0				-									
Refrigerant type / amount(ship) kg/ amount(max) kg				-				R32		3.000		5.975		-							
F-Gas	GWP /			-				675		2.03		4.03		-							
	CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)			-				675		2.03		4.03		-							
Product dimension		Height	mm	295				996				-									
		Width	mm	1060				980				-									
		Depth	mm	249				370				-									
Product dimension (Panel)		H×W×D	mm	-				-				-									
Packing dimension		Height	mm	314				1134				-									
		Width	mm	1168				1095				-									
		Depth	mm	383				529				-									
Mass		(NET)	kg	14				86				-									
		(GROSS)	kg	16				94				-									
		Panel (NET)	kg	-				-				-									
Layers limit (actually)				11 (12)				1 (2)				-									
Operation condition		Cool (DBT)	18°C~32°C				-15°C (*8-20°C)~52°C				-										
		Heat (DBT)	16°C~30°C				-20°C ~ 24°C				-										
Max Working Pressure HP/LP MPa				4.15/2.55				-				-									
Max Allowable Pressure MPa				4.15				-				-									
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)				(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)				-										
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)				-				-										
	Connecting method		flared type				flared type				-										
	Standard length m		5 m				-				-										
	Pipe length range m		5 ~ 100 m				-				-										
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)				-				-										
	Add gas amount (20~85)g/m		40 g/m				-				-										
	Add gas amount (85~100)g/m		40 g/m				-				-										
	Pipe length for additional gas m		30 m				-				-										
			-				-				-										

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-5010PK4E (71) ×2								
PANEL		POS (EAN)		5025232978489								
		MODEL										
OUTDOOR		MODEL					U-140PZH4E8					
		POS (EAN)					5025232945412					
Branch pipe		MODEL		CZ-P155BK1								
Performance test condition		ISO5151 / EN14511 / EN12102 / EN14825										
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz					
COOLING	Capacity	V		220V	230V	240V	380V	400V	415V	Min	Max	
		kW		13.4	13.4	13.4	-	-	-	3.3	16.0	
		BTU/h		45700	45700	45700	-	-	-	11300	54600	
		Sensible	kW	-	-	-	-	-	-	-	-	
	Current	Latent		kW	-	-	-	-	-	-	-	
		A		0.67 ×2	0.65 ×2	0.63 ×2	6.50	6.20	5.95	-	-	
	Input power	W		65 ×2	65 ×2	65 ×2	-	-	-	-	-	
		TOTAL W		-	-	-	3.94k	3.94k	3.94k	620	6.00k	
	Annual consumption	TOTAL kWh *4		-	-	-	-	1970	-	-	-	
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.40	3.40 / A	3.40	5.32	2.67	
	ErP *6	Pdesign	kW	-	-	-	-	13.4	-	-	-	
		ηsc	%	-	-	-	-	269.0	-	-	-	
		Annual consumption	kWh	-	-	-	-	-	-	-	-	
		Class	-	-	-	-	-	-	-	-	-	
		Power factor	%	-	-	-	92	92	92	-	-	
	Noise indoor *7	dB-A (H/M/L)		47/44/40						-	-	
		Power Level dB		63/60/56						-	-	
Noise outdoor	dB-A (H/L)					56/-			-	-		
	Power Level dB					74/-			-	-		
HEATING	Capacity	kW	15.2	15.2	15.2	-	-	-	3.3	18.0		
		BTU/h	51900	51900	51900	-	-	-	11300	61400		
	Current	A		0.67 ×2	0.65 ×2	0.63 ×2	6.85	6.50	6.20	-	-	
		W		65 ×2	65 ×2	65 ×2	-	-	-	-	-	
	Input power	TOTAL W		-	-	-	4.10k	4.10k	4.10k	600	5.90k	
		COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")	-	-	-	3.71	3.71 / A	3.71	5.50	3.05
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	10.6	-	-	-	
		Tbivalent	°C	-	-	-	-	-10	-	-	-	
		ηsh	%	-	-	-	-	169.4	-	-	-	
		Annual consumption	kWh	-	-	-	-	-	-	-	-	
		elbu (-10°C)	kW	-	-	-	-	-	-	-	-	
	Noise indoor *7	Class	-	-	-	-	-	-	-	-	-	
		Power factor	%	-	-	-	91	91	92	-	-	
	Noise indoor *7	dB-A (H/M/L)		47/44/40						-	-	
		Power Level dB		63/60/56						-	-	
	Noise outdoor	dB-A (H/L)					56/-			-	-	
		Power Level dB					74/-			-	-	
LOW TEMP	Total capacity (kW)								-	-		
EXTRA LOW TEMP	Total capacity (kW) *2					11.80			-	-		
Max Current (A) / Max Input power (W)		0.67/65 ×2	0.65/65 ×2	0.63/65 ×2	11.4 / 7.00k	11.4 / 7.35k	11.4 / 7.60k					
Starting current (A) (Cooling/Heating)		-	-	-	6.50 / 6.85	6.20 / 6.50	5.95 / 6.20					
Comp output (W)					3.00k	3.00k	3.00k					
Time Delay fuse max size (A)					15							
Network Impedance (QMAX.)												
Fan motor output (Indoor/Outdoor) W		30			120							
Moisture removal volume		L/h	4.8	(2.4 ×2)								
External static pressure		Pa										
Indoor Air flow *7	Cooling	m³/min (H/M/L)	21.0 ×2 / 19.0 ×2 / 16.5 ×2						-	-		
	Heating	m³/min (H/M/L)	21.0 ×2 / 19.0 ×2 / 16.5 ×2						-	-		
Outdoor Air flow	Cooling	m³/min				89.0			-	-		
	Heating	m³/min				83.0			-	-		
Refrigerant type / amount (ship) kg / amount (max) kg					R32	3.000	5.975					
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					675	2.03	4.03				
Product dimension	Height	mm	295			996						
	Width	mm	1060			980						
	Depth	mm	249			370						
Product dimension (Panel)		H × W × D	mm									
Packing dimension	Height	mm	314			1134						
	Width	mm	1168			1095						
	Depth	mm	383			529						
Mass	(NET)	kg	14			84						
	(GROSS)	kg	16			92						
	Panel	kg										
	(NET)	kg										
Layers limit (actually)		11 (12)			1 (2)							
Operation condition	Cool (DBT)	18°C~32°C			-15°C (*8~20°C)~52°C							
	Heat (DBT)	16°C~30°C			-20°C~24°C							
Max Working Pressure HP/LP MPa					4.15/2.55							
Max Allowable Pressure MPa					4.15							
PIPING	Pipe port diameter mm (inch)	(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)							
	Pipe diameter mm (inch)											
	Connecting method	flared type			flared type							
	Standard length m				5 m							
	Pipe length range m				5 ~ 100 m							
	Indoor unit & Outdoor unit height difference m	15 m (OD located lower) / 30 m (OD located higher)										
	Add gas amount (20~85)g/m				40 g/m							
	Add gas amount (85~100)g/m				40 g/m							
	Pipe length for additional gas m				30 m							

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-5010PK4E (71) ×3								
PANEL		POS (EAN)		5025232978489								
		MODEL										
OUTDOOR		MODEL					U-200PZH4E8					
		POS (EAN)					5025232954469					
Branch pipe		MODEL					CZ-P3HPC2					
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz					
		V		220V	230V	240V	380V	400V	415V	Min	Max	
		kW		17.5	17.5	17.5	-	-	-	5.7	20.0	
Capacity		BTU/h		59700	59700	59700	-	-	-	19400	68200	
		Sensible	kW	-	-	-	-	-	-	-	-	
		Latent	kW	-	-	-	-	-	-	-	-	
Current		A		0.67 ×3	0.65 ×3	0.63 ×3	8.95	8.50	8.20	-	-	
Input power		W		65 ×3	65 ×3	65 ×3	-	-	-	-	-	
Annual consumption		TOTAL W		-	-	-	5.41k	5.41k	5.41k	1.41k	7.50k	
EER/EER CLASS		TOTAL kWh *4		-	-	-	-	2705	-	-	-	
		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.23	3.23 / A	3.23	4.04	2.67	
ErP *6	Pdesign	kW		-	-	-	-	17.5	-	-	-	
	ηsc	%		-	-	-	-	253.4	-	-	-	
	Annual consumption	kWh		-	-	-	-	-	-	-	-	
	Class			-	-	-	-	-	-	-	-	
	Power factor	%		-	-	-	92	92	92	-	-	
	Noise indoor *7	dB-A (H/M/L)		47/44/40						-	-	
		Power Level dB		63/60/56						-	-	
		dB-A (H/L)					57/-			-	-	
	Noise outdoor	Power Level dB					76/-			-	-	
										-	-	
HEATING	Capacity	kW		19.0	19.0	19.0	-	-	-	5.0	22.0	
		BTU/h		64800	64800	64800	-	-	-	17100	75100	
	Current	A		0.67 ×3	0.65 ×3	0.63 ×3	8.45	8.05	7.75	-	-	
	Input power	W		65 ×3	65 ×3	65 ×3	-	-	-	-	-	
		TOTAL W		-	-	-	5.12k	5.12k	5.12k	1.05k	7.00k	
	COP/COP CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.71	3.71 / A	3.71	4.76	3.14	
	Pdesign at -10°C	kW		-	-	-	-	15.7	-	-	-	
		Tbivalent °C		-	-	-	-	-10	-	-	-	
		ηsh		%		-	-	152.6	-	-	-	
		Annual consumption		kWh		-	-	-	-	-	-	
		elbu (-10°C)		kW		-	-	-	-	-	-	
	Class			-	-	-	-	-	-	-	-	
		%		-	-	-	92	92	92	-	-	
	Noise indoor *7	dB-A (H/M/L)		47/44/40						-	-	
		Power Level dB		63/60/56						-	-	
dB-A (H/L)					61/-			-	-			
Noise outdoor	Power Level dB					80/-			-	-		
									-	-		
LOW TEMP	Total capacity (kW)											
EXTRA												
LOW TEMP	Total capacity (kW) *2						17.40					
Max Current (A) / Max Input power (W)				0.67/65 ×3	0.65/65 ×3	0.63/65 ×3	15.0 / 9.08k	15.0 / 9.56k	15.0 / 9.92k			
Starting current (A) (Cooling/Heating)				-	-	-	8.95 / 8.45	8.50 / 8.05	8.20 / 7.75			
Comp output (W)				-	-	-	4.20k	4.20k	4.20k			
Time Delay fuse max size (A)				-	-	-	-	30	-			
Network Impedance (ΩMAX.)				-	-	-	-	-	-			
Fan motor output (Indoor/Outdoor) W				-	30	-	-	600	-			
Moisture removal volume L/h				7.2	(2.4 ×3)	-	-	-	-			
External static pressure Pa				-	-	-	-	-	-			
Indoor Air flow *7	Cooling	m³/min (H/M/L)		21.0 ×3 / 19.0 ×3 / 16.5 ×3						-	-	
	Heating	m³/min (H/M/L)		21.0 ×3 / 19.0 ×3 / 16.5 ×3						-	-	
	Cooling	m³/min					116.0			-	-	
	Heating	m³/min					148.0			-	-	
Outdoor Air flow	Cooling	m³/min								-	-	
	Heating	m³/min								-	-	
Refrigerant type / amount (ship) kg / amount (max) kg							R32	4.800	10.400			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)						675	3.24	7.02			
Product dimension	Height	mm		295			996					
	Width	mm		1060			1140					
	Depth	mm		249			460					
Product dimension (Panel)		H × W × D mm										
Packing dimension	Height	mm		314			1135					
	Width	mm		1168			1252					
	Depth	mm		383			616					
Mass	(NET)	kg		14			109					
	(GROSS)	kg		16			117					
	Panel (NET)	kg										
	Layers limit (actually)		11 (12)			1 (2)						
Operation condition	Cool (DBT)	18°C~32°C			-15°C~52°C							
	Heat (DBT)	16°C~30°C			-20°C~35°C							
Max Working Pressure HP/LP MPa				4.15/2.55								
Max Allowable Pressure MPa				4.15								
PIPING	Pipe port diameter mm (inch)	(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø12.7 (1/2) (Gas) Ø22.22 (7/8)							
	Pipe diameter mm (inch)	(Liquid) Ø12.7 (1/2) (Gas) Ø22.22 (7/8)										
	Connecting method	flared type			(Liquid) flared type (Gas) brazing connection							
	Standard length m	7.5 m										
	Pipe length range m	5 ~ 100 m										
	Indoor unit & Outdoor unit height difference m	30 m (OD located lower) / 30 m (OD located higher)										
	Add gas amount (20~85)g/m	80 g/m										
	Add gas amount (85~100)g/m	80 g/m										
	Pipe length for additional gas m	30 m										

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-5010PK4E (100)								
PANEL		POS (EAN)		5025232978489								
		MODEL										
OUTDOOR		MODEL					U-100PZH4E5					
		POS (EAN)					5025232945368					
Branch pipe		MODEL										
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825								
Power supply		Ø, Hz		1Ø 50Hz			1Ø 50Hz					
COOLING	Capacity	V		220V	230V	240V	220V	230V	240V	Min	Max	
		kW		9.5	9.5	9.5	-	-	-	3.1	10.5	
		BTU/h		32400	32400	32400	-	-	-	10600	35800	
		Sensible	kW	6.4	6.4	6.4	-	-	-	-	-	
	Current	Latent	kW	3.1	3.1	3.1	-	-	-	-	-	
		A		0.91	0.89	0.87	13.8	13.2	12.6	-	-	
	Input power	W		90	90	90	-	-	-	-	-	
		TOTAL W		-	-	-	2.79k	2.79k	2.79k	580	3.40k	
	Annual consumption	TOTAL kWh *4		-	-	-	-	-	-	-	-	
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.41	3.41 / A	3.41	5.34	3.09	
	ErP *6	Pdesign	kW	-	-	-	-	9.5	-	-	-	
		SEER	(W/W)	-	-	-	-	6.6	-	-	-	
		Annual consumption	kWh	-	-	-	-	504	-	-	-	
		Class		-	-	-	-	A++	-	-	-	
	Power factor	%		-	-	-	92	92	92	-	-	
	Noise indoor *7	dB-A (H/M/L)		49/45/41						-	-	
		Power Level dB		65/61/57						-	-	
Noise outdoor	dB-A (H/L)					52/-			-	-		
	Power Level dB					69/-			-	-		
HEATING	Capacity	kW	9.5	9.5	9.5	-	-	-	3.1	11.5		
		BTU/h	32400	32400	32400	-	-	-	10600	39200		
	Current	A	0.91	0.89	0.87	12.1	11.5	11.1	-	-		
		W	90	90	90	-	-	-	-	-		
	Input power	TOTAL W					2.44k	2.44k	2.44k	580	3.83k	
		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.89	3.89 / A	3.89	5.34	3.00	
	ErP *6	Pdesign at -10°C	kW	-	-	-	-	8.0	-	-	-	
		Tbivalent	°C	-	-	-	-	-10	-	-	-	
		SCOP	(W/W)	-	-	-	-	4.1	-	-	-	
		Annual consumption	kWh	-	-	-	-	2731	-	-	-	
	Noise indoor *7	elbu (-10°C)	kW	-	-	-	-	-	-	-	-	
		Class		-	-	-	-	A+	-	-	-	
	Power factor	%		-	-	-	92	92	92	-	-	
	Noise indoor *7	dB-A (H/M/L)		49/45/41						-	-	
		Power Level dB		65/61/57						-	-	
	Noise outdoor	dB-A (H/L)					52/-			-	-	
		Power Level dB					69/-			-	-	
LOW TEMP	Total capacity(kW)								-	-		
EXTRA LOW TEMP	Total capacity(kW) *2					8.90			-	-		
Max Current (A) / Max Input power(W)			0.91/90	0.89/90	0.87/90	28.3 / 5.80k	28.3 / 6.00k	28.3 / 6.25k	-	-		
Starting current (A) (Cooling/Heating)			-	-	-	13.8 / 12.1	13.2 / 11.5	12.6 / 11.1	-	-		
Comp output (W)			-	-	-	2.50k	2.50k	2.50k	-	-		
Time Delay fuse max size (A)			-	-	-	-	35	-	-	-		
Network Impedance (QMAX.)			-	-	-	-	-	-	-	-		
Fan motor output (Indoor/Outdoor) W			-	30	-	-	120	-	-	-		
Moisture removal volume		L/h	4.4	(4.4 x1)	-	-	-	-	-	-		
External static pressure		Pa	-	-	-	-	-	-	-	-		
Indoor Air flow *7	Cooling	m³/min (H/M/L)	22.5 / 20.0 / 17.5						-	-		
	Heating	m³/min (H/M/L)	22.5 / 20.0 / 17.5						-	-		
Outdoor Air flow	Cooling	m³/min				76.0			-	-		
	Heating	m³/min				70.0			-	-		
Refrigerant type / amount (ship) kg / amount (max) kg						R32	2.700	5.975	-	-		
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)					675	1.82	4.03	-	-		
									-	-		
Product dimension	Height	mm	295			996			-	-		
	Width	mm	1060			980			-	-		
	Depth	mm	249			370			-	-		
Product dimension (Panel)		H×W×D mm							-	-		
Packing dimension	Height	mm	314			1134			-	-		
	Width	mm	1168			1095			-	-		
	Depth	mm	383			529			-	-		
Mass	(NET)	kg	14			84			-	-		
	(GROSS)	kg	16			92			-	-		
	Panel (NET)	kg							-	-		
Layers limit (actually)			1(12)			1 (2)			-	-		
Operation condition	Cool (DBT)		18°C~32°C			-15°C (*8-20°C)~52°C			-	-		
	Heat (DBT)		16°C~30°C			-20°C ~ 24°C			-	-		
Max Working Pressure HP/LP MPa			4.15/2.55						-	-		
Max Allowable Pressure MPa			4.15						-	-		
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø9.52(3/8) (Gas) Ø15.88 (5/8)			-	-		
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)						-	-		
	Connecting method		flared type			flared type			-	-		
	Standard length m		5 m						-	-		
	Pipe length range m		5 ~ 100 m						-	-		
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)						-	-		
	Add gas amount (20~85)g/m		40 g/m						-	-		
	Add gas amount (85~100)g/m		40 g/m						-	-		
Pipe length for additional gas_m			30 m						-	-		
									-	-		

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V(400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-5010PK4E (100)									
PANEL		POS (EAN)		5025232978489									
		MODEL											
OUTDOOR		MODEL					U-100PZH4E8						
		POS (EAN)					5025232945375						
Branch pipe		MODEL											
Performance test condition										ISO5151 / EN14511 / EN12102 / EN14825			
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz						
COOLING	Capacity	V		220V	230V	240V	380V	400V	415V	Min	Max		
		kW		9.5	9.5	9.5	-	-	-	3.1	10.5		
		BTU/h		32400	32400	32400	-	-	-	10600	35800		
		Sensible	kW	6.4	6.4	6.4	-	-	-	-	-		
	Current	Latent	kW	3.1	3.1	3.1	-	-	-	-	-		
		A		0.91	0.89	0.87	4.65	4.45	4.20	-	-		
	Input power	W		90	90	90	-	-	-	-	-		
		TOTAL W		-	-	-	2.79k	2.79k	2.79k	580	3.40k		
	Annual consumption	TOTAL kWh *4		-	-	-	-	1395	-	-	-		
	EER/EER CLASS	TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.41	3.41 / A	3.41	5.34	3.09		
	ErP *6	Pdesign	kW	-	-	-	-	9.5	-	-	-		
		SEER	(W/W)	-	-	-	-	6.6	-	-	-		
		Annual consumption	kWh	-	-	-	-	504	-	-	-		
		Class	-	-	-	-	-	A++	-	-	-		
	Power factor	%		-	-	-	91	91	92	-	-		
	Noise indoor *7	dB-A (H/M/L)		49/45/41						-	-		
		Power Level dB		65/61/57						-	-		
	Noise outdoor	dB-A (H/L)					52/-			-	-		
		Power Level dB					69/-			-	-		
	HEATING	Capacity	kW	9.5	9.5	9.5	-	-	-	3.1	11.5		
BTU/h			32400	32400	32400	-	-	-	10600	39200			
Current		A	0.91	0.89	0.87	4.05	3.85	3.70	-	-			
		W	90	90	90	-	-	-	-	-			
Input power		TOTAL W		-			2.44k	2.44k	2.44k	580	3.83k		
		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.89	3.89 / A	3.89	5.34	3.00		
ErP *6		Pdesign at -10°C	kW	-	-	-	-	8.0	-	-	-		
		Tbivalent	°C	-	-	-	-	-10	-	-	-		
		SCOP	(W/W)	-	-	-	-	4.1	-	-	-		
		Annual consumption	kWh	-	-	-	-	2731	-	-	-		
elbu (-10°C)		kW	-	-	-	-	-	-	-	-	-		
		Class	-	-	-	-	-	A+	-	-	-		
		Power factor	%		-	-	-	91	91	92	-	-	
		Noise indoor *7	dB-A (H/M/L)		49/45/41						-	-	
Power Level dB			65/61/57						-	-			
Noise outdoor		dB-A (H/L)					52/-			-	-		
	Power Level dB					69/-			-	-			
LOW TEMP	Total capacity (kW)			-			-			-			
EXTRA LOW TEMP	Total capacity (kW) *2			-			8.90			-			
Max Current (A) / Max Input power (W)			0.91/90		0.89/90	0.87/90	9.90 / 6.05k	9.90 / 6.30k	9.90 / 6.50k	-			
Starting current (A) (Cooling/Heating)			-		-	-	4.65 / 4.05	4.45 / 3.85	4.20 / 3.70	-			
Comp output (W)			-		-	-	2.50k	2.50k	2.50k	-			
Time Delay fuse max size (A)			-		-	-	15			-			
Network Impedance (ΩMAX.)			-		-	-	-			-			
Fan motor output (Indoor/Outdoor) W			30		-	-	120			-			
Moisture removal volume		L/h	4.4	(4.4 ×1)		-	-			-			
External static pressure		Pa	-		-	-	-			-			
Indoor Air flow *7	Cooling	m³/min (H/M/L)	22.5 / 20.0 / 17.5			-			-	-	-		
	Heating	m³/min (H/M/L)	22.5 / 20.0 / 17.5			-			-	-	-		
Outdoor Air flow	Cooling	m³/min	-			76.0			-	-	-		
	Heating	m³/min	-			70.0			-	-	-		
Refrigerant type / amount (ship) kg / amount (max) kg			-			R32	2.700	5.975	-				
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)		-			675	1.82	4.03	-				
Product dimension	Height	mm	295			996			-				
	Width	mm	1060			980			-				
	Depth	mm	249			370			-				
Product dimension (Panel)		H × W × D	mm			-			-				
Packing dimension	Height	mm	314			1134			-				
	Width	mm	1168			1095			-				
	Depth	mm	383			529			-				
Mass	(NET)	kg	14			82			-				
	(GROSS)	kg	16			90			-				
	Panel (NET)	kg	-			-			-				
Layers limit (actually)			11 (12)			1 (2)			-				
Operation condition	Cool (DBT)	18°C~32°C			-15°C (*8~20°C)~52°C			-					
	Heat (DBT)	16°C~30°C			-20°C ~ 24°C			-					
Max Working Pressure HP/LP MPa			4.15/2.55			-			-				
Max Allowable Pressure MPa			4.15			-			-				
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			-				
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			-			-				
	Connecting method		flared type			flared type			-				
	Standard length m		5 m			-			-				
	Pipe length range m		5 ~ 100 m			-			-				
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)			-			-				
	Add gas amount (20~85)g/m		40 g/m			-			-				
	Add gas amount (85~100)g/m		40 g/m			-			-				
	Pipe length for additional gas m		30 m			-			-				
						-			-				

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 SEER and SCOP classification is at 230V(400V) only in accordance with EN-14825. For heating, SCOP indicates the value of only Average heating season, Other fiche data indicates in an attached sheet.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

*9 Total piping length is 100m, but maximum wiring length is 85m. Piping length maybe limited depending on the wiring length.

INDOOR		MODEL		S-5010PK4E (100) *2									
PANEL		POS (EAN)		5025232978489									
		MODEL											
OUTDOOR		MODEL								U-200PZH4E8			
		POS (EAN)								5025232954469			
Branch pipe		MODEL											
Performance test condition										CZ-P680BK2 + CZ-P155BK1*2			
										ISO5151 / EN14511 / EN12102 / EN14825			
COOLING	Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz					
			V		220V	230V	240V	380V	400V	415V	Min	Max	
	Capacity		kW		16.0	16.0	16.0	-	-	-	5.7	20.0	
			BTU/h		54600	54600	54600	-	-	-	19400	68200	
			Sensible		kW		-	-	-	-	-	-	
			Latent		kW		-	-	-	-	-	-	
	Current		A		0.91 *2	0.89 *2	0.87 *2	8.15	7.75	7.50	-	-	
	Input power		W		90 *2	90 *2	90 *2	-	-	-	-	-	
			TOTAL W					4.95k	4.95k	4.95k	1.41k	7.50k	
	Annual consumption		TOTAL kWh *4					-	2475	-	-	-	
	EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")					3.23	3.23 / A	3.23	4.04	2.67	
	ErP *6	Pdesign		kW					-	16.0	-	-	-
		ηsc		%					-	239.9	-	-	-
		Annual consumption		kWh					-	-	-	-	-
		Class							-	-	-	-	-
	Power factor		%					-	92	92	92	-	-
	Noise indoor *7		dB-A (H/M/L)		49/45/41						-	-	-
			Power Level dB		65/61/57						-	-	-
Noise outdoor		dB-A (H/L)					57/-			-	-	-	
		Power Level dB					76/-			-	-	-	
HEATING	Capacity		kW		17.5	17.5	17.5	-	-	-	5.0	20.0	
			BTU/h		59700	59700	59700	-	-	-	17100	68200	
	Current		A		0.91 *2	0.89 *2	0.87 *2	7.80	7.40	7.15	-	-	
	Input power		W		90 *2	90 *2	90 *2	-	-	-	-	-	
			TOTAL W					4.720k	4.720k	4.720k	1.05	5.500	
			TOTAL (W/W) *5/ ("A"~"G")		-	-	-	4.72k	4.72k	4.72k	1.05k	5.50k	
	COP/COP CLASS				-	-	-	3.71	3.71 / A	3.71	4.76	3.64	
	ErP *6	Pdesign at -10°C		kW					-	15.7	-	-	-
		Tbivalent		°C					-	-10	-	-	-
		ηsh		%					-	152.0	-	-	-
		Annual consumption		kWh					-	-	-	-	-
	elbu (-10°C)		kW					-	-	-	-	-	
	Class							-	-	-	-	-	
	Power factor		%					-	92	92	92	-	-
	Noise indoor *7		dB-A (H/M/L)		49/45/41						-	-	-
			Power Level dB		65/61/57						-	-	-
	Noise outdoor		dB-A (H/L)					61/-			-	-	-
			Power Level dB					80/-			-	-	-
LOW TEMP	Total capacity (kW)								-				
EXTRA LOW TEMP	Total capacity (kW) *2								17.40				
Max Current (A) / Max Input power (W)				0.91/90 *2			0.89/90 *2			0.87/90 *2			
Starting current (A) (Cooling/Heating)										15.0 / 9.08k			
Comp output (W)										15.0 / 9.56k			
Time Delay fuse max size (A)										7.50 / 7.40			
Network Impedance (ΩMAX)										7.50 / 7.15			
Fan motor output (Indoor/Outdoor) W										4.20k			
Moisture removal volume				L/h			8.8			4.20k			
External static pressure				Pa						30			
Indoor Air flow *7	Cooling	m³/min (H/M/L)		22.5 *2 / 20.0 *2 / 17.5 *2									
	Heating	m³/min (H/M/L)		22.5 *2 / 20.0 *2 / 17.5 *2									
Outdoor Air flow	Cooling	m³/min								116.0			
	Heating	m³/min								148.0			
Refrigerant type / amount (ship) kg / amount (max) kg										R32			
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)								675				
									3.24				
Product dimension		Height	mm		295			996					
		Width	mm		1060			1140					
		Depth	mm		249			460					
Product dimension (Panel)		H×W×D		mm									
Packing dimension		Height	mm		314			1135					
		Width	mm		1168			1252					
		Depth	mm		383			616					
Mass		(NET)	kg		14			109					
		(GROSS)	kg		16			117					
		Panel (NET)	kg										
Layers limit (actually)				11 (12)			1 (2)						
Operation condition		Cool (DBT)	18°C~32°C			-15°C ~52°C							
		Heat (DBT)	16°C~30°C			-20°C ~35°C							
Max Working Pressure HP/LP MPa				4.15/2.55									
Max Allowable Pressure MPa				4.15									
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)			(Liquid) Ø12.7 (1/2) (Gas) Ø22.22 (7/8)							
	Pipe diameter mm (inch)		(Liquid) Ø12.7 (1/2) (Gas) Ø22.22 (7/8)										
	Connecting method		flared type			(Liquid) flared type (Gas) brazing connection							
	Standard length m		7.5 m										
	Pipe length range m		5 ~ 100 m										
	Indoor unit & Outdoor unit height difference m		30 m (OD located lower) / 30 m (OD located higher)										
	Add gas amount (20~85)g/m		80 g/m										
	Add gas amount (85~100)g/m		80 g/m										
	Pipe length for additional gas m		30 m										

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

INDOOR		MODEL		S-3650PU3E (50) ×3									
		POS (EAN)		5025232898831									
PANEL		MODEL		Standard type : CZ-KPU3 or CZ-KPU3W / ECONAVI type : CZ-KPU3A or CZ-KPU3AW									
OUTDOOR		MODEL		-			U-140PZH3E8			-			
Branch pipe		POS (EAN)		-			5025232914579			-			
		MODEL		CZ-P3HPC2									
Performance test condition				ISO5151 / EN14511 / EN12102 / EN14825									
Power supply		Ø, Hz		1Ø 50Hz			3Ø 50Hz						
		V		220V	230V	240V	380V	400V	415V	Min	Max		
Capacity		kW		14.0	14.0	14.0	-	-	-	3.3	16.0		
		BTU/h		47800	47800	47800	-	-	-	11300	54600		
		Sensible	kW	-	-	-	-	-	-	-	-		
		Latent	kW	-	-	-	-	-	-	-	-		
Current		A		-	-	-	6.80	6.45	6.20	-	-		
Input power		W		-	-	-	-	-	-	-	-		
		TOTAL W		-	-	-	4.11k	4.11k	4.11k	620	5.85k		
Annual consumption		TOTAL kWh *4		-	-	-	-	2055	-	-	-		
EER/EER CLASS		TOTAL (W/W) *5/ ("A"~"G")		-	-	-	3.41	3.41 / A	3.41	5.32	2.74		
ErP *6		Pdesign		kW	-	-	-	14.0	-	-	-		
		ηsc		%	-	-	-	290.4	-	-	-		
		Annual consumption		kWh	-	-	-	-	-	-	-	-	
		Class		-	-	-	-	-	-	-	-	-	
Power factor		%		-	-	-	92	92	92	-	-		
Noise indoor *7		dB-A (H/M/L)		32/29/27			-			-	-		
		Power Level dB		47/44/42			-			-	-		
		dB-A (H/L)		-			54/-			-	-		
Noise outdoor		dB-A (H/L)		-			54/-			-	-		
		Power Level dB		-			71/-			-	-		
HEATING		Capacity		kW	16.0	16.0	16.0	-	-	-	3.3	18.0	
				BTU/h	54600	54600	54600	-	-	-	11300	61400	
		Current		A	-	-	-	6.15	5.85	5.65	-	-	
		Input power		W	-	-	-	-	-	-	-	-	
				TOTAL W	-	-	-	3.72k	3.72k	3.72k	600	5.50k	
		COP/COP CLASS		TOTAL (W/W) *5/ ("A"~"G")	-	-	-	4.30	4.30 / A	4.30	5.50	3.27	
		ErP *6		Pdesign at -10°C		kW	-	-	-	10.6	-	-	-
				Tbivalent		°C	-	-	-	-10	-	-	-
				ηsh		%	-	-	-	181.6	-	-	-
				Annual consumption		kWh	-	-	-	-	-	-	-
				elbu (-10°C)	kW	-	-	-	-	0.00	-	-	-
		Class	-	-	-	-	-	-	-	-	-		
Power factor		%		-	-	-	92	92	92	-	-		
Noise indoor *7		dB-A (H/M/L)		32/29/27			-			-	-		
		Power Level dB		47/44/42			-			-	-		
Noise outdoor		dB-A (H/L)		-			54/-			-	-		
		Power Level dB		-			71/-			-	-		
LOW TEMP	Total capacity (kW) / Input power (W) / COP						-	-	-	-	-		
EXTRA	Total capacity (kW) / Input power (W) / COP						-	-	-	-	-		
LOW TEMP	Max Current (A) / Max Input power (W)						10.5 / 6.45k	10.4 / 6.80k	10.4 / 7.05k	-	-		
Starting current (A) (Cooling/Heating)							6.80 / 6.15	6.45 / 5.85	6.20 / 5.65	-	-		
Comp output (W)							3.00k	3.00k	3.00k	-	-		
Time Delay fuse max size (A)							-	15	-	-	-		
Network Impedance (ΩMAX.)							-	-	-	-	-		
Fan motor output (Indoor/Outdoor) W				60			-	90×2	-	-	-		
Moisture removal volume				4.8			-	-	-	-	-		
External static pressure				Pa			-	-	-	-	-		
Indoor Air flow *7	Cooling	m³/min (H/M/L)	16.5 ×3 / 13.5 ×3 / 11.5 ×3						-	-			
	Heating	m³/min (H/M/L)	16.5 ×3 / 13.5 ×3 / 11.5 ×3						-	-			
	Cooling	m³/min				129.0			-	-			
Outdoor Air flow	Cooling	m³/min				116.0			-	-			
	Heating	m³/min							-	-			
Refrigerant type / amount (ship) kg / amount (max) kg							R32	3.050	5.975	-	-		
F-Gas	GWP / CO2eq (ton) (PRECHARGED AMOUNT) / CO2eq (ton) (MAXIMUM CHARGED AMOUNT)						675	2.06	4.03	-	-		
Product dimension		Height	mm	256			1416			-	-		
		Width	mm	840			940			-	-		
		Depth	mm	840			340			-	-		
Product dimension (Panel)		H × W × D	mm	33.5 x 950 x 950						-	-		
Packing dimension		Height	mm	302			1556			-	-		
		Width	mm	898			1055			-	-		
		Depth	mm	898			485			-	-		
Mass		(NET)	kg	19			98			-	-		
		(GROSS)	kg	25			110			-	-		
		Panel (NET)	kg	5						-	-		
Layers limit (actually)				11 (12)			1 (2)			-	-		
Operation condition		Cool (DBT)	18°C~32°C			-15°C (*8-20°C)~48°C			-	-			
		Heat (DBT)	16°C~30°C			-20°C ~ 24°C			-	-			
Max Working Pressure HP/LP MPa				4.15/2.70						-	-		
Max Allowable Pressure Mpa				4.15						-	-		
PIPING	Pipe port diameter mm (inch)		(Liquid) Ø6.35 (1/4) (Gas) Ø12.7 (1/2)			(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)							
	Pipe diameter mm (inch)		(Liquid) Ø9.52 (3/8) (Gas) Ø15.88 (5/8)										
	Connecting method		flared type			flared type							
	Standard length m		5 m										
	Pipe length range m		5 ~ 85 m										
	Indoor unit & Outdoor unit height difference m		15 m (OD located lower) / 30 m (OD located higher)										
	Add gas amount g/m		45 g/m										
	Pipe length for additional gas m		20 m										

* In the case of nanoe X OFF

*1 In case it is necessary to indicate the air flow volume in (l/s), the value in (m³/min.) shall be multiplied by 16.7 and rounded down the decimal point.

*2 If the EUROVENT Certified models can be operated under the "extra-low" temperature condition, -7°C dry bulb and -8°C wet-bulb temperatures with rated voltage 230V shall be used.

*3 Network Impedance shall be applicable for EUROPE and CHINA models.

*4 The annual consumption is calculated by multiplying the input power at 230V (400V) by an average of 500 hours per year in cooling mode.

*5 EER and COP classification is at 230V (400V) only in accordance with EU directive 2002/31/EC.

*6 ηsc and ηsh classification is at 230V(400V) only in accordance with EN-14825. For heating, ηsh indicates the value of only Average heating season.

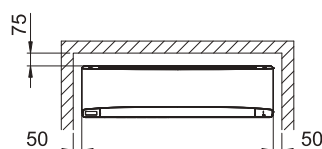
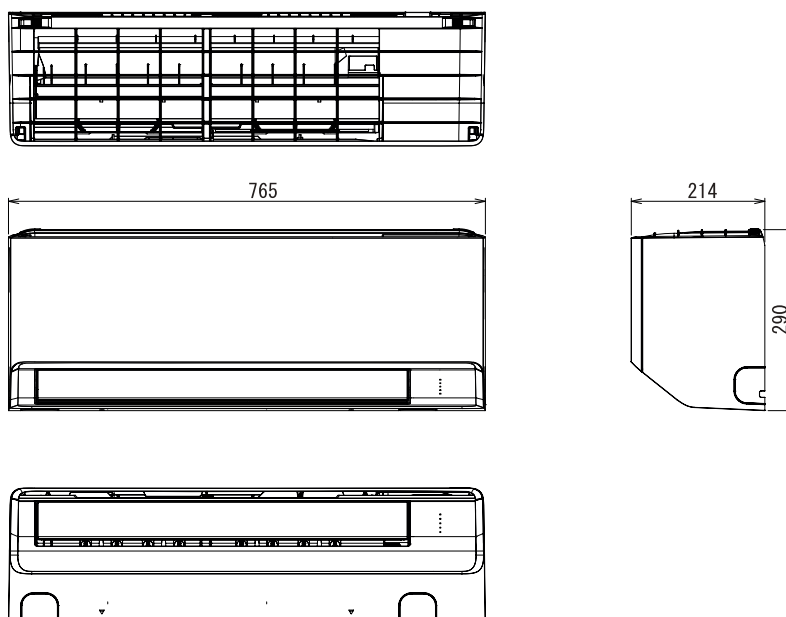
*7 H : High at setting 5 stage (Level 5), M : Middle at setting 5 stage (Level 3), L : Low at setting 5 stage (Level 1)

*8 It is possible to operate at -20°C only computer rooms with the piping length of 30m or less.

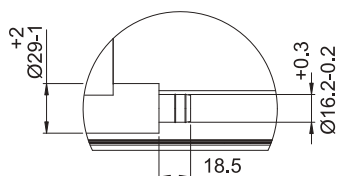
3.2 Dimensional Data

3.2.1 Wall Mounted Type S-2545PK4E

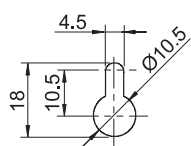
unit :mm



Minimum space requirements for installation

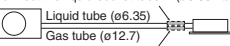
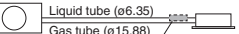


Detailed view B



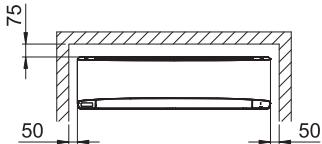
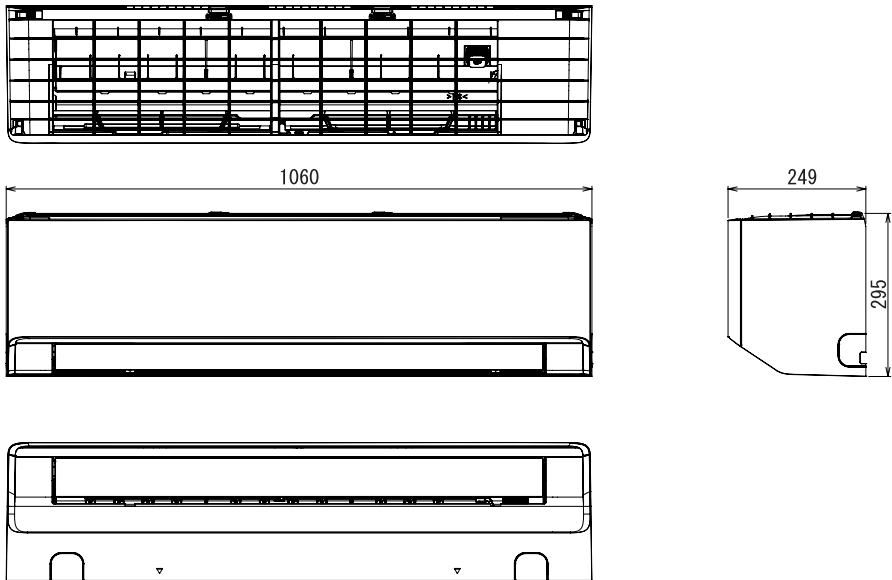
Detailed view C

①	Refrigerant tubing (liquid tube)	S-2545PK4E : $\phi 6.35$ S-5010PK4E : $\phi 9.52$ ($\phi 6.35$)
②	Refrigerant tubing (gas tube)	S-2545PK4E : $\phi 12.7$ S-5010PK4E : $\phi 15.88$ ($\phi 12.7$)
③	Drain hose	
④	Rear panel	
⑤	Rear panel fixing holes	($\phi 5.0$ holes or as shown in figure "C")
⑥	Tubing and wiring holes ($\phi 70$)	

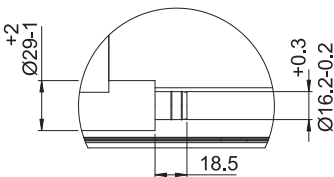
Outdoor PZ3 and PZH3 series (Type 50 and 60)	Outdoor PZ3 series (Type 71)
Connect the liquid socket tube B ($\phi 6.35$ - $\phi 9.52$) to the liquid tubing side indoor unit  Connect the gas socket tube A ($\phi 12.7$ - $\phi 15.88$) to the gas tubing side indoor unit	 Connect the liquid socket tube B ($\phi 6.35$ - $\phi 9.52$) to the liquid tubing side indoor unit

3.2.2 Wall Mounted Type S-5010PK4E

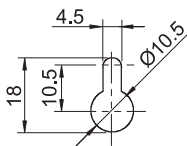
unit :mm



Minimum space requirements for installation

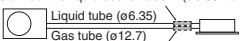
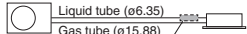


Detailed view B



Detailed view C

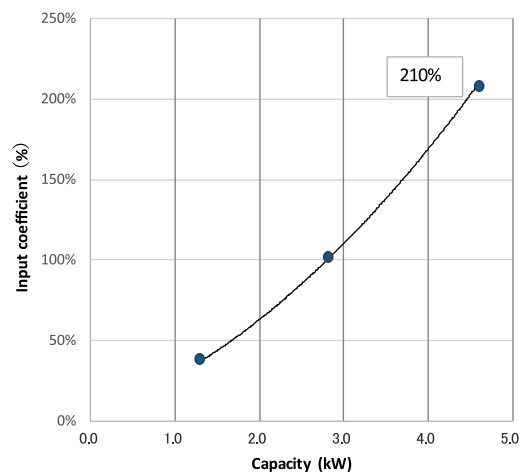
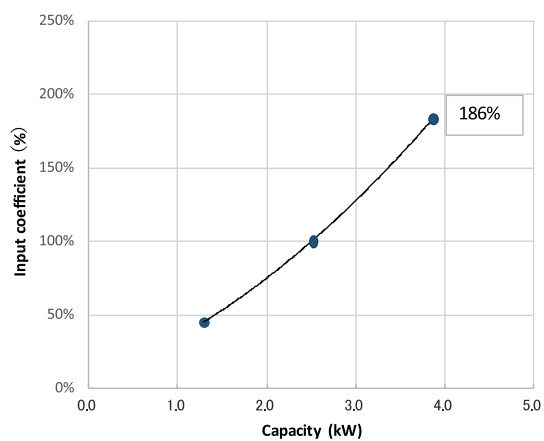
①	Refrigerant tubing (liquid tube) S-2545PK4E : Ø6.35 S-5010PK4E : Ø9.52 (Ø6.35)
②	Refrigerant tubing (gas tube) S-2545PK4E : Ø12.7 S-5010PK4E : Ø15.88 (Ø12.7)
③	Drain hose
④	Rear panel
⑤	Rear panel fixing holes (Ø5.0 holes or as shown in figure "C")
⑥	Tubing and wiring holes (Ø70)

Outdoor PZ3 and PZH3 series (Type 50 and 60)	Outdoor PZ3 series (Type 71)
Connect the liquid socket tube B (Ø6.35 - Ø9.52) to the liquid tubing side indoor unit 	 Connect the liquid socket tube B (Ø6.35 - Ø9.52) to the liquid tubing side indoor unit

3.3 Capacity Correction

3.3.1 Rated Capacity Ratio

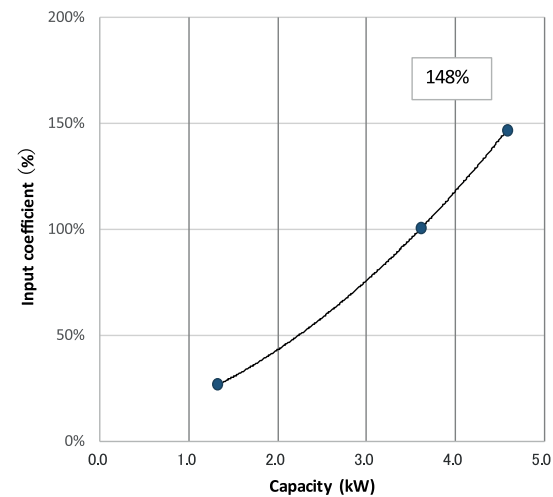
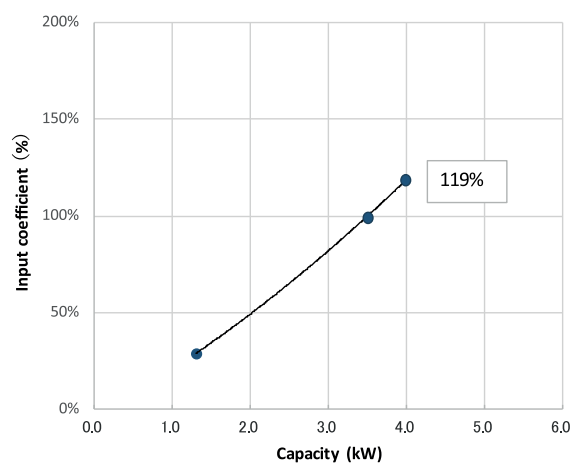
3.3.1.1 PK4E (U-25PZ3E5)



NOTE

- Each type of the characteristics shows the value under the following conditions.
Equivalent tubing length : 5m
Difference of elevation : 0m
Wind speed : High

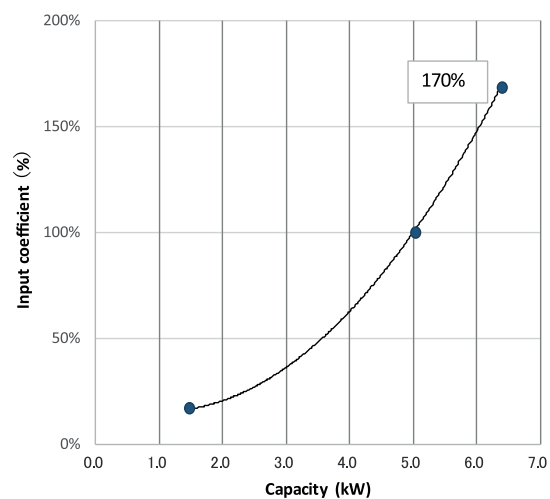
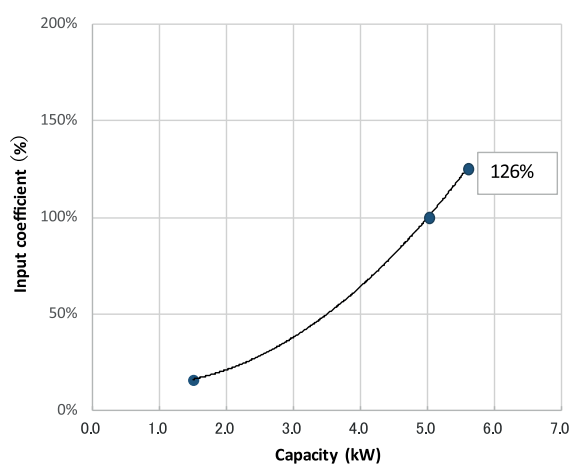
3.3.1.2 PK4E (U-36PZ3E5)



NOTE

- 1. Each type of the characteristics shows the value under the following conditions.
 - Equivalent tubing length : 5m
 - Difference of elevation : 0m
 - Wind speed : High

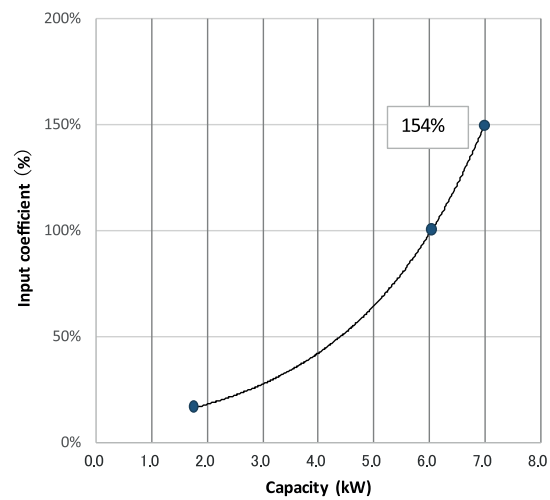
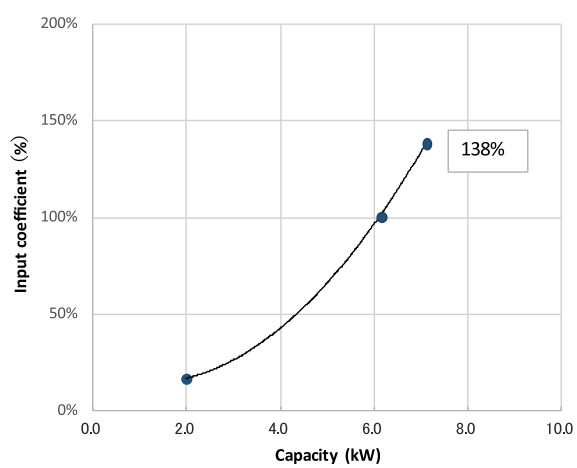
3.3.1.3 PK4E (U-50PZ3E5)



NOTE

- Each type of the characteristics shows the value under the following conditions.
Equivalent tubing length : 5m
Difference of elevation : 0m
Wind speed : High

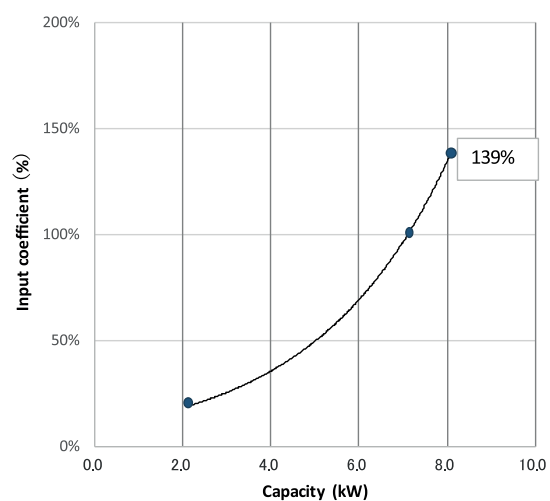
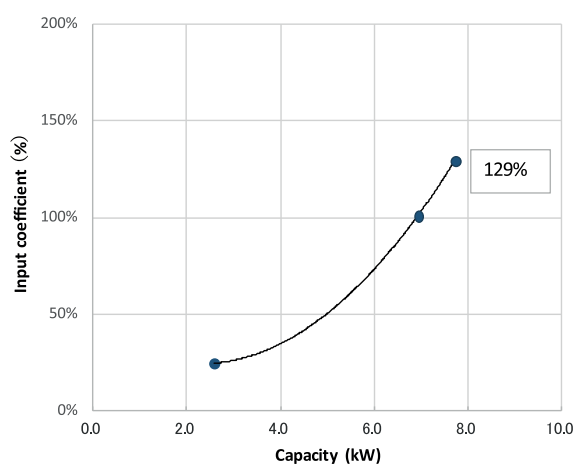
3.3.1.4 PK4E (U-60PZ3E5A)



NOTE

- 1. Each type of the characteristics shows the value under the following conditions.
Equivalent tubing length : 5m
Difference of elevation : 0m
Wind speed : High

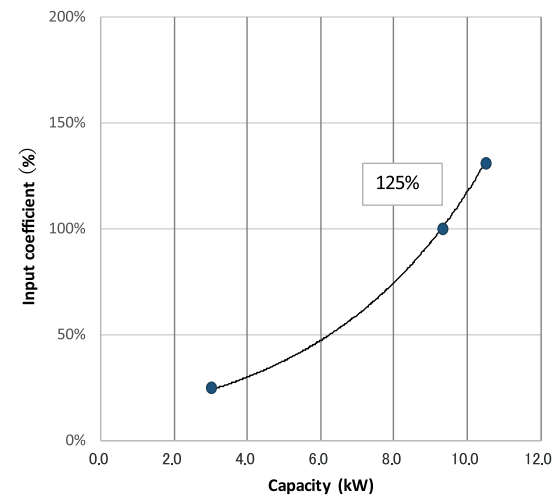
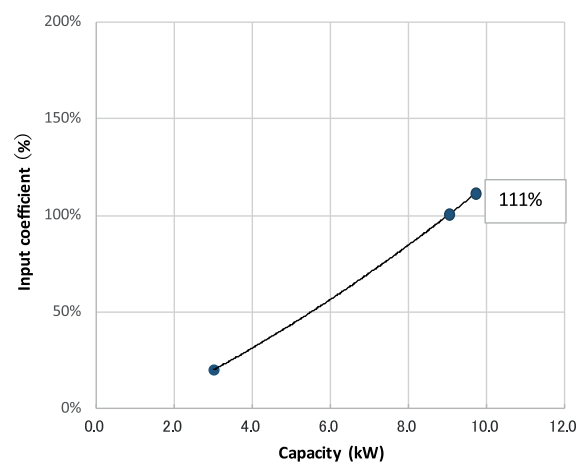
3.3.1.5 PK4E (U-71PZ3E5A)



NOTE

- Each type of the characteristics shows the value under the following conditions.
Equivalent tubing length : 5m
Difference of elevation : 0m
Wind speed : High

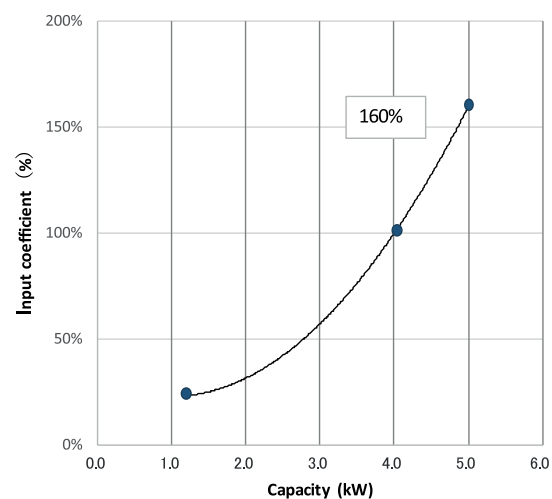
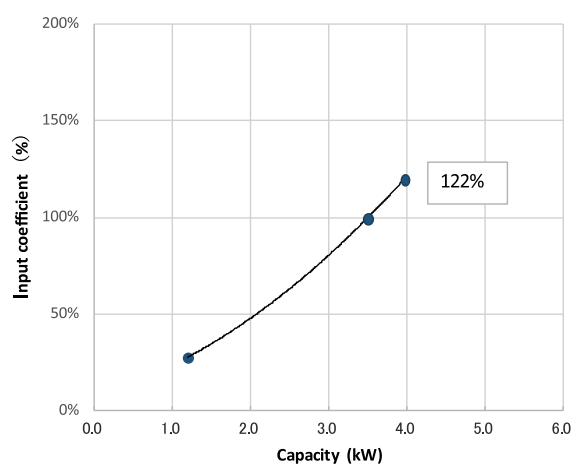
3.3.1.6 PK4E (U-100PZ3E5/8)



NOTE

- 1. Each type of the characteristics shows the value under the following conditions.
 - Equivalent tubing length : 5m
 - Difference of elevation : 0m
 - Wind speed : High

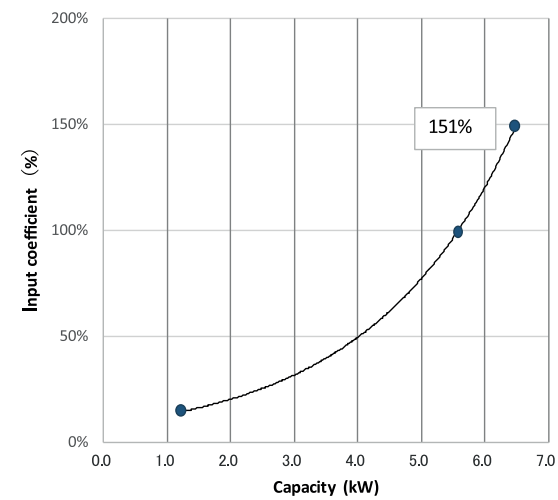
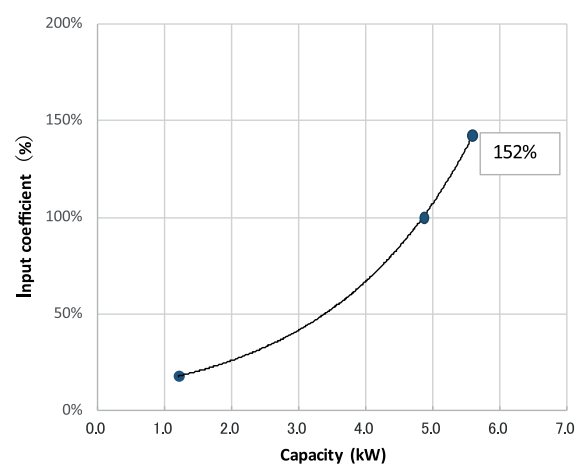
3.3.1.7 PK4E (U-36PZH3E5)



NOTE

- Each type of the characteristics shows the value under the following conditions.
 Equivalent tubing length : 5m
 Difference of elevation : 0m
 Wind speed : High

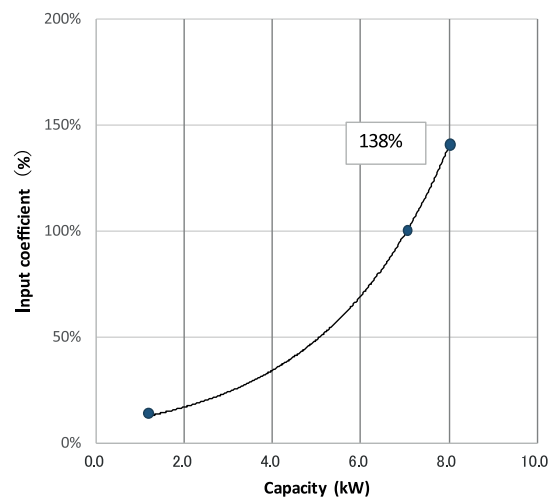
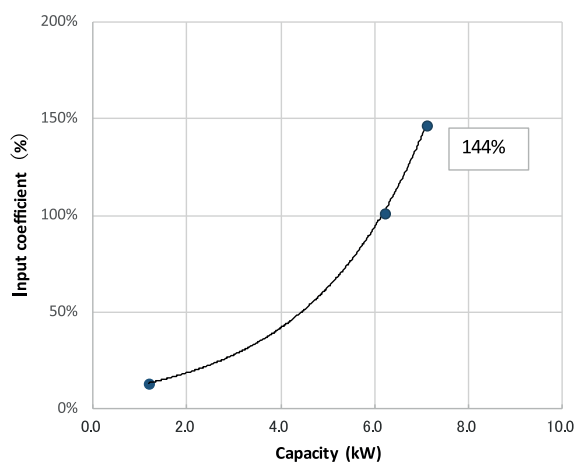
3.3.1.8 PK4E (U-50PZH3E5)



NOTE

- 1. Each type of the characteristics shows the value under the following conditions.
 - Equivalent tubing length : 5m
 - Difference of elevation : 0m
 - Wind speed : High

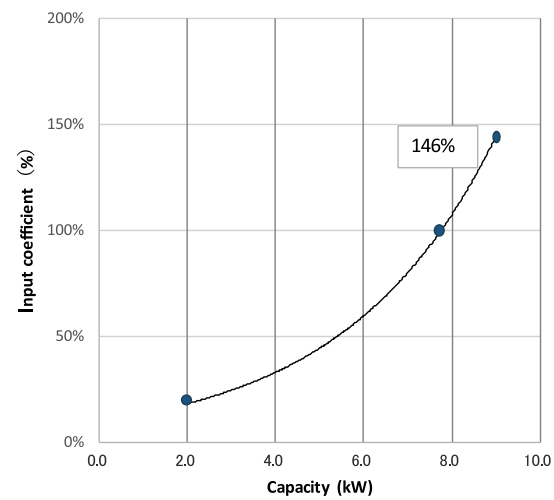
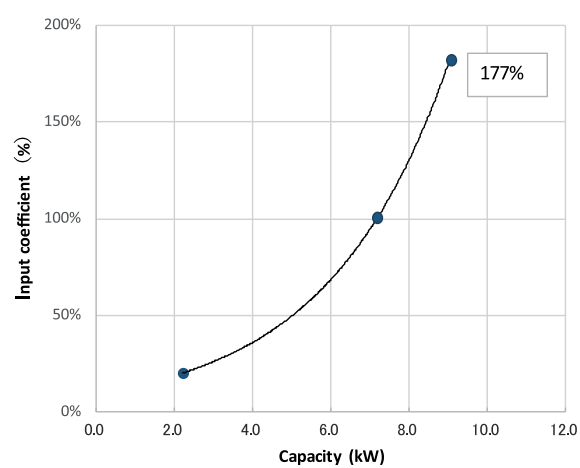
3.3.1.9 PK4E (U-60PZH3E5)



NOTE

- Each type of the characteristics shows the value under the following conditions.
 Equivalent tubing length : 5m
 Difference of elevation : 0m
 Wind speed : High

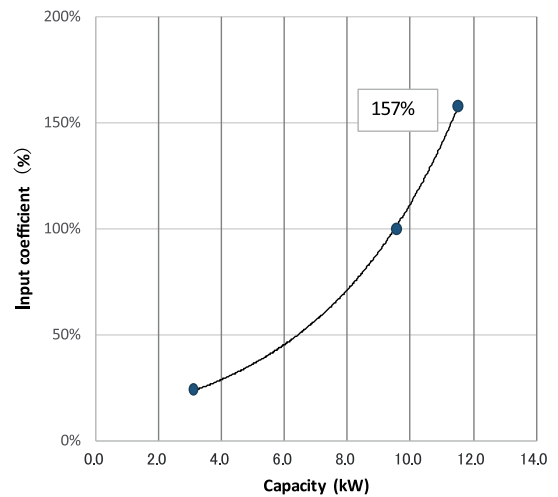
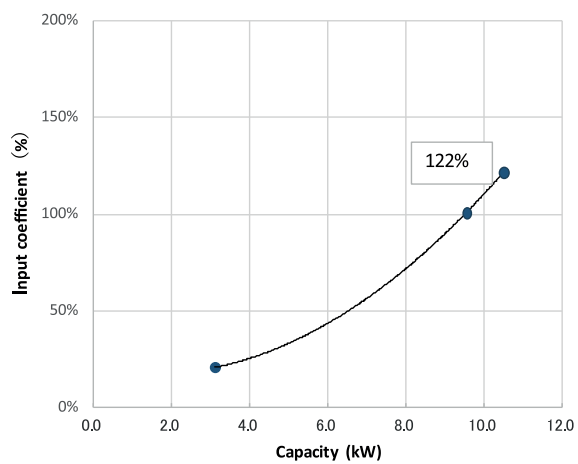
3.3.1.10 PK4E (U-71PZH4E5/8)



NOTE

- 1. Each type of the characteristics shows the value under the following conditions.
 - Equivalent tubing length : 5m
 - Difference of elevation : 0m
 - Wind speed : High

3.3.1.11 PK4E (U-100PZH4E5/8)



NOTE

- Each type of the characteristics shows the value under the following conditions.
 Equivalent tubing length : 5m
 Difference of elevation : 0m
 Wind speed : High

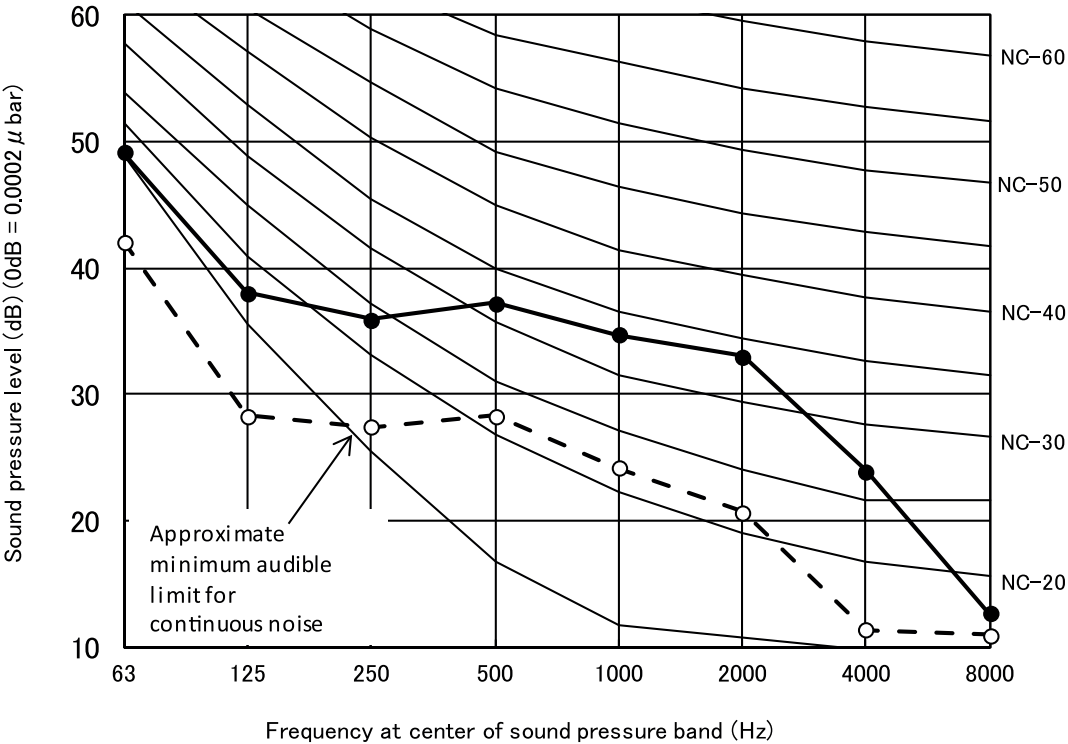
3.4 Noise Criterion Curves

3.4.1 Indoor Unit

S-2545PK4E (25) Octave Band Central Frequency(Hz)

Power supply	50Hz		
Fan Speed	H	M	L
A-scale(dB)	39	34	29

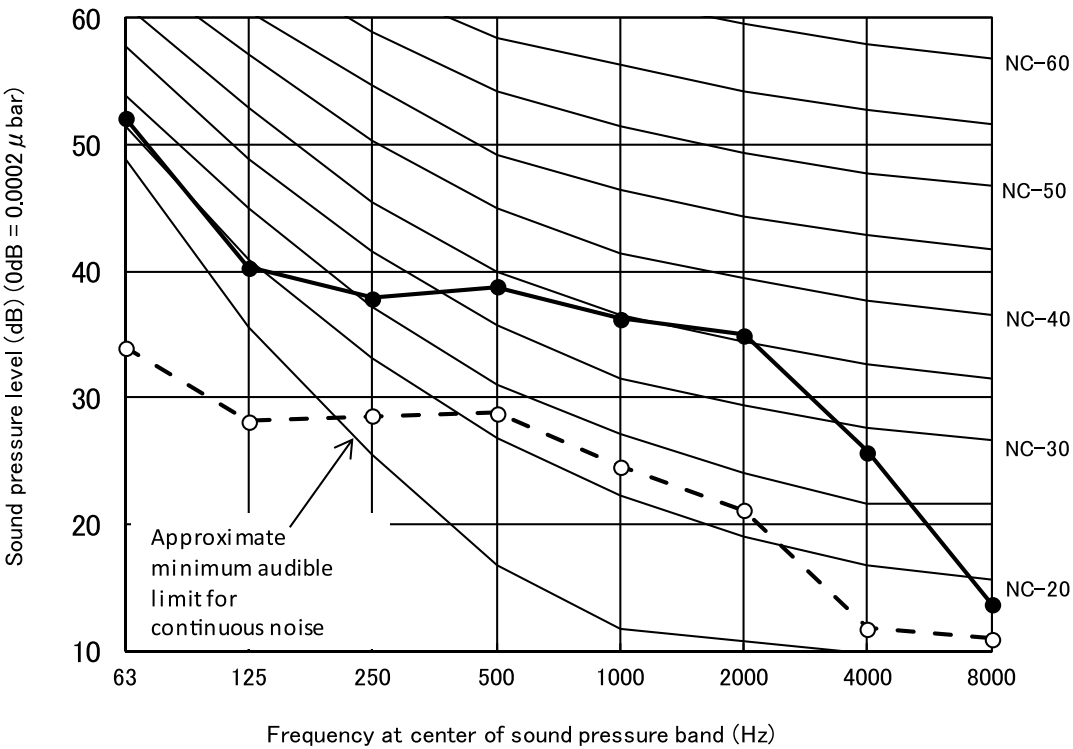
Strong (H)
Low (L)



S-2545PK4E (36) Octave Band Central Frequency(Hz)

Power supply	50Hz		
Fan Speed	H	M	L
A-scale(dB)	41	36	30

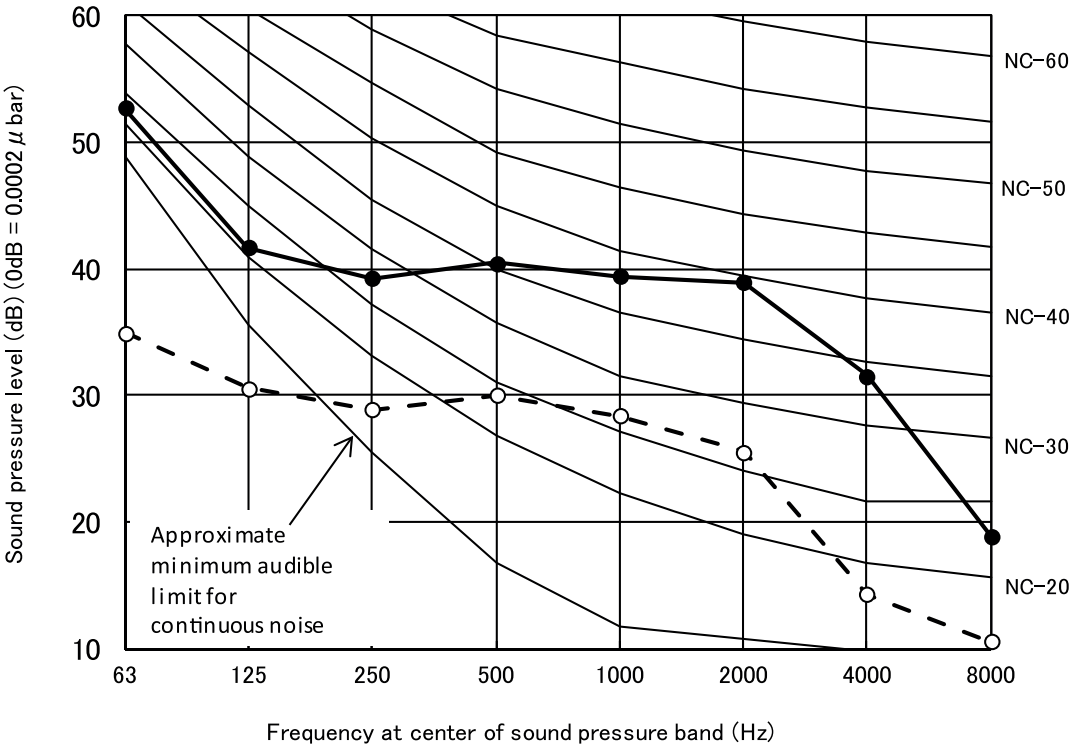
Strong (H)
Low (L)



S-2545PK4E (45) Octave Band Central Frequency(Hz)

Power supply	50Hz		
Fan Speed	H	M	L
A-scale(dB)	44	38	32

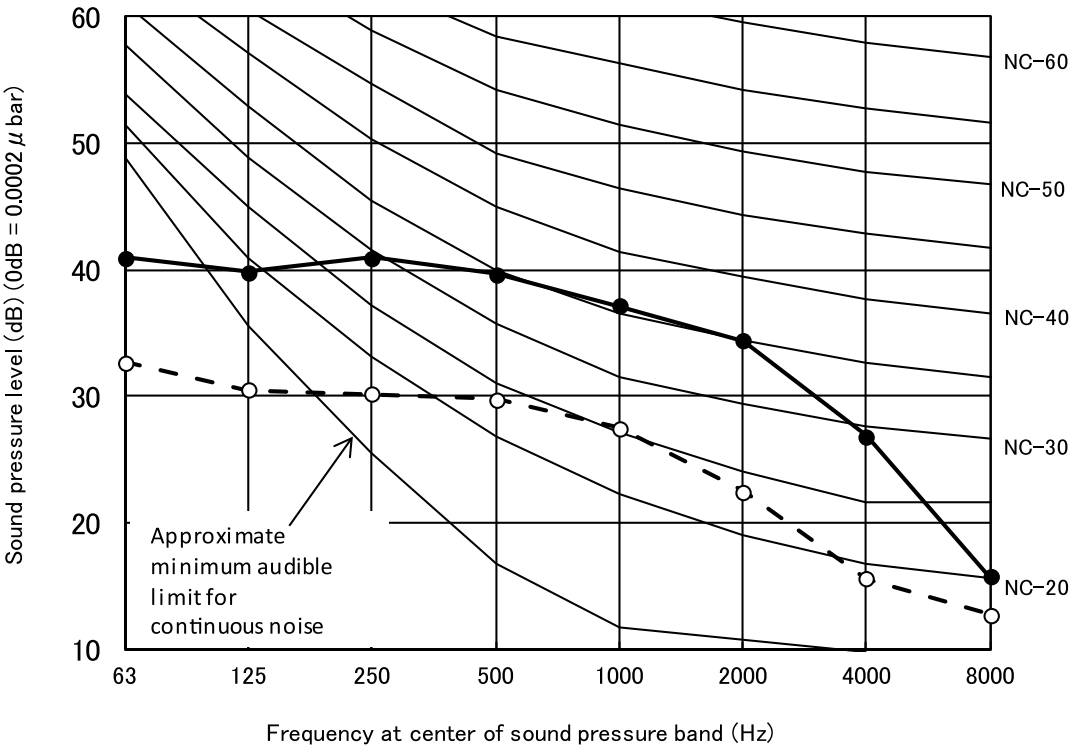
—●— Strong (H)
- - -○- - Low (L)



S-5010PK4E (50) Octave Band Central Frequency(Hz)

Power supply	50Hz		
Fan Speed	H	M	L
A-scale(dB)	41	36	31

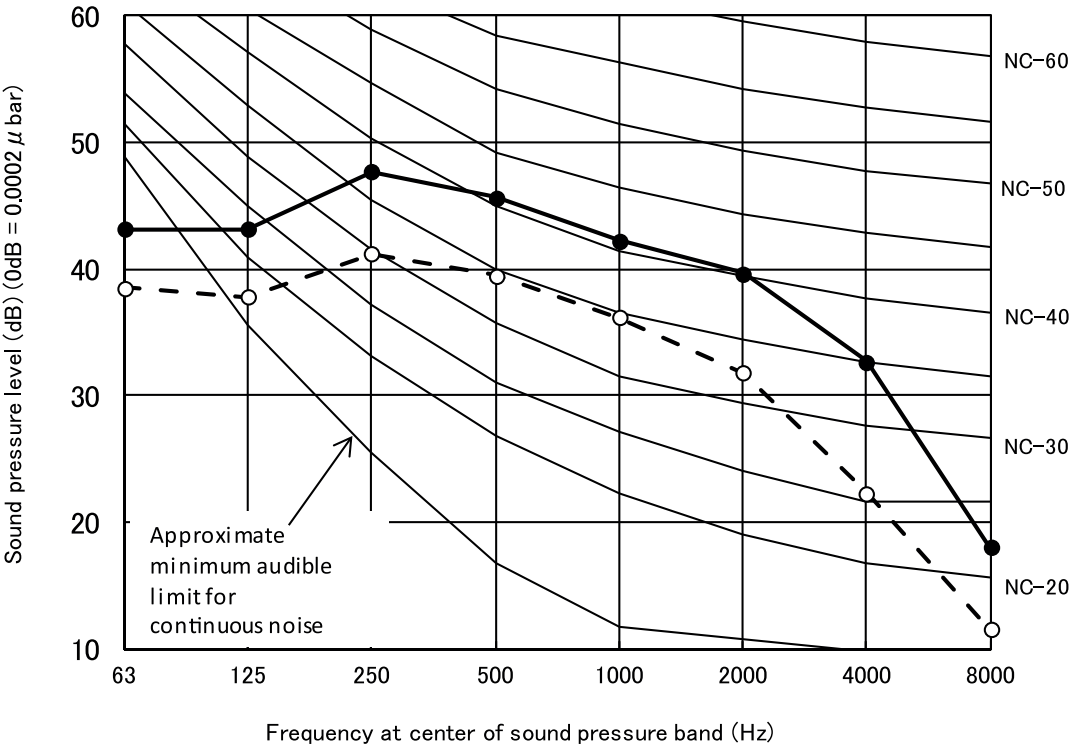
—●— Strong (H)
- - -○- - Low (L)



S-5010PK4E (60) Octave Band Central Frequency(Hz)
S-5010PK4E (71) Octave Band Central Frequency(Hz)

Power supply	50Hz		
Fan Speed	H	M	L
A-scale(dB)	47	44	40

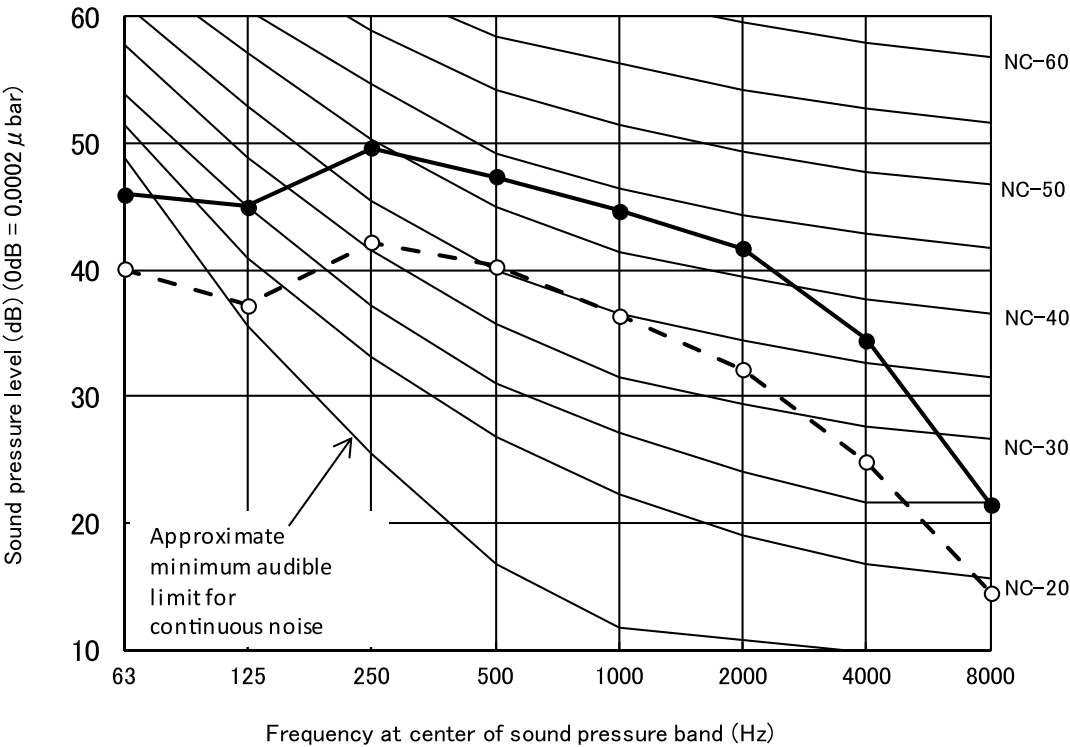
Strong (H)
Low (L)



S-5010PK4E (100) Octave Band Central Frequency(Hz)

Power supply	50Hz		
Fan Speed	H	M	L
A-scale(dB)	49	45	41

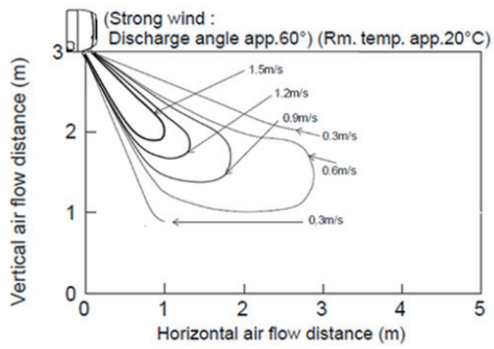
Strong (H)
Low (L)



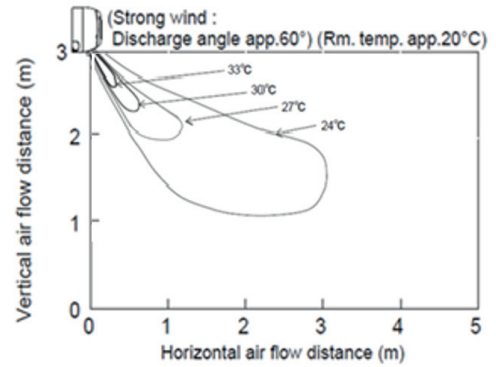
3.5 Airflow Distance Chart

S-2545PK4E(25)

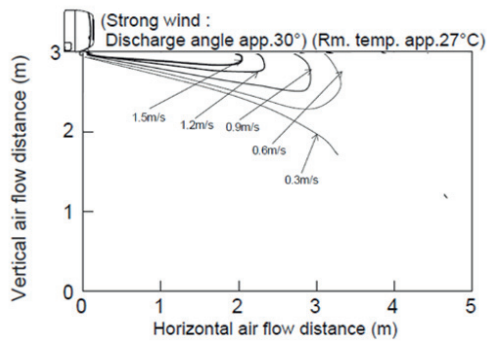
Heating : Distribution of wind velocity



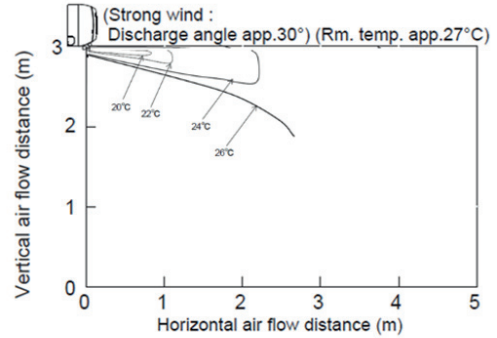
Heating : Distribution of temperature



Cooling : Distribution of wind velocity

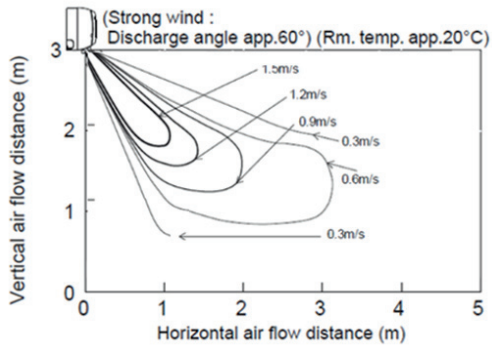


Cooling : Distribution of temperature

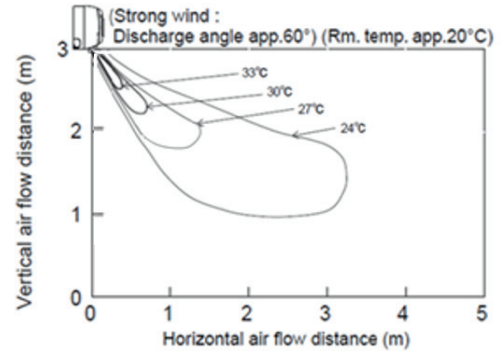


S-2545PK4E(36)

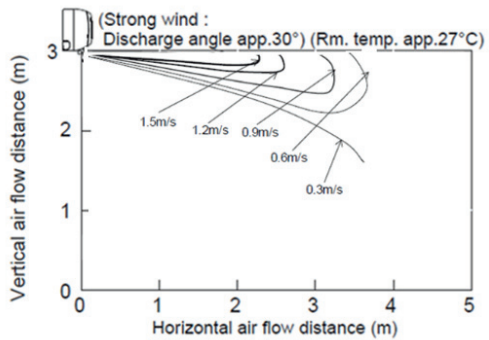
Heating : Distribution of wind velocity



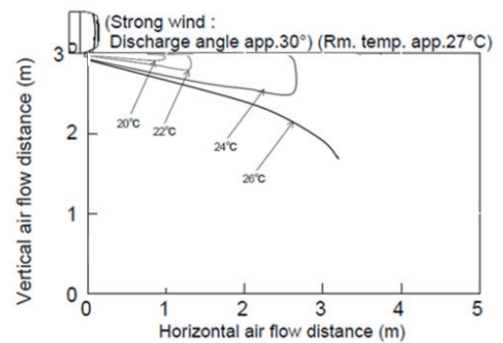
Heating : Distribution of temperature



Cooling : Distribution of wind velocity

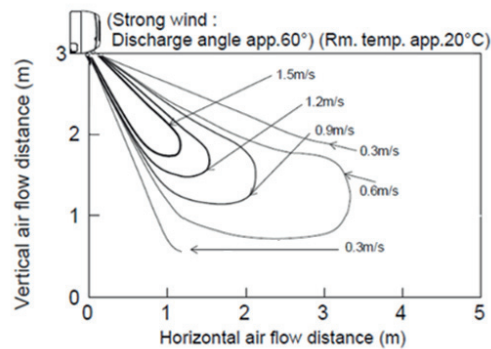


Cooling : Distribution of temperature

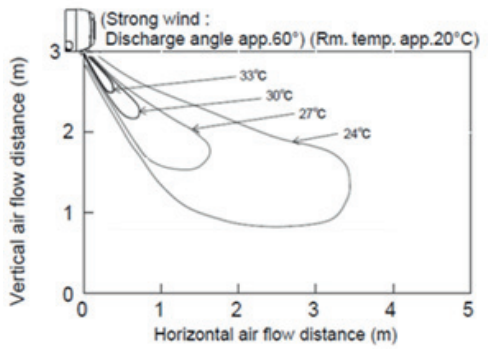


S-2545PK4E(45)

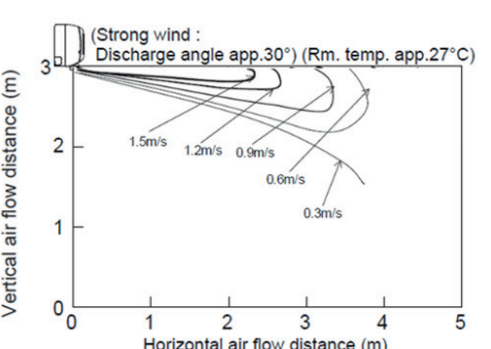
Heating : Distribution of wind velocity



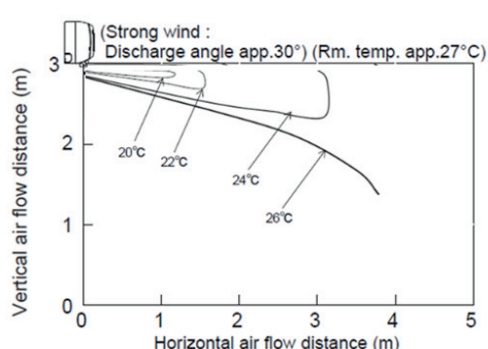
Heating : Distribution of temperature



Cooling : Distribution of wind velocity

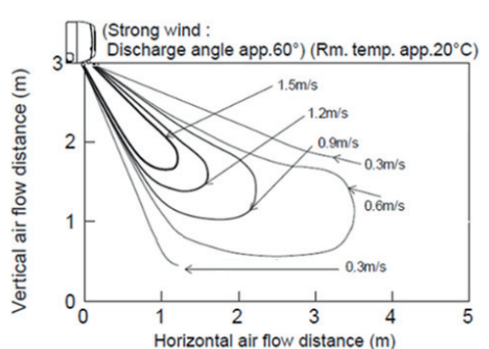


Cooling : Distribution of temperature

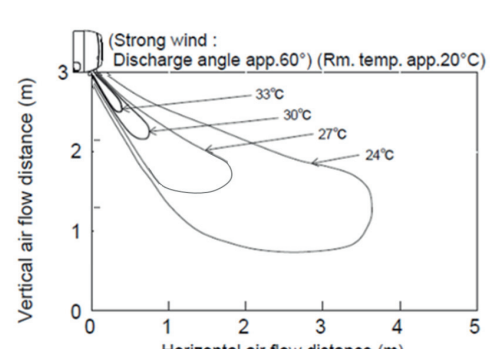


S-5010PK4E(50)

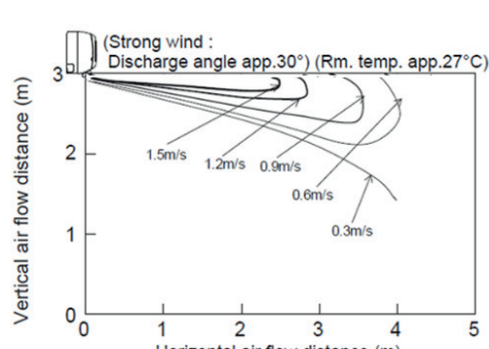
Heating : Distribution of wind velocity



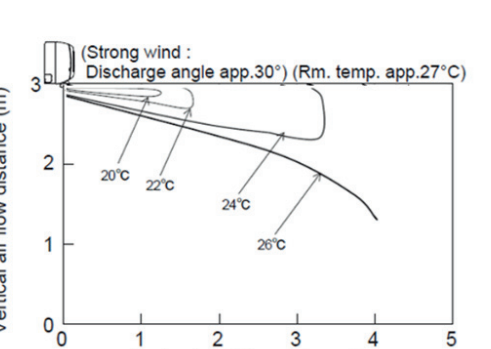
Heating : Distribution of temperature



Cooling : Distribution of wind velocity

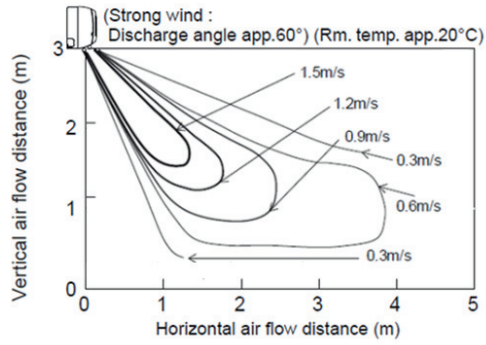


Cooling : Distribution of temperature

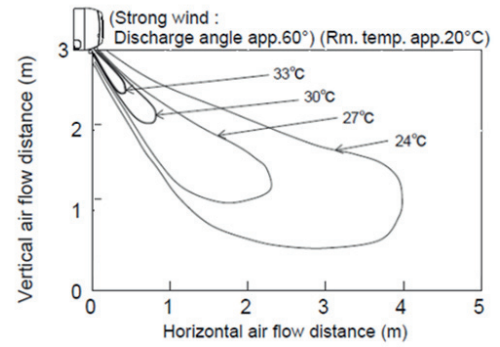


S-5010PK4E(60)

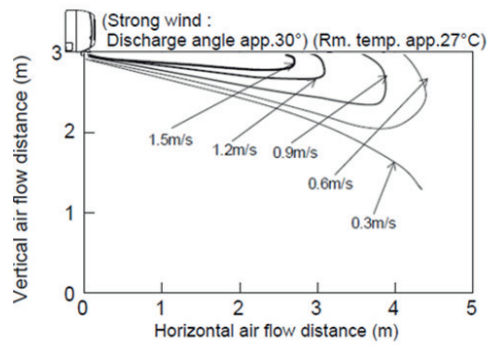
Heating : Distribution of wind velocity



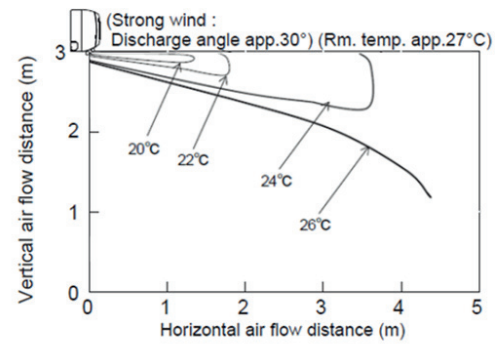
Heating : Distribution of temperature



Cooling : Distribution of wind velocity

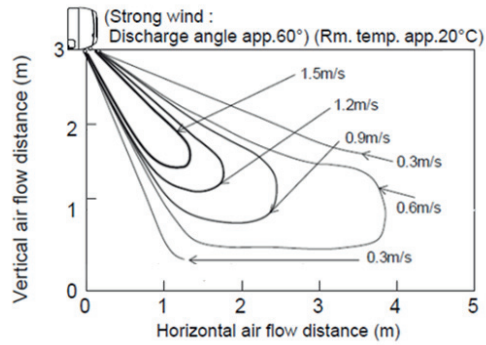


Cooling : Distribution of temperature

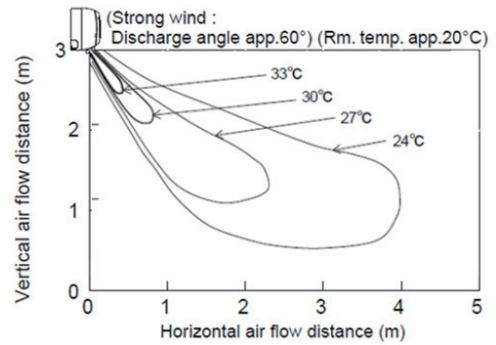


S-5010PK4E (71)

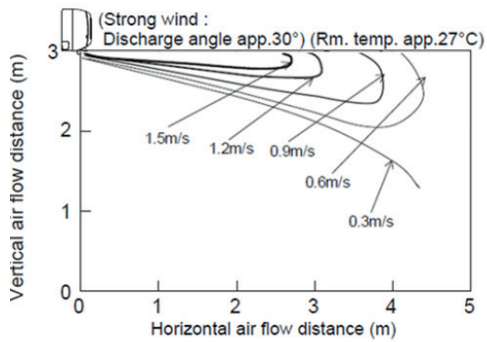
Heating : Distribution of wind velocity



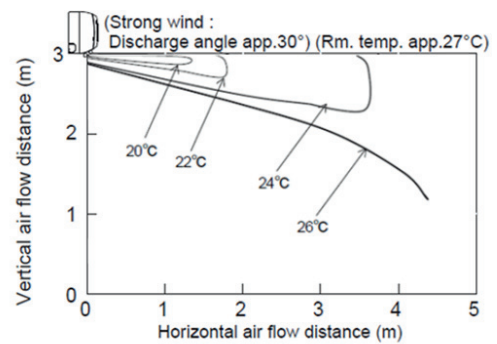
Heating : Distribution of temperature



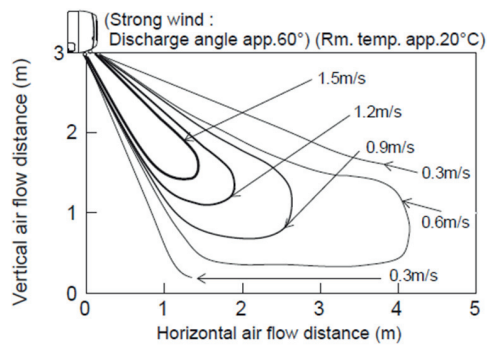
Cooling : Distribution of wind velocity



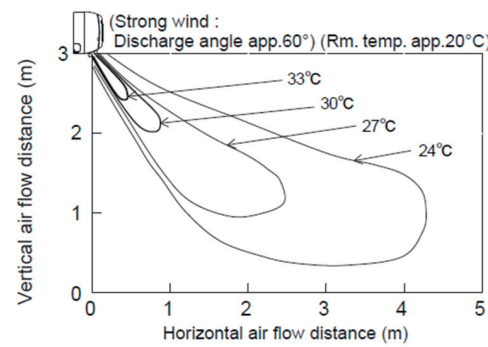
Cooling : Distribution of temperature



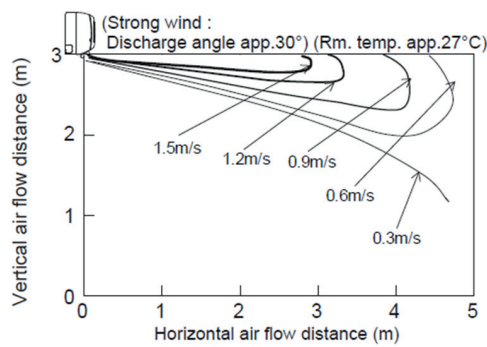
Heating : Distribution of wind velocity



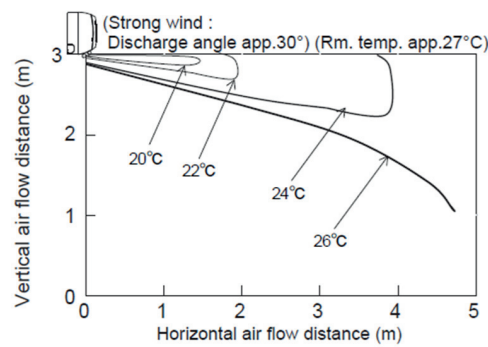
Heating : Distribution of temperature



Cooling : Distribution of wind velocity



Cooling : Distribution of temperature



3.6 Electrical Wiring

■ General Precautions on Wiring

- (1) Before wiring, confirm the rated voltage of the unit as shown on its nameplate, then carry out the wiring closely following the wiring diagram.



WARNING

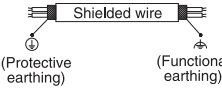
- (2) This equipment is strongly recommended to be installed with Earth Leakage Circuit Breaker (ELCB) or Residual Current Device (RCD). Otherwise, it may cause electrical shock and fire in case of equipment breakdown or insulation breakdown. The ELCB must be incorporated in the fixed wiring in accordance with the wiring regulations. The ELCB must be an approved circuit capacity, having a contact separation in all poles.
The ELCB or RCD suitable for use with inverters, resistant to high frequency noise, is most suitable. The ELCB's or RCD's intended for protection to include high frequency currents are unnecessary and should be avoided, as potentially causing nuisance tripping, in this application.
- (3) To prevent possible hazards from insulation failure, the unit must be grounded.
- (4) Each wiring connection must be done in accordance with the wiring system diagram.
Wrong wiring may cause the unit to misoperate or become damaged.
- (5) Do not allow wiring to touch the refrigerant tubing, compressor, or any moving parts of the fan.
- (6) Unauthorized changes in the internal wiring can be very dangerous. The manufacturer will accept no responsibility for any damage or misoperation that occurs as a result of such unauthorized changes.
- (7) Regulations on wire diameters differ from locality to locality. For field wiring rules, please refer to your LOCAL ELECTRICAL CODES before beginning.
You must ensure that installation complies with all relevant rules and regulations.
- (8) To prevent malfunction of the air conditioner caused by electrical noise, care must be taken when wiring as follows:
 - The remote control wiring and the inter-unit control wiring should be wired apart from the inter-unit power wiring.
 - Use shielded wires for inter-unit control wiring between units and ground the shield on both sides.



CAUTION

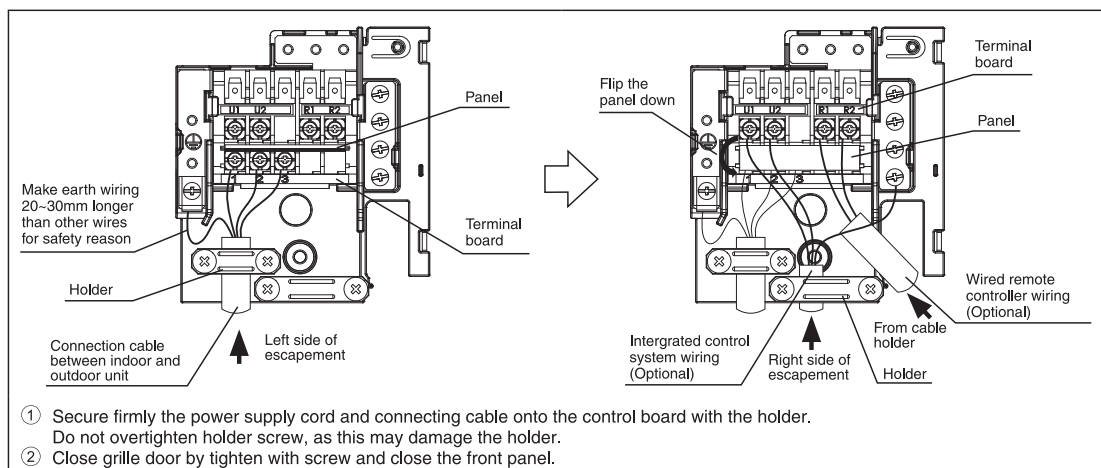
Check local electrical codes and regulations before wiring. Also, check any specified instruction or limitations.

■ Recommended Wire Length and Wire Size

Connection cable between Indoor and Outdoor Unit		Wired Remote Controller (Optional) (R1 / R2)		Integrated Control System (Optional) (U1 / U2)	
Wire Size	Length	Wire Size	Length	Use shielded wires for integrated control system wiring and ground the shield on both sides, otherwise misoperation from noise may occur. Connect wiring as shown in Section 3-2 Wiring System Diagrams. 	
2.5mm ²	Max. 100m	0.75mm ² (AWG#18)	Max. 500m		
1.5mm ²	Max. 40m				

NOTE

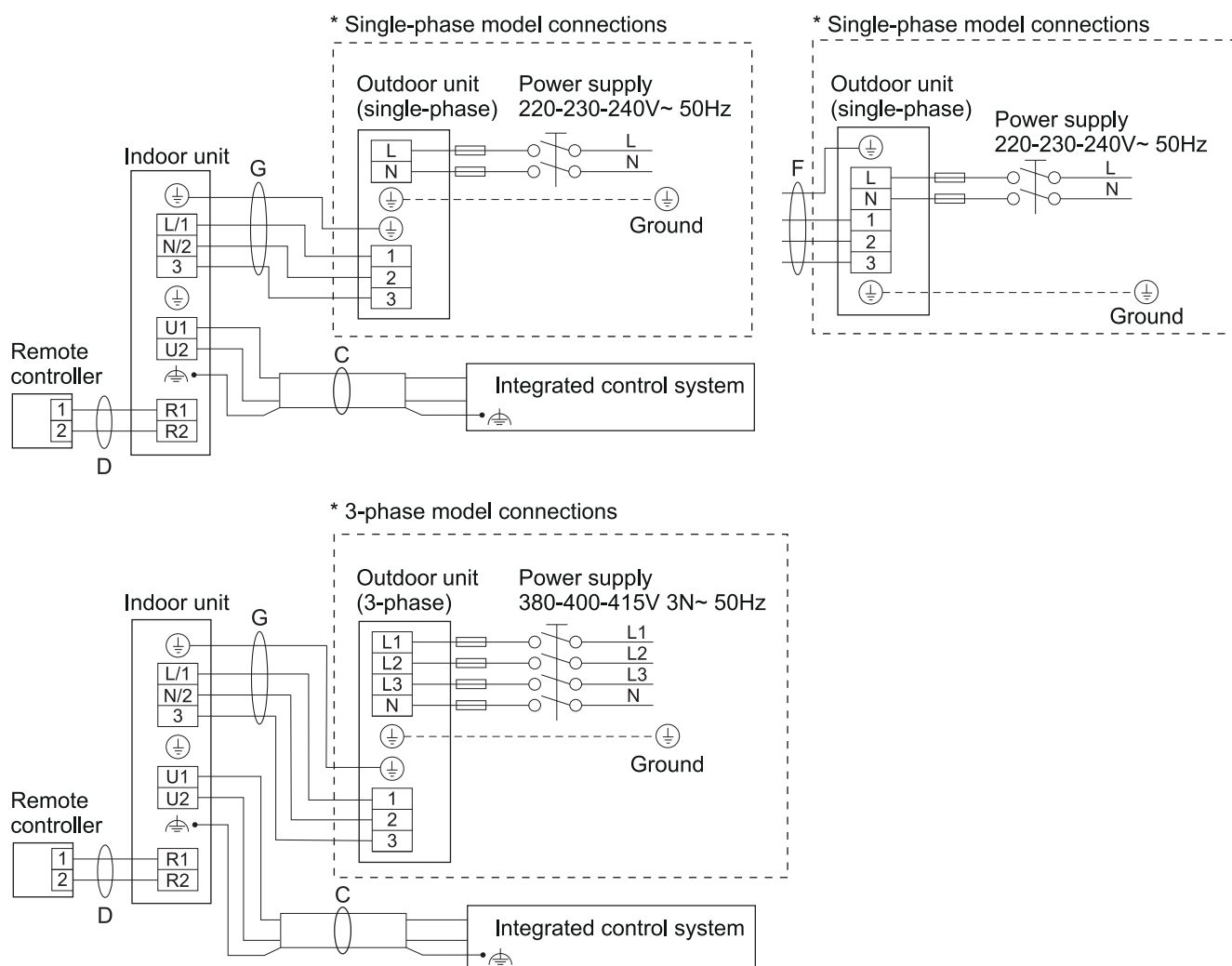
For Optional Parts connecting wiring size, refer to Installation Manual of the Optional Parts.
Connect the wired remote controller wire and connection cable between indoor unit and outdoor unit according to the diagram below.



■ Wiring System Diagrams

● 3-LINE CONNECTION

Example : Single connection

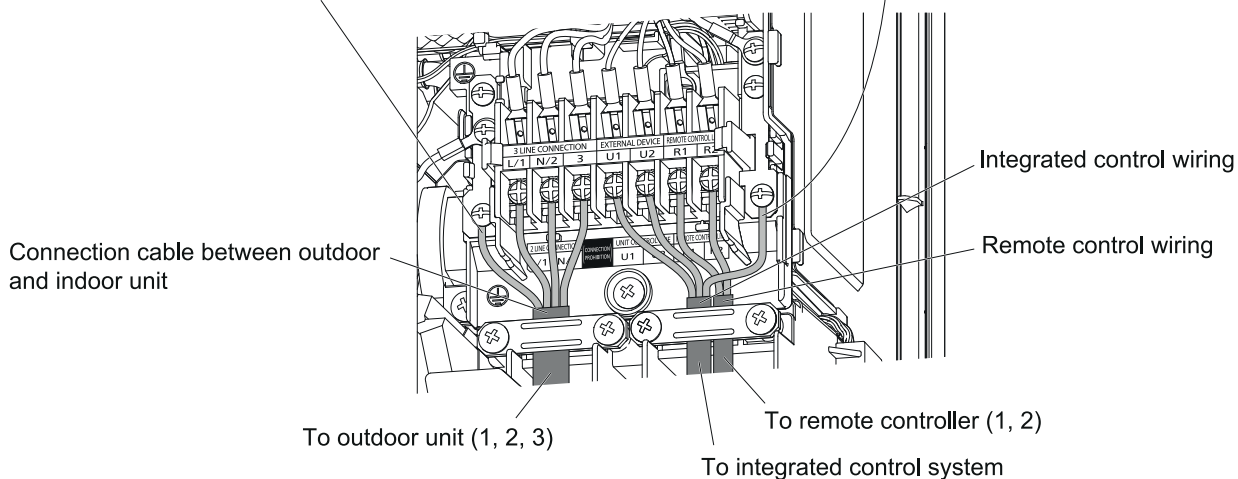


Indoor unit wiring sample

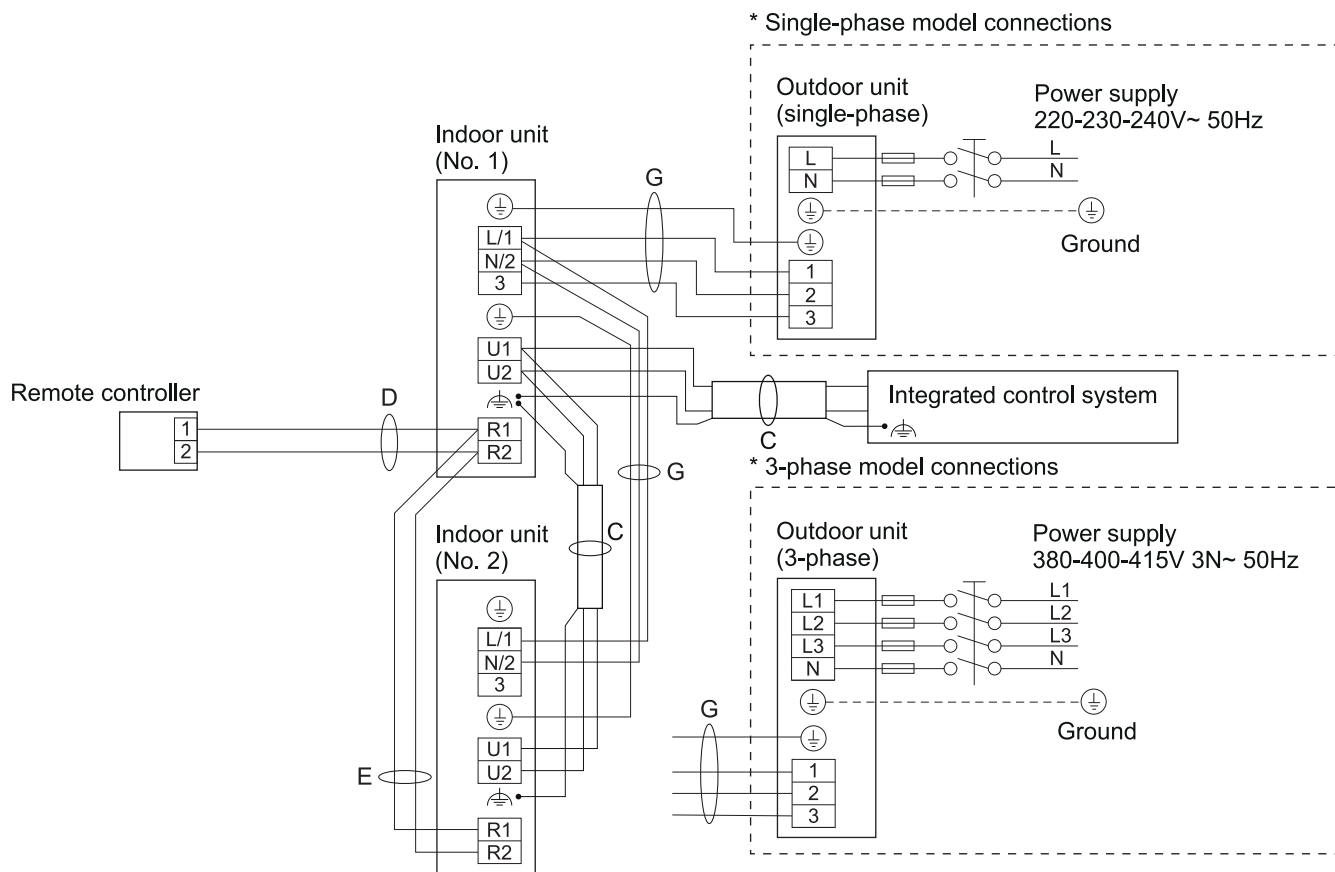
Earth wiring:

Make the earth wiring 25 - 30 mm longer than connecting wires to L/1, N/2, 3.

Use this screw when connecting the shield for the Inter-unit control wiring to ground.
(: Functional earthing)



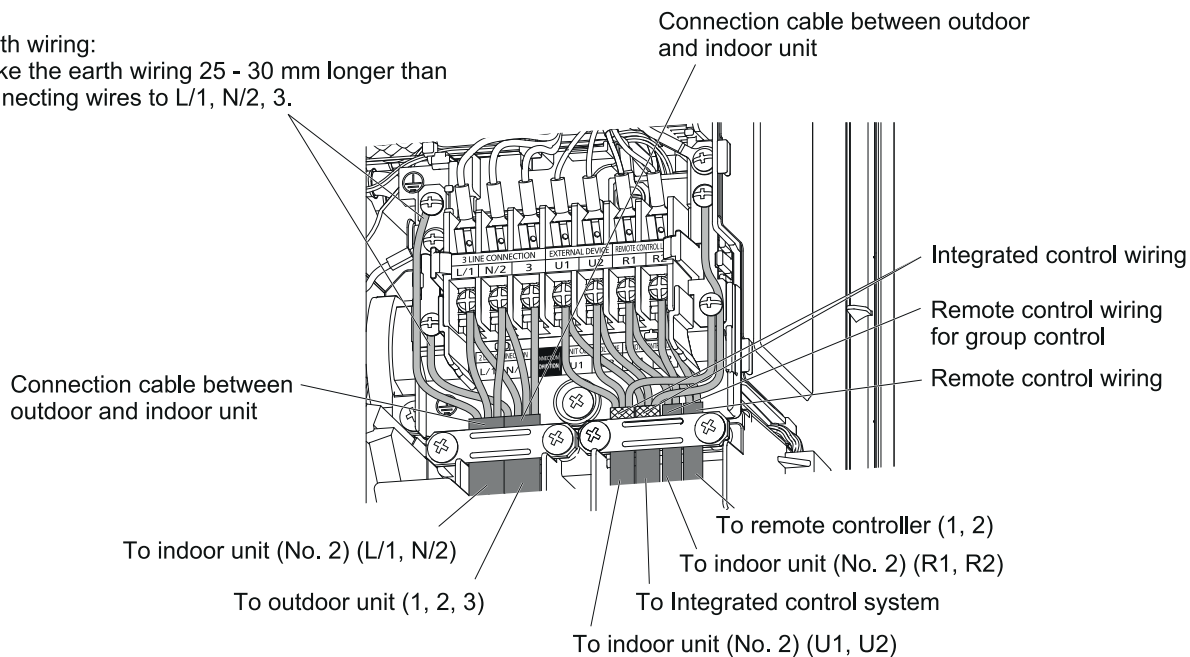
Example : Twin connection



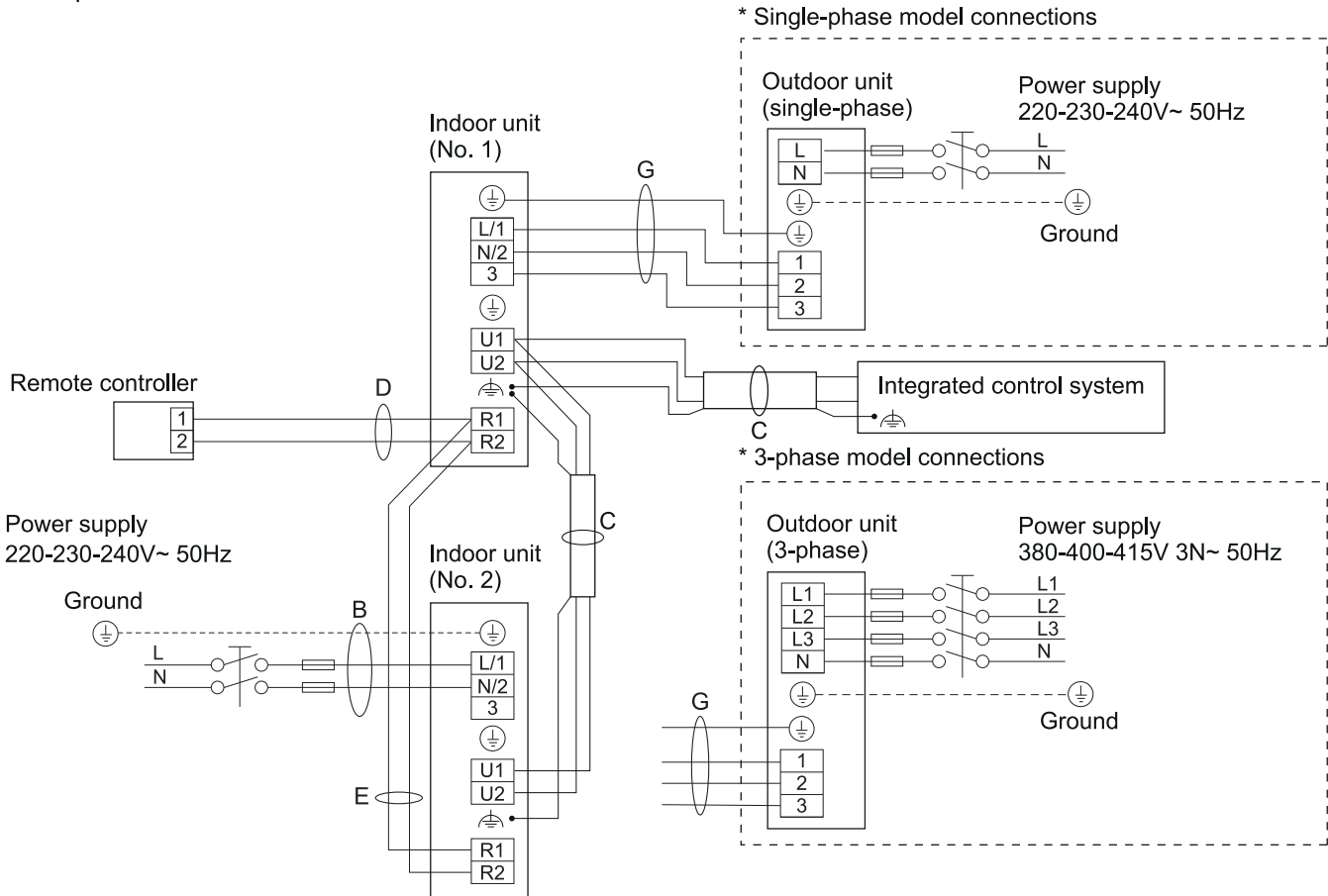
Indoor unit (No. 1) wiring sample

Earth wiring:

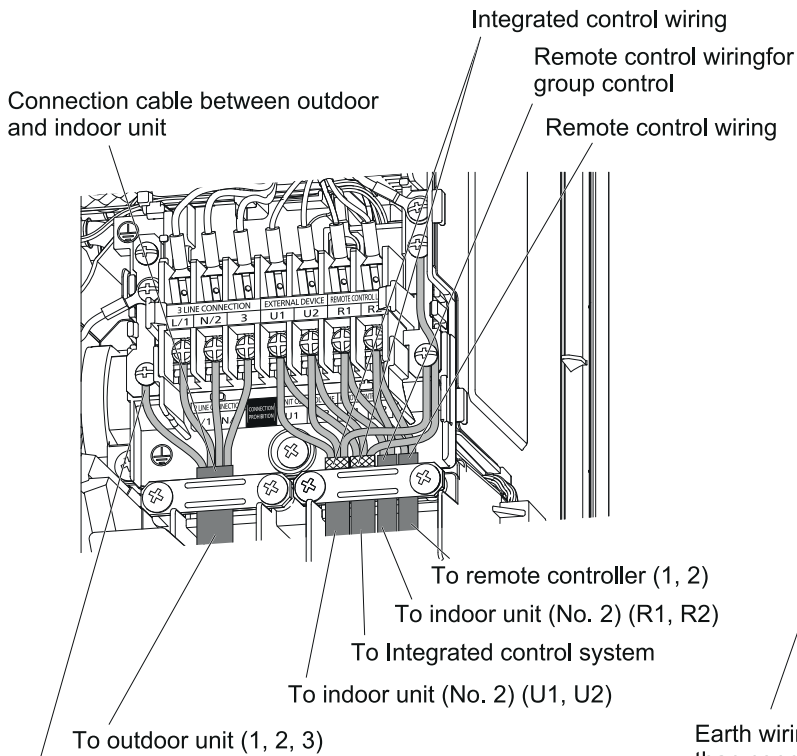
Make the earth wiring 25 - 30 mm longer than connecting wires to L/1, N/2, 3.



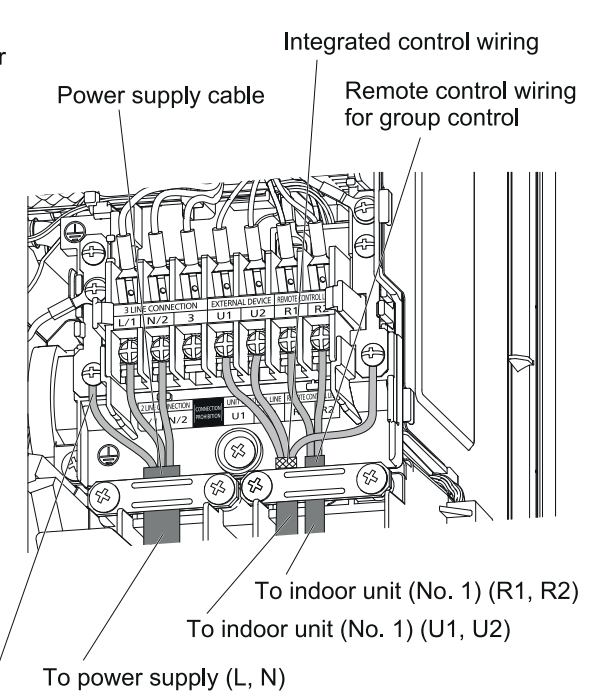
Example : Twin connection



Indoor unit (No. 1) wiring sample



Indoor unit (No. 2) wiring sample

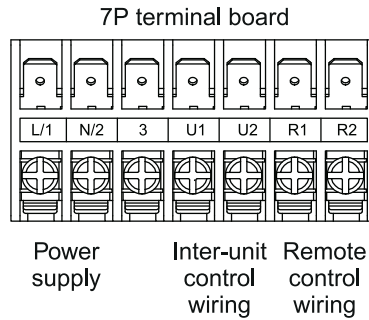


Earth wiring:
Make the earth wiring 25 - 30 mm longer than connecting wires to L/1, N/2, 3.

Earth wiring: Make the earth wiring 25 - 30 mm longer than connecting wires to L/1, N/2.

NOTE

- (1) See “■ Recommended Wire Length and Wire Diameter for Power Supply System” on page 1-10-1-3-2 for the explanation of “B”, “C”, “D”, “E”, “F” and “G” under “■ Wiring System Diagrams” on page 1-10-1-3-3 to 1-10-1-3-5.
 - (2) The basic connection diagram of the indoor unit shows the terminal boards, so the terminal boards in your equipment may differ from the diagram.
 - (3) Refrigerant Circuit address should be set before turning the power on.
 - (4) Regarding Refrigerant Circuit address setting, refer to the installation instructions supplied with the remote controller (Optional).
- Auto address setting can be executed by remote controller automatically.



CAUTION

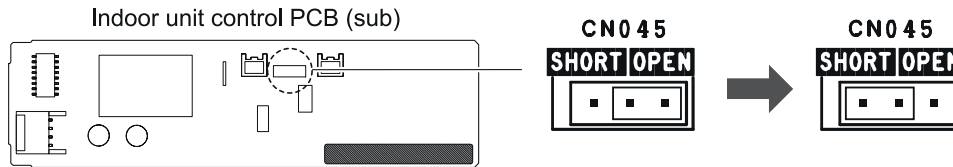
(1) When connecting to the integrated control system, the setting of the terminating resistance is required. Even more connection with the integrated control system is required, all indoor units in the link of 3-line connection should be connected with 2-line link wiring.

- How to set the terminating resistance of the indoor unit

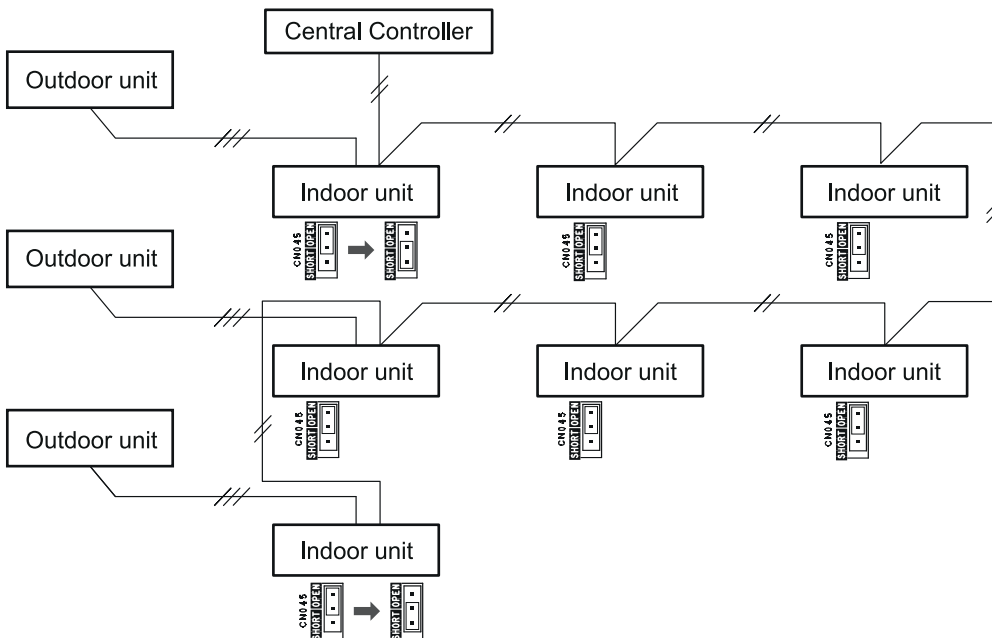
The setting of the terminating resistance should be made by CN045 on the indoor unit control PCB.

The setting of indoor unit terminating resistance at shipment is OPEN side. If the shorting socket is moved as shown below, the terminating resistance is SHORT side (operative).

It is not necessary to install all units' terminating resistance. Follow the steps on the next page which unit's terminating resistance to install.



- In case that the inter-unit control wiring in the link are all 3-line connection:

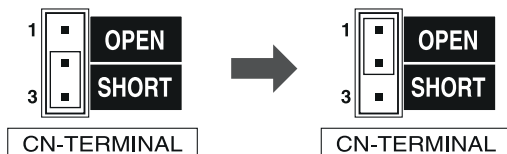


- In case that the inter-unit control wiring in the link are mixed with 3-line and 2-line connections: Set the terminating resistance with the TERMINAL pin (CN-TERMINAL) on the *outdoor unit control PCB.

The setting of the outdoor unit terminating resistance at shipment is SHORT side (operative). Leave one unit in short circuit among outdoor units in the link.

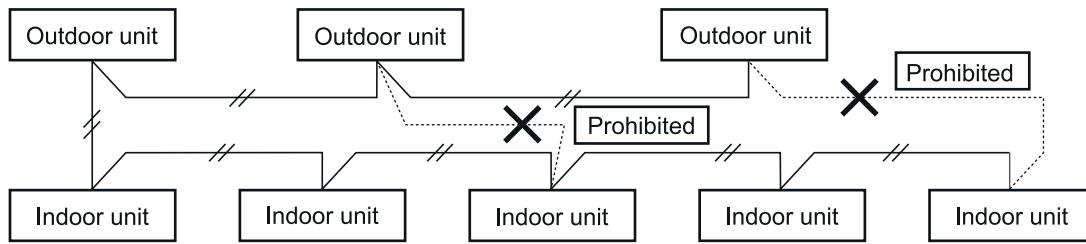
Change to OPEN for other units. It is not necessary to install all units' terminating resistance to OPEN side.

It is not necessary to install all units' terminating resistance. Follow the steps on the next page which unit's terminating resistance to install.



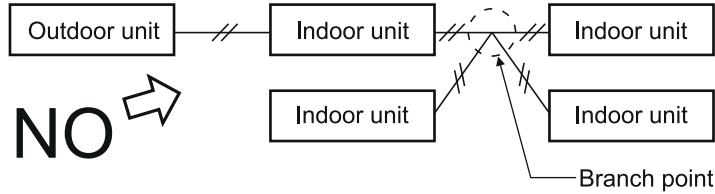
* Outdoor unit is connected by 2-line connection.

(2) Do not install the inter-unit control wiring in a way that forms a loop.



(3) Do not install inter-unit control wiring such as star branch wiring.

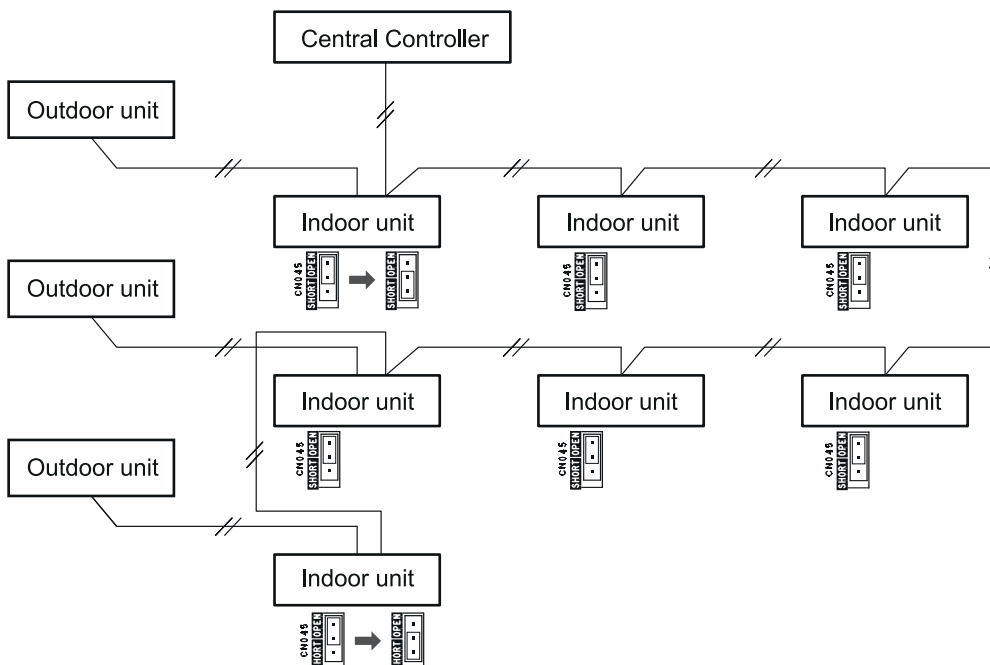
Star branch wiring causes mis-address setting.



(4) If branching the inter-unit control wiring, the number of branch points should be 16 or fewer.

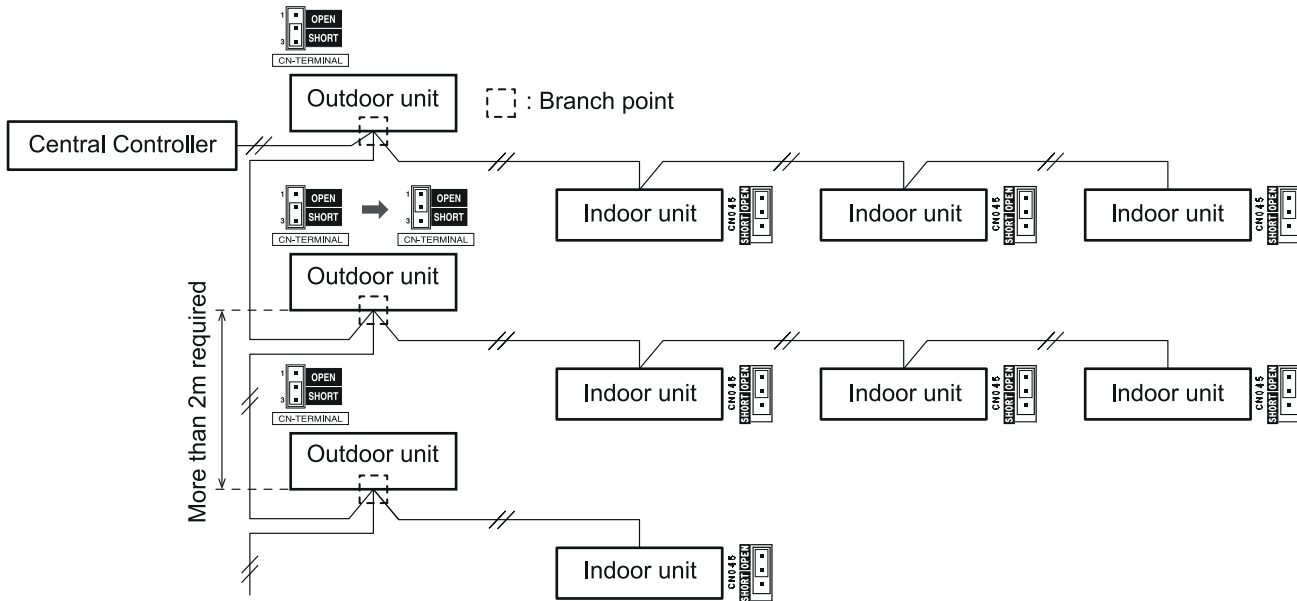
The setting of the terminating resistance changes according to the number of refrigerant systems connected to the integrated control wiring in the link.

- For one refrigerant system in the link wiring, it is necessary to set one terminating resistance to the valid (SHORT side). For over 2 refrigerant systems, it is necessary to set 2 terminating resistance to the valid (SHORT side).
- The valid or invalid setting of the terminating resistance is basically carried out with the outdoor unit. However, 3-line connection outdoor unit cannot make a setting of terminating resistance. In this case, the shortage of the valid setting for the terminating resistance should be carried out with the indoor unit. The setting of the terminating resistance of the 2-line outdoor unit at shipment is the valid (SHORT side) and outdoor unit is the invalid (OPEN side).
- In case that the inter-unit control wiring in the link are all 3-line connection:

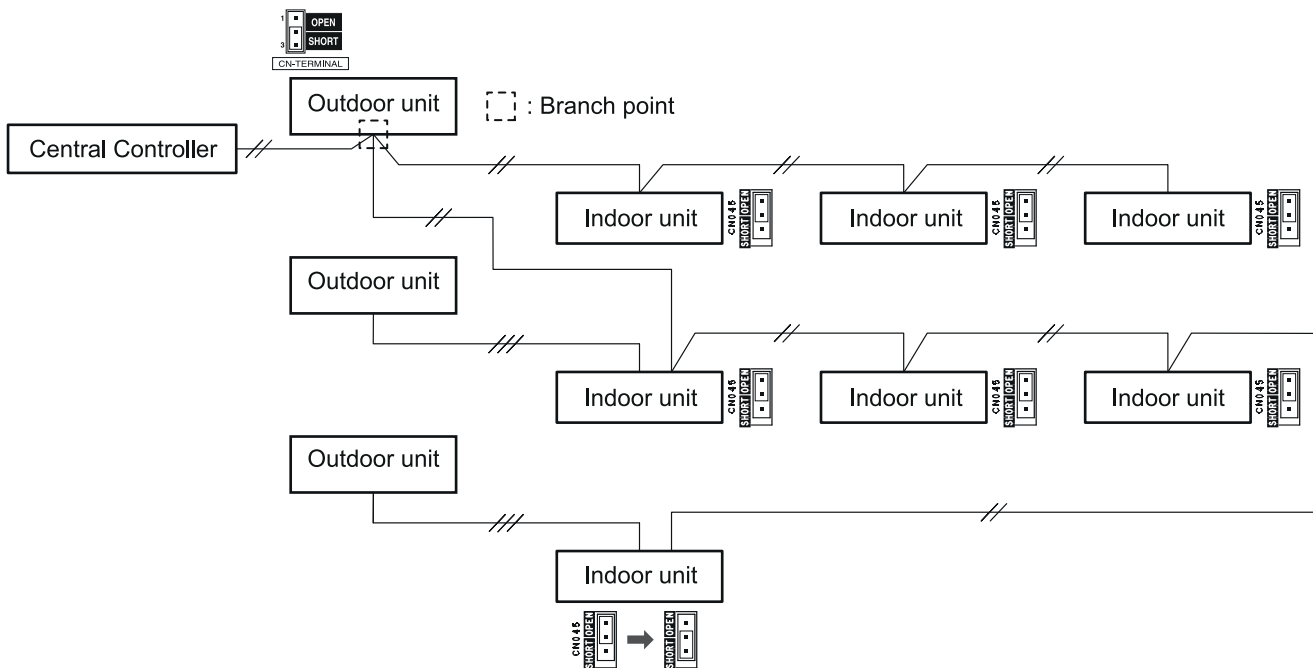


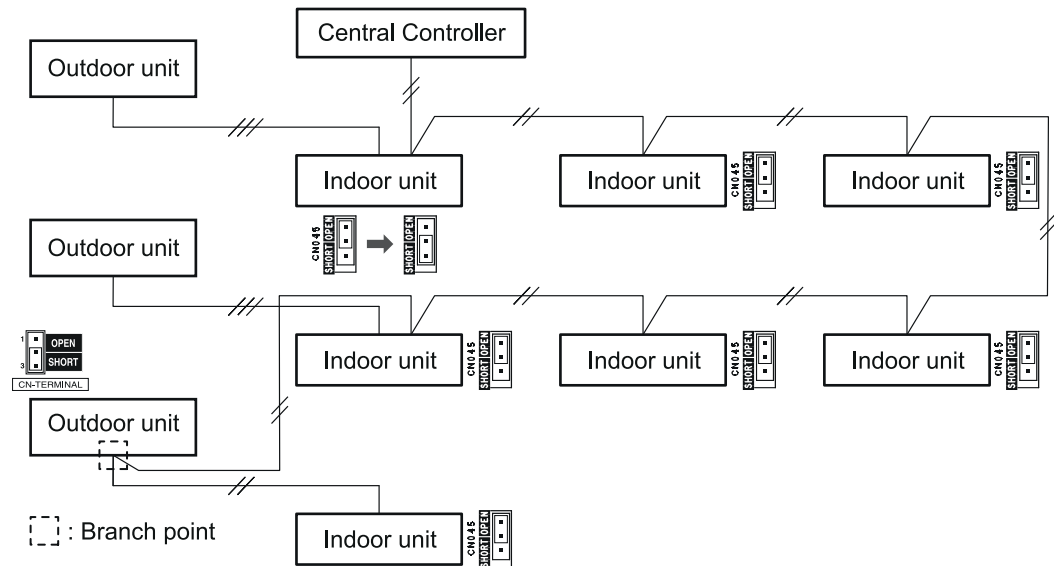
- In case that the inter-unit control wiring in the link are all 2-line connection only, or mixed with 2-line and 3-line connections:

1) All refrigerant systems are 2-line connection:

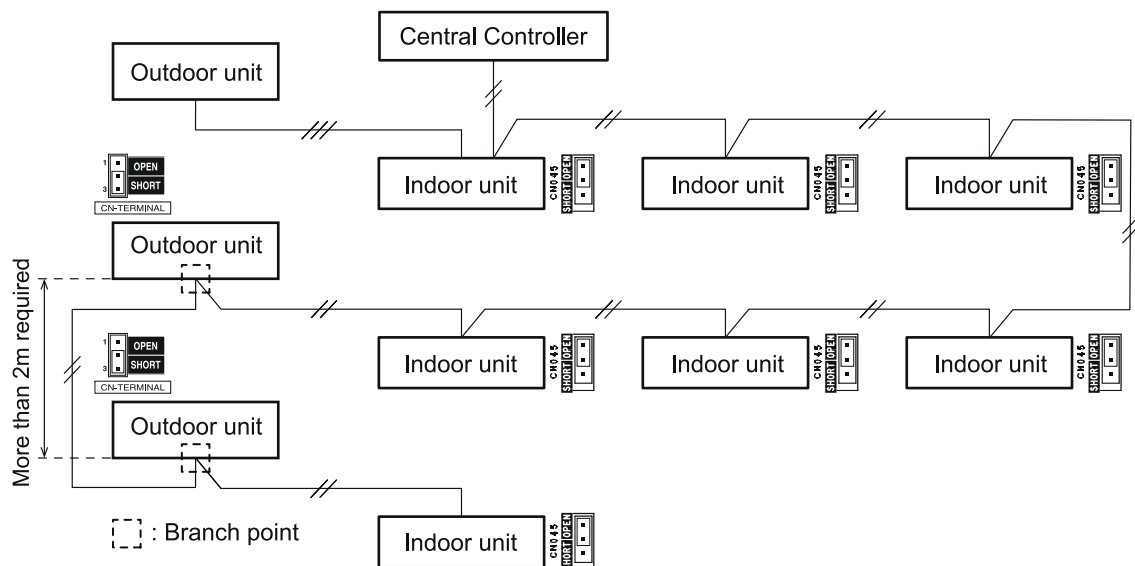


2) Only one refrigerant system is 2-line connection and other refrigerant systems are 3-line connection:

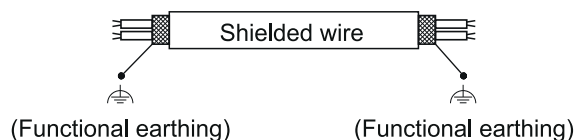




3) Only one refrigerant system is 3-line connection and other refrigerant systems are 2-line connection:



- (5) Use shielded wires for inter-unit control wiring (C) and ground the shield on both sides, otherwise misoperation from noise may occur. Connect wiring as shown in Section “■ Wiring System Diagrams” on page 1-10-1-3-3 to 1-10-1-3-5.



- (6) • In the case of 3-line connection, connection cable between outdoor and indoor unit shall be approved polychloroprene sheathed flexible cord. Type designation 60245 IEC57 (H05RN-F, GP85PCP etc.) or heavier cord.
- Use the standard power supply cables for Europe (such as H05RN-F or H07RN-F which conform to CENELEC (HAR) rating specifications) or use the cables based on IEC standard. (60245 IEC57, 60245 IEC66)

⚠ WARNING

Loose wiring may cause the terminal to overheat or result in unit malfunction.

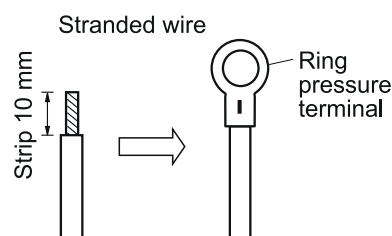
A fire hazard may also occur. Therefore, ensure that all wiring is tightly connected.

When connecting each power wire to the terminal, follow the instructions on “● How to connect wiring to the terminal” and fasten the wire securely with the terminal screw.

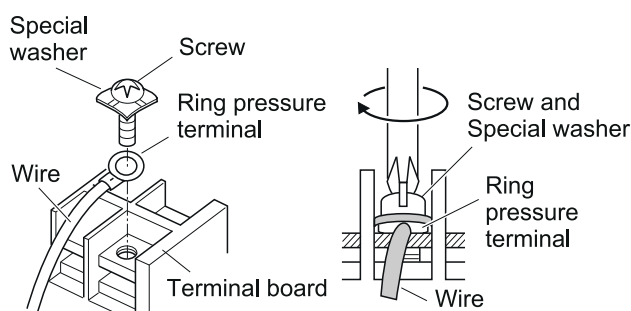
● How to connect wiring to the terminal

For stranded wiring

- (1) Cut the wire end with cutting pliers, then strip the insulation to expose the stranded wiring about 10 mm and tightly twist the wire ends.



- (2) Using a Phillips head screwdriver, remove the terminal screw(s) on the terminal board.
- (3) Using a ring connector fastener or pliers, securely clamp each stripped wire end with a ring pressure terminal.
- (4) Place the ring pressure terminal, and replace and tighten the removed terminal screw using a screwdriver.

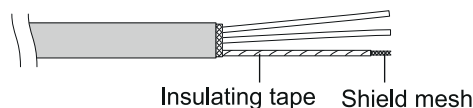


Examples of shield wires

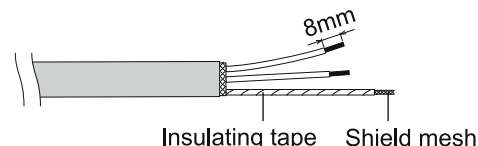
- (1) Remove cable coat not to scratch braided shield.



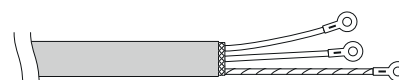
- (2) Unbraid the braided shield carefully and twist the unbraided shield wires tightly together. Insulate the shield wires by covering them with an insulation tube or wrapping insulating tape around them.



- (3) Remove coat of signal wire.



- (4) Attach ring pressure terminals to the signal wires and the shield wires insulated in Step (2).



3.7 Installation Instruction

3.7.1 Indoor Unit Installation

- Explanation of symbols displayed on the indoor unit or outdoor unit.

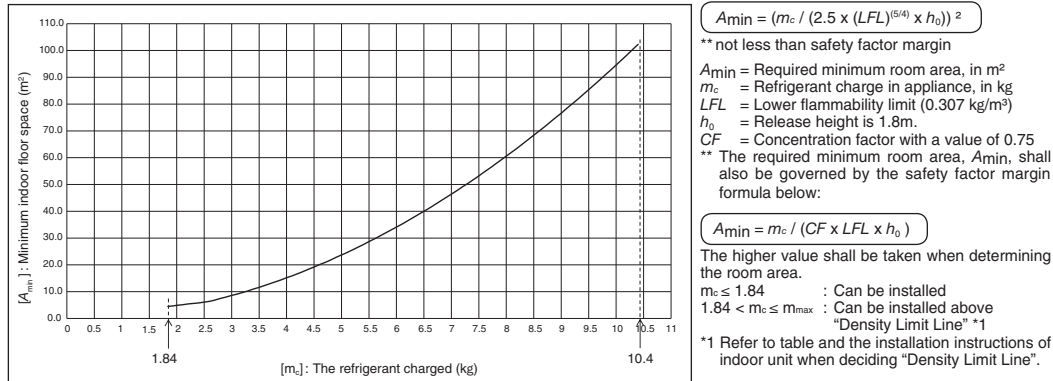
	WARNING	This symbol shows that this equipment uses a flammable refrigerant. If the refrigerant is leaked, together with an external ignition source, there is a possibility of ignition.
	CAUTION	This symbol shows that the Operating Instructions should be read carefully.
	CAUTION	This symbol shows that a service personnel should be handling this equipment with reference to the Technical Manual.

Check of Density Limit

The refrigerant (R32), which is used in the air conditioner, is a flammable refrigerant. So the requirements for installation space of appliance are determined according to the refrigerant charge amount [m_c] used in the appliance.

Regarding the refrigerant charge amount [m_c] used in the appliance, refer to the installation instructions for the outdoor unit.

The minimum indoor floor space compared with the amount of refrigerant is roughly as follows:



[m _c] (kg)	[A _{min}] (m ²)	[m _c] (kg)	[A _{min}] (m ²)	[m _c] (kg)	[A _{min}] (m ²)	[m _c] (kg)	[A _{min}] (m ²)	[m _c] (kg)	[A _{min}] (m ²)
1.8	4.5	3.6	12.3	5.4	27.6	7.1	47.7	8.8	73.3
1.9	4.6	3.7	13.0	5.5	28.7	7.2	49.1	8.9	75.0
2.0	4.9	3.8	13.7	5.6	29.7	7.3	50.4	9.0	76.6
2.1	5.1	3.9	14.4	5.7	30.8	7.4	51.8	9.1	78.4
2.2	5.4	4.0	15.2	5.8	31.9	7.5	53.2	9.2	80.1
2.3	5.6	4.1	15.9	5.9	33.0	7.6	54.7	9.3	81.8
2.4	5.8	4.2	16.7	6.0	34.1	7.7	56.1	9.4	83.6
2.5	6.1	4.3	17.5	6.1	35.2	7.8	57.6	9.5	85.4
2.6	6.4	4.4	18.4	6.2	36.4	7.9	59.1	9.6	87.2
2.7	6.9	4.5	19.2	6.3	37.6	8.0	60.6	9.7	89.0
2.8	7.5	4.6	20.1	6.4	38.8	8.1	62.1	9.8	90.9
2.9	8.0	4.7	20.9	6.5	40.0	8.2	63.6	9.9	92.7
3.0	8.6	4.8	21.8	6.6	41.2	8.3	65.2	10.0	94.6
3.1	9.1	4.9	22.8	6.7	42.5	8.4	66.8	10.1	96.5
3.2	9.7	5.0	23.7	6.8	43.8	8.5	68.4	10.2	98.4
3.3	10.3	5.1	24.6	6.9	45.1	8.6	70.0	10.3	100.4
3.4	11.0	5.2	25.6	7.0	46.4	8.7	71.6	10.4	102.3
3.5	11.6	5.3	26.6						

3.7.1.1 Select the Indoor Unit Installation Location

3.7.1.1.1 Indoor Unit

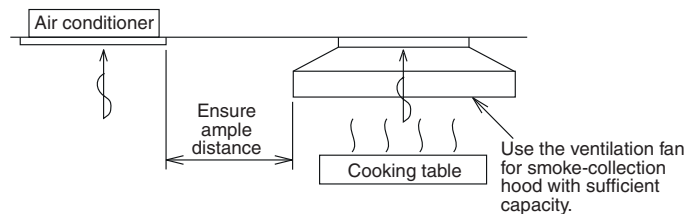
- Install the indoor unit once the following conditions are satisfied and after receiving the customer approval.
 1. The indoor unit must be within a maintenance space.
 2. The indoor unit must be free from any obstacles in path of the air inlet and outlet, and must allow spread of air throughout the room.
- If the height from the floor to ceiling exceeds three meters, air flow distribution deteriorates and the effect is decreased.

Warning

3. The installation position must be able to support a load four times the indoor unit weight.
4. The indoor unit must be away from heat and sources of steam, but avoiding installation near an entrance.
5. The indoor unit must allow easy draining.
6. The indoor unit must allow easy connection to the outdoor unit.
7. The indoor unit must be at least 3 m away from any noise-generating equipment. The electrical wiring must be shielded with a steel conduit.
8. If the power supply is subject to noise generation, add a suppressor.
9. Do not install the indoor unit in a laundry. Electric shocks may result.
10. Installation height is more than 1.8m.

Note

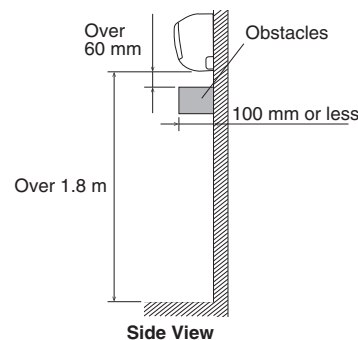
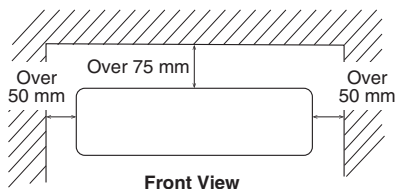
- Thoroughly study the following installation locations.
 1. In such places as restaurants and kitchens, considerable amount of oil steam and flour adhere to the fan, the fin of the heat exchanger, resulting in heat exchange reduction, spraying, dispersing of water drops, etc.
In these cases, take the following actions:
 - Make sure that the ventilation fan for smoke-collecting hood on a cooking table has sufficient capacity so that it draws oily steam which should not flow into the suction of the air conditioner.
 - Make sure there is enough distance from the cooking room to install the air conditioner in such place where it may not suck in oily steam.
 2. Avoid installing the air conditioner in such circumstances where cutting oil mist or iron powder exist, especially in factories, etc.
 3. Avoid places where inflammable gas is generated, flows-in, contaminated, or leaked.
 4. Avoid places where sulphurous acid gas or corrosive gas can be generated.
 5. Avoid places near high frequency generators.



Wall Mounted

The air inlet and outlet of the indoor unit must be free of any obstructions to allow air to spread throughout the room.

- 1 The indoor unit must be within a maintenance space.



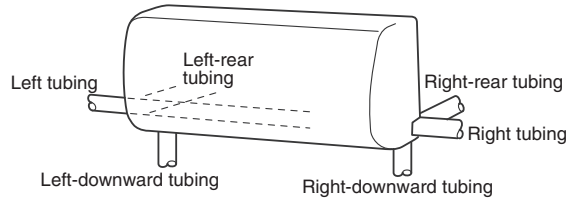
3.7.1.2 How to Install the Indoor Unit

3.7.1.2.1 Starting the Installation

(1) Remove the rear panel.

Note

Tubing can be extended in 6 directions as shown below.
Select the direction you need providing the shortest run to the outside unit.

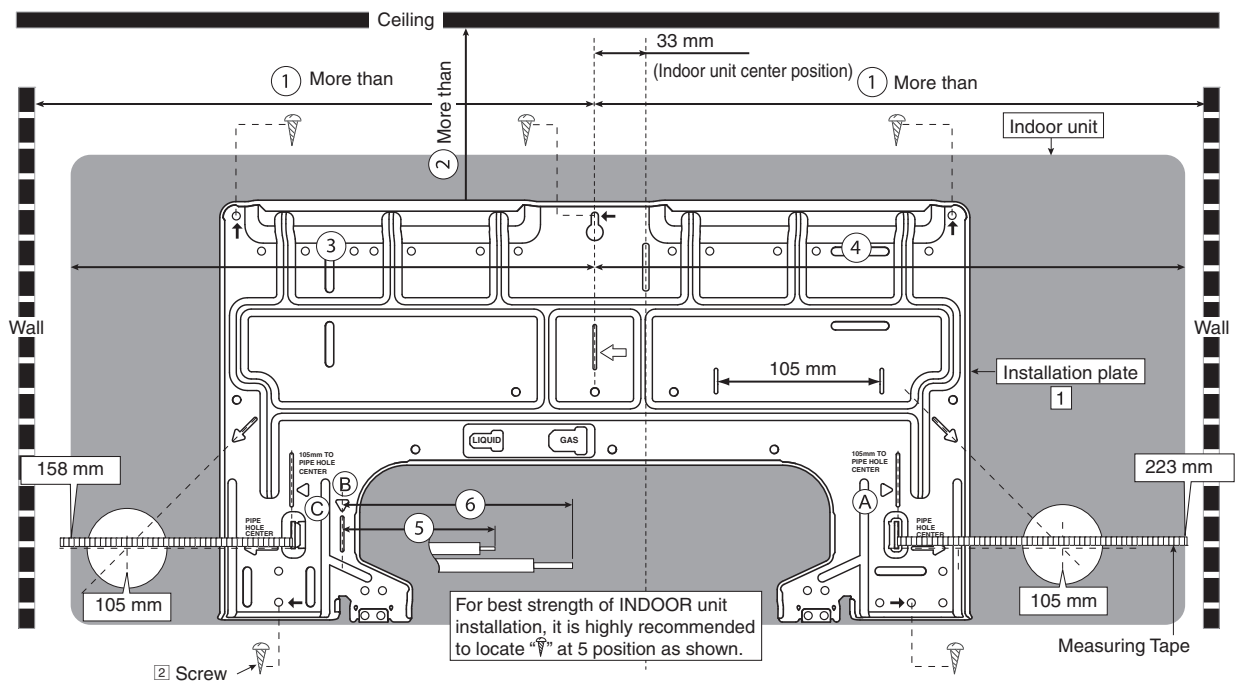


3.7.1.2.2 How to Fix Installation Plate

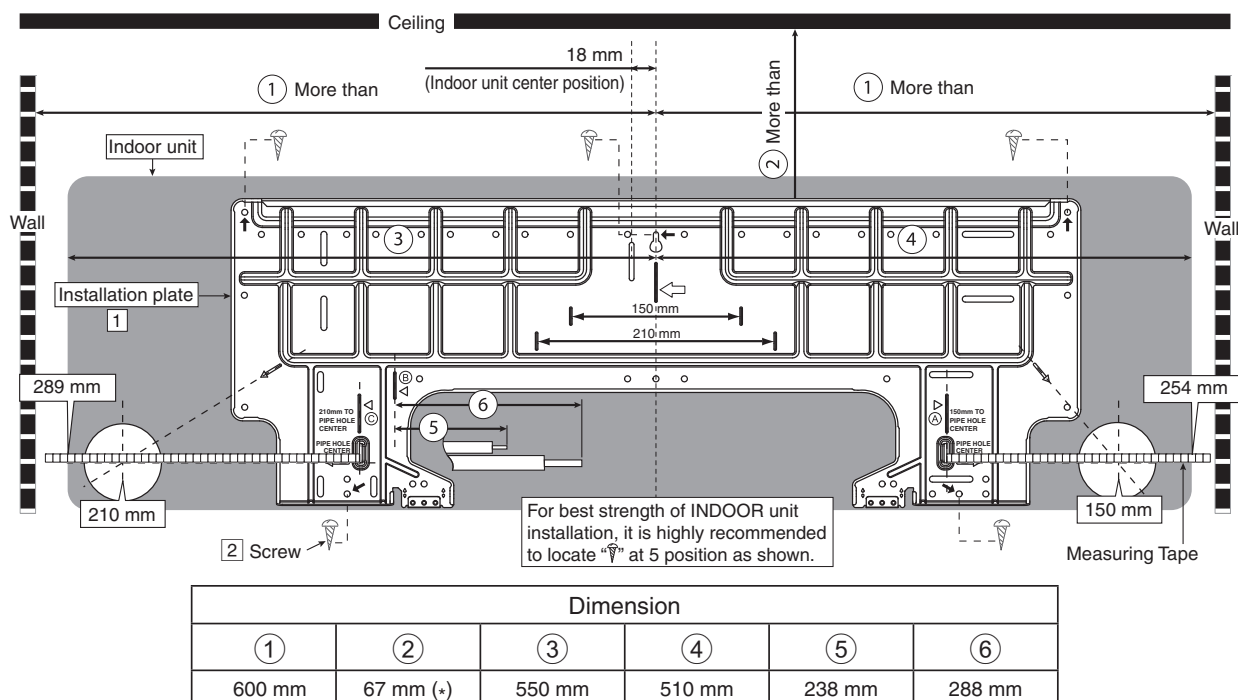
The mounting wall should be strong and solid enough to withstand the unit's vibration.

1 Place the installation plate from the indoor unit on the wall at the location selected.

Type 2545



Dimension					
①	②	③	④	⑤	⑥
465 mm	68 mm (*)	350 mm	415 mm	71 mm	120 mm



- The center of installation plate should be at more than ① at right and left of the wall.
- The distance from installation plate edge to ceiling should more than ②.
- From installation plate center to unit's left side is ③.
- From installation plate center to unit's right side is ④.
- For left side piping, piping connection for liquid should be about ⑤ from this line.
- For left side piping, piping connection for gas should be about ⑥ from this line.

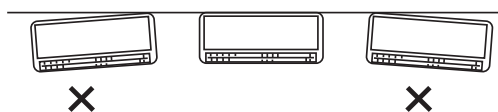
Dimension ②

(*) :-
If holder at the rear of chassis (Refer column "6.1.4 Indoor Unit Installation") need to be used to prop up the unit, this distance shall be 83 mm (Type 2545) / 82 mm (Type 5010) or more.

- 2 Mount the installation plate on the wall with 5 screws or more (at least 5 screws).
(If mounting the unit on the concrete wall, consider using anchor bolts.)
 - Always mount the installation plate horizontally by aligning the marking-off line with the thread and using a level gauge.

If Wooden Wall

- (1) Attach the installation plate to the wall with the 5 screws (4 × 20) provided.
- (2) Double check with a carpenter's level or tape measure that the panel is level. This is important to install the unit properly.



- (3) Make sure the panel is flush against the wall. Any space between the wall and unit will cause noise and vibration.

If Concrete Wall

- (1) When attaching the installation plate to the concrete wall, use the screws (field supply) for concrete or an optional anchor plug and fix to the hole of $\varnothing 5$ mm of the installation plate as shown in the figure under Section 6.1.2.2.
When fixing with bolt, attach to the hole of $\varnothing 8$ mm.
- (2) Double check with a carpenter's level or tape measure that the plate is level. This is important to install the unit properly.
- (3) Make sure the installation plate is flush against the wall. Any space between the wall and unit will cause noise and vibration.

- 2 Drill the piping plate hole with $\varnothing 70$ mm hole-core drill.
 - Line according to the left and right side of the installation plate. The meeting point of the extended line is the center of the hole.
Another method is by putting measuring tape at position as shown in the diagram above.
For Type 2545, the hole center is obtained by measuring the distance namely 105 mm for left and right hole respectively.
For Type 5010, the hole center is obtained by measuring the distance namely 210 mm for left hole and 150 mm for right hole respectively.
 - Drill the piping hole at either the right or the left and the hole should be slightly slanting to the outdoor side.

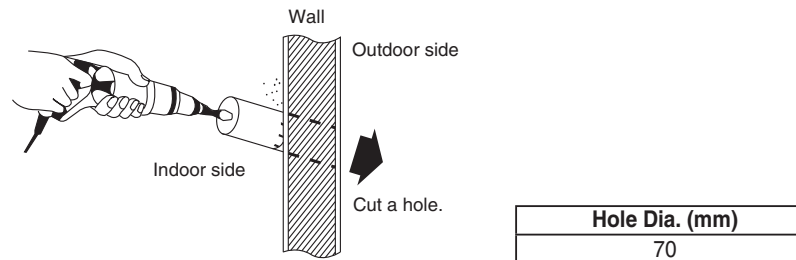
3.7.1.3 To Drill a Hole in the Wall and Install a Sleeve of Piping

- 1 Before making the hole, check carefully that no studs or pipes are directly run behind the spot to be cut.

	CAUTION Avoid areas where electrical wiring is located.
---	--

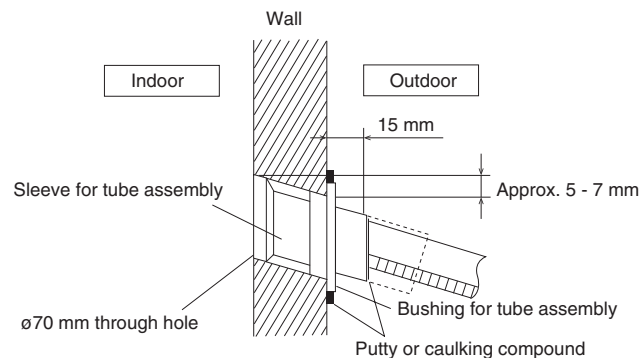
The above precautions are also applicable if tubing goes through the wall in any other location.

- 2 Using a sabre saw, keyhole saw or hole-cutting drill attachment, cut a hole of $\varnothing 70$ mm in the wall. Hole should be made at a slight downward slant to the outdoor side.



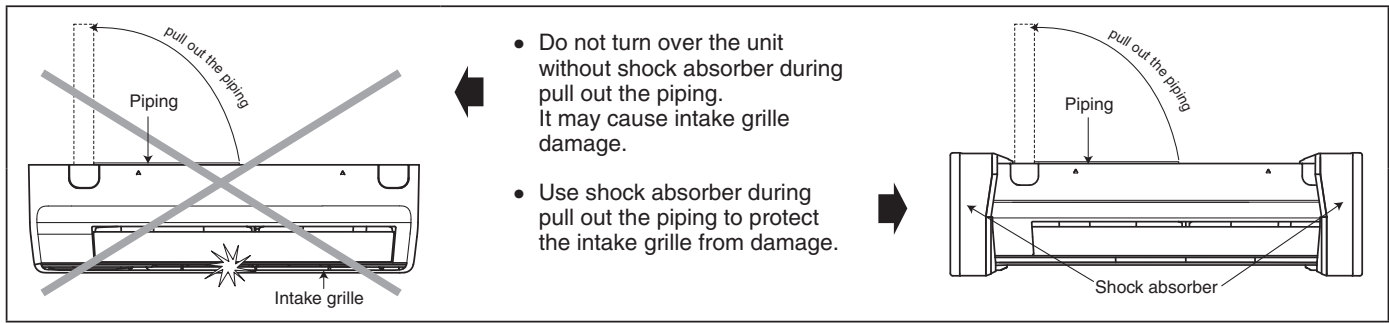
- 3 Place a plastic cover over the end of the pipe (for indoor side only) and insert the pipe in the wall. This will protect the tube from contacting the metal lath or wire lath, leakage due to condensation or entering small animals through the hole.

	CAUTION When the wall is hollow, please be sure to use the piping sleeve assembly to prevent dangers caused by mice biting the connection cable.
---	---



- 1 Insert the piping sleeve to the hole.
- 2 Fix the bushing to the sleeve.
- 3 Cut the sleeve until it extrudes about 15 mm from the wall.
- 4 Finish by sealing the sleeve with putty or caulking compound at the final stage.

3.7.1.4 Indoor Unit Installation

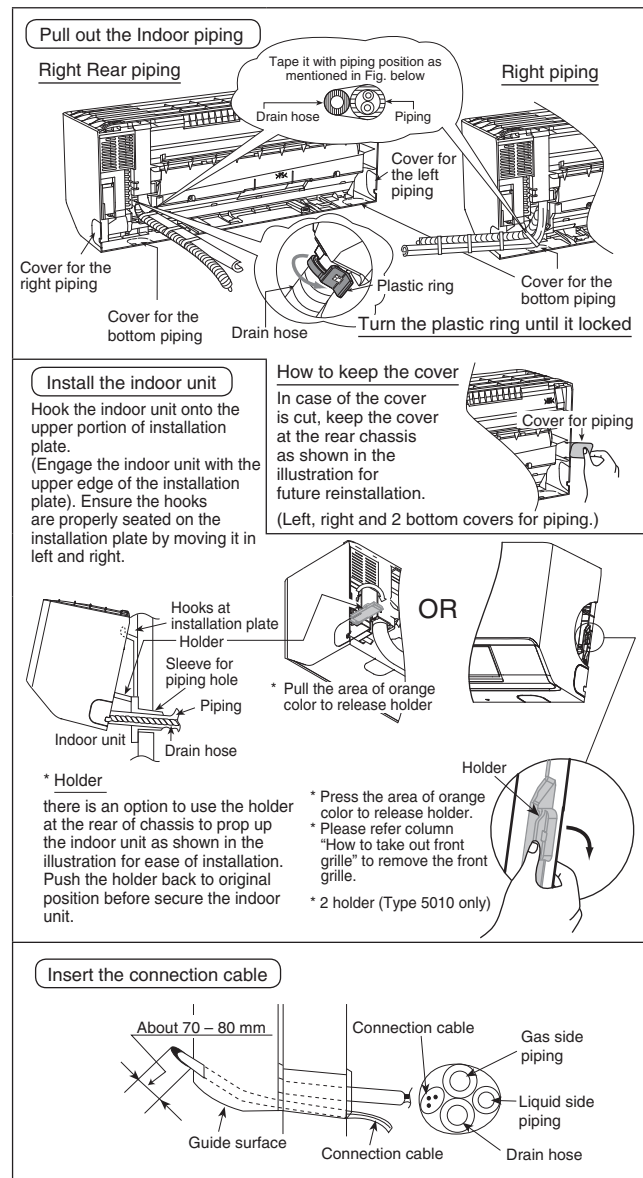
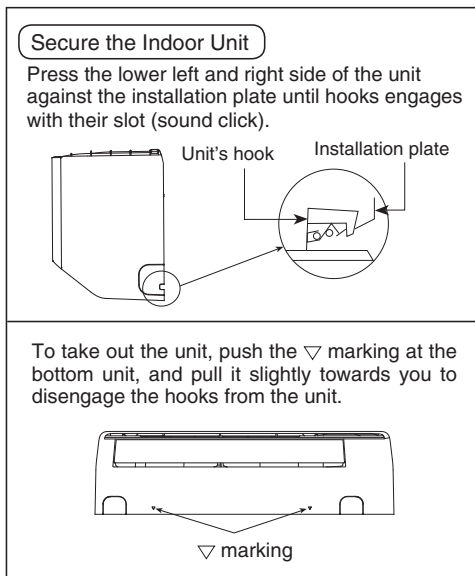


3.7.1.4.1 For the Right Rear Piping

- Step-1** Pull out the Indoor piping
- Step-2** Install the Indoor Unit
- Step-3** Secure the Indoor Unit
- Step-4** Insert the power supply cord and connection cable
- Insert the cables from bottom of the unit through the control board hole until terminal board area.

3.7.1.4.2 For the Right and Right Bottom Piping

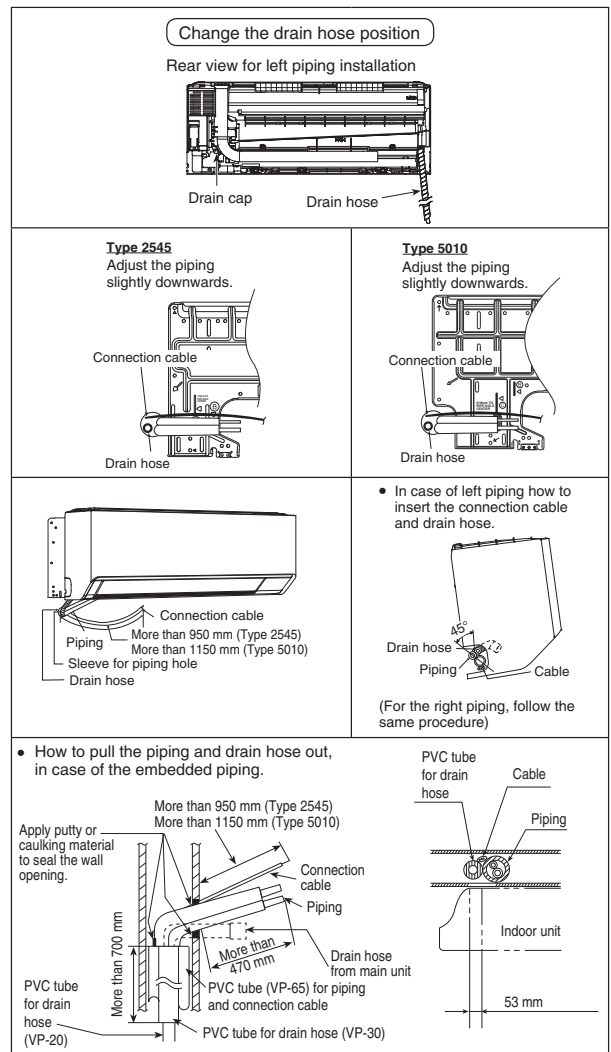
- Step-1** Pull out the Indoor piping
- Step-2** Install the Indoor Unit
- Step-3** Insert the power supply cord and connection cable
- Insert the cables from bottom of the unit through the control board hole until terminal board area.
- Step-4** Secure the Indoor Unit



3.7.1.4.3 For the Embedded Piping

- | | |
|---------------|---|
| Step-1 | Change the drain hose position |
| Step-2 | Bend the embedded piping <ul style="list-style-type: none"> Use a spring bender or equivalent to bend the piping so that the piping is not crushed. |
| Step-3 | Pull the connection cable into Indoor Unit <ul style="list-style-type: none"> The power supply cord and indoor unit and outdoor unit connection cable can be connected without removing the front grille. |
| Step-4 | Cut and flare the embedded piping <ul style="list-style-type: none"> When determining the dimensions of the piping, slide the unit all the way to the left on the installation plate. Refer to the column "Cutting and flaring the piping". |
| Step-5 | Install the Indoor Unit |
| Step-6 | Connect the piping <ul style="list-style-type: none"> Please refer to "Connecting the piping" column in outdoor unit section. (Below steps are done after connecting the outdoor piping and gas-leakage confirmation.) |
| Step-7 | Insulate and finish the piping <ul style="list-style-type: none"> Please refer to "Insulation of piping connection" column as mentioned in indoor/outdoor unit installation. |
| Step-8 | Secure the Indoor Unit |

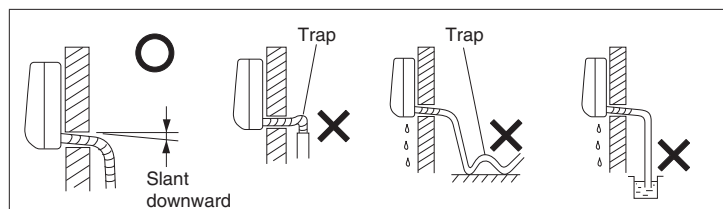
(This can be used for left rear piping also.)



Note

When there is a long horizontal drain hose runs with very little slope to the run, water is likely to remain inside the hose. Slant the drain hose downward slightly to the outdoors and insulate it with the insulation.

- 1 Slant downward not to remain water inside the drain hose.
- 2 Make sure tubing does not become trapped.
- 3 Do not let the tip of the drain hose dip into the drain water.
- 4 Do not leave the drain hose in the sewerage. This will cause the heat exchanger erosion damage caused by the corrosive gas such as hydrogen sulfide occurred inside the sewerage and lead to a gas leak.



3.7.1.5 Electrical Wiring

As to main power source and cable size of outdoor unit, read the installation manual attached to the outdoor unit.

3.7.1.5.1 General Precautions on Wiring

 WARNING	This air conditioner must be installed in accordance with national wiring regulations.
	Cables connected to indoor unit must be approved polychloroprene sheathed type 60245 IEC 57 or heavier.
	The units must be connected to the supply cables for fixed wiring by qualified technician. Circuit breaker must be incorporated in the fixed wiring in accordance with the national wiring regulations. The circuit breaker must be approved, suitable for the voltage and current ratings of equipment and have a contact separation by 3mm in all poles. When the supply cable is damaged, it must be replaced by qualified technician.
	Be sure to install a current leakage breaker, main switch and fuse to the main power supply, otherwise electric shocks may result.
	Be sure to connect the unit to secure earth connection. If the earthing work is not carried out properly, electric shocks may result. 
	Wiring shall be connected securely by using specified cables and fix them securely so that external force of the cables may not transfer to the terminal connection section. Imperfect connection and fixing leads to fire, etc.

- (1) Select a power source that is capable of supplying the current required by the air conditioner.
 - (2) Feed the power source to the unit via a distribution switch board designed for this purpose, the switch should disconnect all poles with a contact separation of at least 3 mm.
 - (3) Always ground the air conditioner with a grounding wire and screw to meet the LOCAL REGULATIONS.
 - (4) Be sure to connect the indoor/outdoor unit connection wires correctly to terminal board.
 - (5) Be sure to turn off the main power before installing and connecting the remote controller.
 - (6) Each wiring connection must be done in accordance with the wiring system diagram.
- Wrong wiring may cause the wires overloaded and overheated.

Note

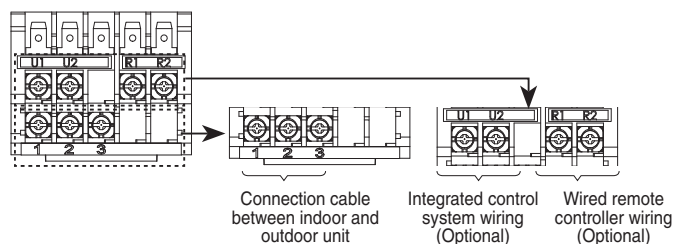
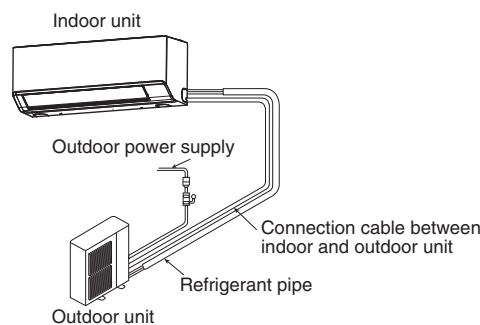
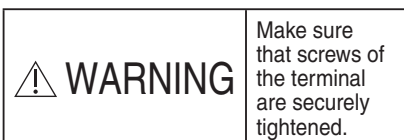
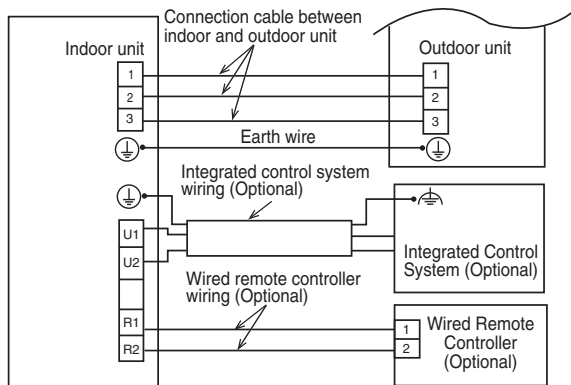
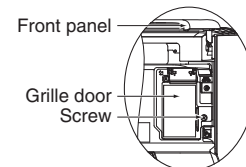
If momentarily turning on the power supply for both the indoor and outdoor units, do not turn the power off after at least 1 minute has passed.

(For the system's automatic setting.) Turning off the power supply on the way may cause an abnormal operation.

3.7.1.5.2 Wiring System Diagrams

The indoor and outdoor unit connection cable and wired remote controller wire can be connected without removing the front grille.

- 1 Install the indoor unit on the installing holder that mounted on the wall.
- 2 Open the front panel and grille door by loosening the screw.



3.7.1.5.3 Recommended Wire Length and Wire Size

Connection cable between Indoor and Outdoor Unit

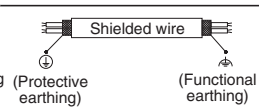
Wire Size	Length
2.5mm ²	Max.100m
1.5mm ²	Max.40m

Wired Remote Controller (Optional) (R1 / R2)

Wire Size	Length
0.75mm ² (AWG#18)	Max. 500m

Integrated Control System (Optional) (U1 / U2)

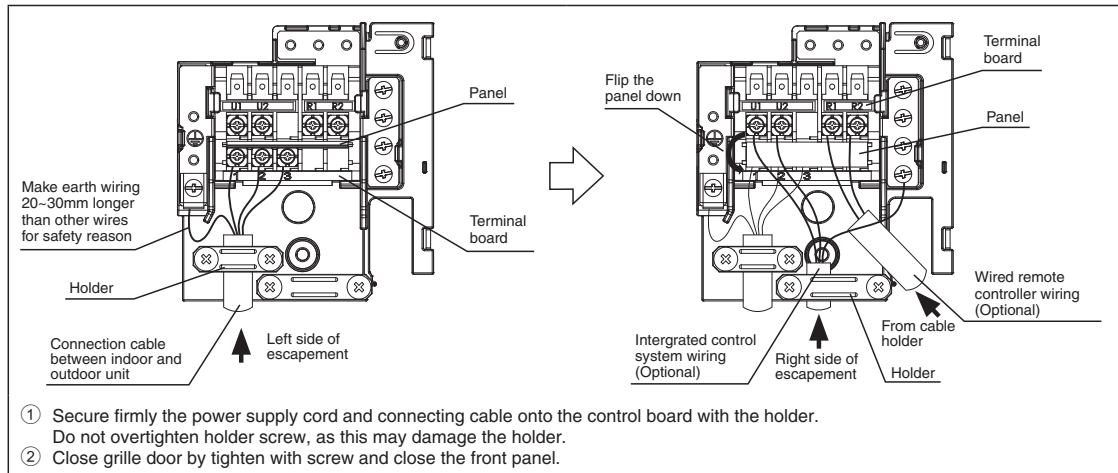
Use shielded wires for integrated control system wiring and ground the shield on both sides, otherwise misoperation from noise may occur. Connect wiring as shown in Section 6.1.5.2 Wiring System Diagrams.



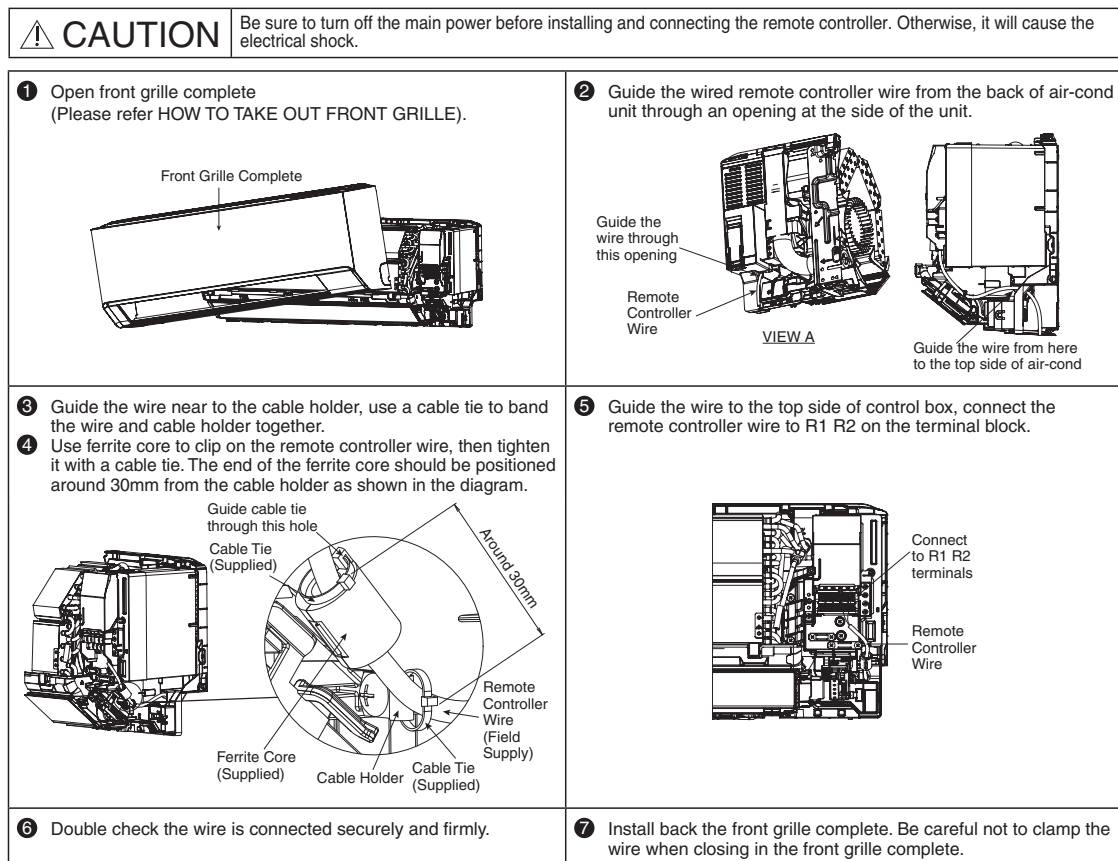
Note

For Optional Parts connecting wiring size, refer to Installation Manual of the Optional Parts.

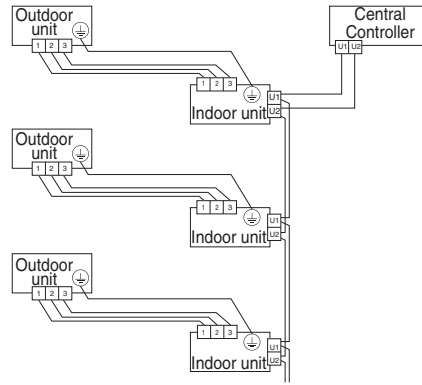
Connect the wired remote controller wire and connection cable between indoor unit and outdoor unit according to the diagram below.



How To Connect Wired Remote Controller to The Indoor Unit



If branching in the inter-unit control wiring, the number of branch points should be 16 or fewer



WIRE STRIPPING AND CONNECTING REQUIREMENT					
Wire stripping 10 ± 1 mm	Indoor/outdoor connecting terminal board	Conductor fully inserted	Conductor over inserted	Conductor not fully inserted	
No loose strand when inserted	5 mm or more (gap between wires)	ACCEPT	PROHIBITED	PROHIBITED	
This equipment must be properly earthed. Note: Isolating Devices (Disconnecting means) should have minimum 3.0 mm contact gap. Earth wire shall be Yellow/Green (Y/G) in colour and longer than other AC wires for safety reasons. Earth lead wire shall be longer than other lead wires as shown in the figure for the electrical safety in case of the cord slipping out of anchorage.					

 WARNING This equipment must be properly earthed.	 WARNING RISK OF FIRE JOINING OF WIRES MAY CAUSE OVERHEATING AND FIRE.	
Do not joint wires		

3.7.1.6 Refrigerant Piping

Must ensure mechanical connections be accessible for maintenance purposes.

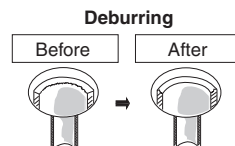
3.7.1.6.1 Connecting the Refrigerant Tubing

Use of the Flaring Method

Many of conventional split system air conditioners employ the flaring method to connect refrigerant tubes that run between indoor and outdoor units. In this method, the copper tubes are flared at each end and connected with flare nuts.

Flaring Procedure with a Flare Tool

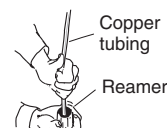
- (1) Cut the copper tube to the required length with a tube cutter.
It is recommended to cut approx. 30 – 50 cm longer than the tubing length you estimate.
- (2) Remove burrs at each end of the copper tubing with a tube reamer or a similar tool.
This process is important and should be done carefully to make a good flare.
Be sure to keep any contaminants (moisture, dirt, metal filings, etc.) from entering the tubing.



Note

When reaming, hold the tube end downward and be sure that no copper scraps fall into the tube.

- (3) Remove the flare nut from the unit and be sure to mount it on the copper tube.
- (4) Make a flare at the end of the copper tube with a flare tool.

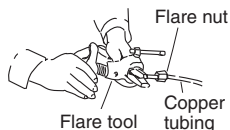


Note

When flared joints are reused, the flare part shall be re-fabricated.

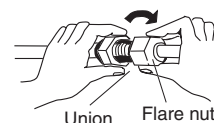
A good flare should have the following characteristics:

- 1 inside surface is glossy and smooth
- 2 edge is smooth
- 3 tapered sides are of uniform length



Caution Before Connecting Tubes Tightly

- (1) Apply a sealing cap or water-proof tape to prevent dust or water from entering the tubes before they are used.
 - (2) Be sure to apply refrigerant lubricant (ether oil) to the inside of the flare nut before making piping connections. This is effective for reducing gas leaks.
 - (3) For proper connection, align the union tube and flare tube straight with each other, then screw on the flare nut lightly at first to obtain a smooth match.
- Adjust the shape of the liquid tube using a tube bender at the installation site and connect it to the liquid tubing side valve using a flare.



3.7.1.6.2 Connecting Tubing Between Indoor and Outdoor Units

- (1) Tightly connect the indoor-side refrigerant tubing extended from the wall with the outdoor-side tubing.

Indoor Unit Tubing Connection

Unit : mm

Indoor unit type	S-2545PK4E	S-5010PK4E
Gas tube	ø12.7	ø15.88 (ø12.7)
Liquid tube	ø6.35	ø9.52 (ø6.35)

Different-diameter-tube joint for the indoor unit tubing connection part is supplied with Type 5010.

The size of parenthesis indicates the connection tube diameter when using the different-diameter-tube joint.

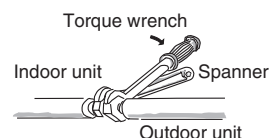
How to use different-diameter-tube joint (supplied)

- (1) When using with single connection.

Outdoor PZ3 and PZH3 series (Type 50 and 60)	Outdoor PZ3 series (Type 71)
Connect the liquid socket tube B (ø6.35 - ø9.52) to the liquid tubing side indoor unit Connect the gas socket tube A (ø12.7 - ø15.88) to the gas tubing side indoor unit	Connect the liquid socket tube B (ø6.35 - ø9.52) to the liquid tubing side indoor unit

The following examples show the multiple connections.

- Connectable or disconnectable units vary depending on a series of outdoor units. Refer to the installation instructions for the outdoor unit as well.
- Two, three or four indoor units can be operated simultaneously with a single remote controller. Note that individual operation is not possible.
- Master unit and slave unit can be set automatically in twin, triple and double twin system. No address setting is necessary.



(2) To fasten the flare nuts, apply specified torque.

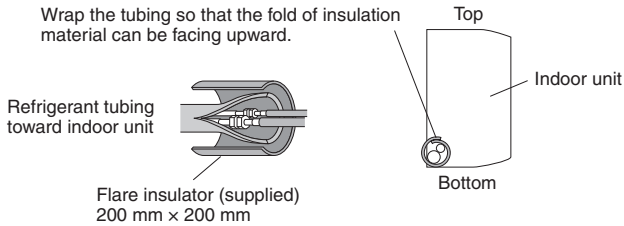
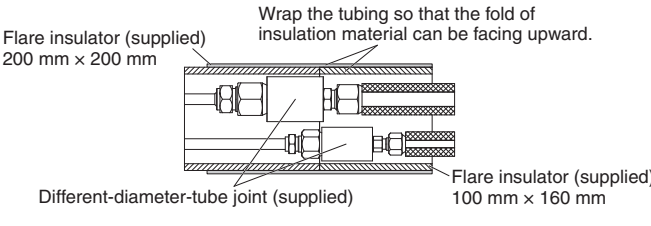
- When removing the flare nuts from the tubing connections, or when tightening them after connecting the tubing, be sure to use a torque wrench and a spanner. If the flare nuts are over-tightened, the flare may be damaged, which could result in refrigerant leakage and cause injury or asphyxiation to room occupants.
- For the flare nuts at tubing connections, be sure to use the flare nuts that were supplied with the unit. The refrigerant tubing that is used must be of the correct wall thickness as shown in the table below.

Tube diameter	Flare nut tightening torque (approximate)	Min. tube thickness
ø6.35 (1/4")	16± 2 N·m {160± 20 kgf·cm}	0.8 mm
ø9.52 (3/8")	38± 4 N·m {380± 40 kgf·cm}	0.8 mm
ø12.7 (1/2")	52± 3 N·m {520± 30 kgf·cm}	0.8 mm
ø15.88 (5/8")	75± 7 N·m {750± 70 kgf·cm}	1.0 mm

- Because the pressure is approximately 1.6 times higher than conventional refrigerant R22 pressure, the use of ordinary flare nuts or thin-walled tubes may result in tube rupture, injury, or asphyxiation caused by refrigerant leakage.
- In order to prevent damage to the flare caused by over-tightening of the flare nuts, use the table above as a guide when tightening.
- When tightening the flare nut on the liquid tube, use an adjustable wrench with a nominal handle length of 200 mm.

3.7.1.6.3 Insulating the Refrigerant Tubing

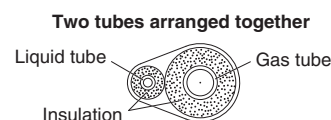
Unless the insulation is made, condensation can cause damage to the interior of a property. Use the supplied insulation material.

Illustration shows when using different-diameter-tube joint.	
Wrap the tubing so that the fold of insulation material can be facing upward. 	

Tubing Insulation

Must ensure that pipe-work shall be protected from physical damage

- Thermal insulation must be applied to all units tubing, including distribution joint (field supply).
 - * For gas tubing, the insulation material must be heat resistant to 120°C or above. For other tubing, it must be heat resistant to 80°C or above.
- Insulation material thickness must be 10 mm or greater.



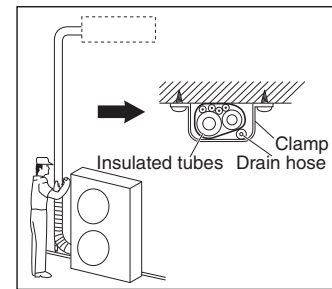
Note

If noise bothers you from the area between indoor and outdoor units' connection pipes, it is effective to wind the soundproofing materials (field supply) to reduce noise.

 Caution	After a tube has been insulated, never try to bend it into a narrow curve because it can cause the tube to break or crack. Never grasp the drain or refrigerant connecting outlets when moving the unit.
---	--

3.7.1.6.4 Taping the Tubes

- (1) At this time, the refrigerant tubes (and electrical wiring if local codes permit) should be taped together with armoring tape in 1 bundle. To prevent condensation from overflowing the drain pan, keep the drain hose separate from the refrigerant tubing.
- (2) Wrap the armoring tape from the bottom of the outdoor unit to the top of the tubing where it enters the wall.
As you wrap the tubing, overlap half of each previous tape turn.
- (3) Clamp the tubing bundle to the wall, using 1 clamp approx. each meter.



Note

Do not wind the armoring tape too tightly since this will decrease the heat insulation effect. Also ensure that the condensation drain hose splits away from the bundle and drips clear of the unit and the tubing.

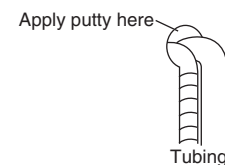


Caution

If the exterior of the outdoor unit valves has been finished with a square Duct covering, make sure you allow sufficient space to access the valves and to allow the panels to be attached and removed.

3.7.1.6.5 Finishing the Installation

After finishing insulating and taping over the tubing, use sealing putty to seal off the hole in the wall to prevent rain and draft from entering.



3.7.1.6.6 Additional Precautions for R32 models

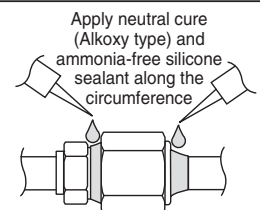
Additional Precautions For R32 Models when connecting by flaring at indoor side



Ensure to do re-flaring of pipes before connecting to units to avoid leaking

Seal sufficiently the flare nut (both gas and liquid sides) with neutral cure (Alkoxy type) & ammonia-free silicone sealant and insulation material to avoid the gas leak caused by freezing.

※ Use of silicon containing ammonia can lead to stress corrosion on the joint & can cause leakage.



Neutral cure (Alkoxy type) & ammonia-free silicone sealant is only to be applied after pressure testing and cleaning up by following instructions of sealant, only to the outside of the connection. The aim is to prevent moisture from entering the connection joint and possible occurrence of freezing. Curing sealant will take some time.
Make sure sealant will not peel off when wrapping the insulation.

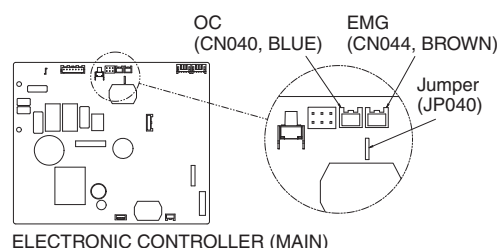
3.7.1.7 How to Install the Timer Remote Controller or High-Spec Wired Remote Controller (Optional Part)

Note

Refer to the Installation Instructions attached to the optional Timer Remote Controller or optional High-spec Wired Remote Controller.

3.7.1.8 Precautions on Test Run

- Request that the customer be present when the test run is performed. At this time, explain the operation manual and have the customer perform the actual steps.
- Check that the 220-230-240 VAC power is not connected to the U1 & U2 terminal board terminal.
 * If 220-230-240 VAC is accidentally applied, the Fuse on indoor unit Electronic Controller (Main) will blow in order to protect the PCB.
 In this case, recover the connection by disconnect 2P connector wires that originally connected to the indoor unit Electronic Controller OC connector and shift the connector wires to EMG connector on same indoor unit Electronic Controller (Main). If operation is still not possible after shift to EMG connector, cut the jumper JP040 on the same indoor unit Electronic Controller (Main).



Items to Check Before the Test Run

- Check that the indoor and outdoor units have correct combination.
- Turn the remote power switch ON at least 5 hours in advance in order to energize.
- Fully open the closed valves on the liquid tubing and gas tubing sides.
- Separate the power supply in accordance with the types of system.
- In the case of conditions below, restore the detailed setting code nos. 11, 12, 13, 14 of all indoor units in the system to the factory setting and then set up the auto address setting.
 - Indoor unit has been communicated with another outdoor unit before.
 - One or more PCBs of indoor units in the system are replaced.
 - Detailed setting "Code no." 11 is different from correct indoor unit capacity.
 - Detailed setting "Code no." 12, 13 or 14 doesn't match for system.
 - E15, E16 or L09 alarm occurs.
 - The "Assigning" screen appears on the LCD display for more than 10 minutes.

* Factory setting

XX : Code no.	Item	YYYY : Set data	XX : Code no.	Item	YYYY : Set data
11	Indoor unit capacity	0000	13	Indoor unit address	0099
12	System address	0099	14	Group control address	0099

List of detailed setting items code nos. 11, 12, 13, 14

Code no.	Item	Set data							
		No.	Description			No.	Description		
11	Indoor unit capacity	0003	28	S-2545PK4E (25) K4			0005	36	S-2545PK4E (36) K4
		0007	45	S-2545PK4E (45) K4			0009	56	S-5010PK4E (50) K4
		0011	71	S-5010PK4E (60) K4			0012	80	S-5010PK4E (71) K4
		0015	112	S-5010PK4E (100) K4					
12	System address	0001	Unit no. 1						
		0002	Unit no. 2						
		0003	Unit no. 3						
		}	{						
		0030	Unit no. 30						
		0099	Not set						
13	Indoor unit address	0001	Unit no. 1						
		0002	Unit no. 2						
		0003	Unit no. 3						
		}	{						
		0064	Unit no. 64						
		0099	Not set						
14	Group control address	0000	Individual (1:1 = Indoor unit with no group wiring)						
		0001	Main unit (One of the group-control indoor units)						
		0002	Sub unit (All group-control indoor units except for main unit)						
		0099	Not set						

* Code no. is displayed with 6 digits in wired remote controller, CZ-RTC6 series.
 In this case, read as follows. e.g. 11 → 000011

Note

The Item code numbers 11, 12, 13 and 14 can automatically be changed to the appropriate settings from factory settings listed above by making the auto address settings according to the connected outdoor unit capacity and the number of indoor units. If needed to reset the settings after once changed, return all the item codes to the factory shipment-time settings. It is necessary to set the auto address settings once again.

Note

In case of checking and changing before setting up the address settings in group connection, turn on only the power of the system to be checked and changed. If you turn on the power to all systems before address settings, the settings of all indoor units may not be seen correctly.

After changing, turn off the power supply within 2 minutes or carry out the auto address setting procedures immediately. If the power of the system switched on for a while, the auto address setting may start as a single system and it might not match the multiple systems.

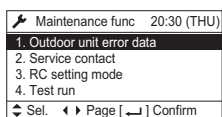
3.7.1.9 Test Run

3.7.1.9.1 Test Run Using the Wired Remote Controller

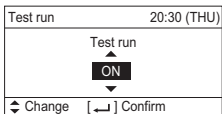
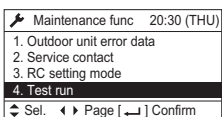
CZ-RTC5B (High-spec wired remote controller)

This mode places a heavy load on the machines. Therefore use it only when performing the test run.

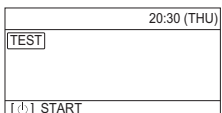
- (1) Keep pressing the ,  and  buttons simultaneously for 4 or more seconds. The "Maintenance func" screen appears on the LCD display.



- (2) Press the  or  button to see each menu. If you wish to see the next screen instantly, press the  or  button. Select "4. Test run" on the LCD display and press the  button. Change the display from "OFF" to "ON" by pressing the  or  button. Then press the  button.

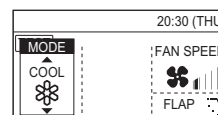
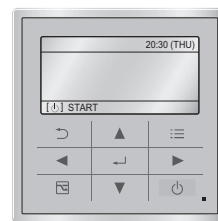


- (3) Press the  button. "TEST" will be displayed on the LCD display.



- (4) Press the  button. Test run will be started. Test run setting mode screen appears on the LCD display.

- The test run can be performed using the HEAT, COOL, or FAN operation mode.
- The temperature cannot be adjusted when in test run mode.
- If correct operation is not possible, a code is displayed on the remote controller LCD display. (Regarding the alarm contents, see the SUPPLEMENT at the end of this manual.)



- (5) After the test run is completed, proceed from Step (1) and change to "OFF" at Step (2).
- To prevent continuous test run, this remote controller includes a timer function that cancels the test run after 60 minutes.

NOTE

- The outdoor units will not operate for approximately 3 minutes after the power is turned ON and after operation is stopped.

CZ-RTC4 / CZ-RTC4A (Timer remote controller)

This mode places a heavy load on the machines. Therefore use it only when performing the test run.

- (1) Press the remote controller button for 4 seconds or longer.

Then press the button.

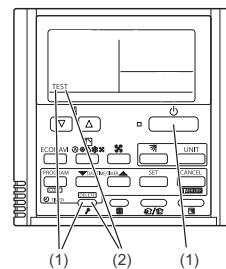
“TEST” appears on the LCD display while the test run is in progress.

- The test run can be performed using the HEAT, COOL, or FAN operation mode.
- The temperature cannot be adjusted when in test run mode.
- If correct operation is not possible, a code is displayed on the remote controller LCD display. (Regarding the alarm contents, see the SUPPLEMENT at the end of this manual.)

- (2) After the test run is completed, press the button again.

Check that “TEST” disappears from the LCD display.

- To prevent continuous test run, this remote controller includes a timer function that cancels the test run after 60 minutes.



CZ-RTC6 series (Wired Remote Controller)

This mode places a heavy load on the machines. Therefore use it only when performing the test run.

- (1) Keep pressing the and buttons simultaneously for 4 or more seconds. The “Maintenance func” screen appears on the LCD display.

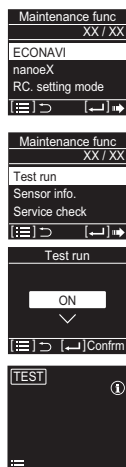
- (2) Press the or button to see each menu. Select “Test run” on the LCD display and press the button.

Change the display from “OFF” to “ON” by pressing the or button.

Then press the button.

- (3) Press the button.

“TEST” will be displayed on the LCD display.



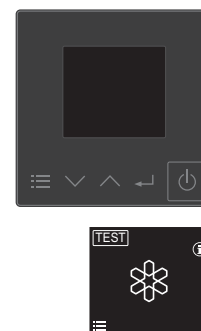
- (4) Press the button. Test run will be started.

Test run setting mode screen appears on the LCD display.

- The test run can be performed using the HEAT, COOL, or FAN operation mode.
- The temperature cannot be adjusted when in test run mode.
- If correct operation is not possible, a code is displayed on the remote controller LCD display. (Regarding the alarm contents, see the SUPPLEMENT at the end of this manual.)

- (5) After the test run is completed, proceed from Step (1) and change to “OFF” at Step (2).

- To prevent continuous test run, this remote controller includes a timer function that cancels the test run after 60 minutes.



NOTE

- The outdoor units will not operate for approximately 3 minutes after the power is turned ON and after operation is stopped.

3.7.1.9.2 Main-Sub Remote Controller Control

One (1) indoor unit can be controlled by two (2) wired remote controllers. In the case of using 2 remote controllers, one of them needs to be designated as the sub remote controller.

Connecting 2 remote controllers to control 1 Indoor unit

Remote controller (main) Remote controller (sub)

Optional 1 2

Remote control wiring

Terminal board for remote control wiring

Indoor unit

Ground ①

Ground ②

Outdoor unit

3-LINE CONNECTION

Remote controller setting mode (CZ-RTC5B)

(1) Press and hold the , and for 4 seconds or more simultaneously.

(2) Select “3. RC. setting mode”.

(3) Select the “Code no.” and “Set data”.

(Repeat)

(4) Press .

• After selecting “YES”, the unit restarts.

Code no.	Item	Set data	
		0000	0001
01	Main/Sub	Sub	Main

Remote controller setting mode (CZ-RTC4 / CZ-RTC4A)

(1) Press and hold the and buttons for several seconds simultaneously.

(2) Select the Code no. / .

(2) Select the Set data. →

The indicator illuminates after blinking. Press .

Code no.	Item	Set data	
		0000	0001
01	Main/Sub	Sub	Main

Remote controller setting mode (CZ-RTC6 series)

(1) Press and hold the , and for 4 seconds or more simultaneously.

(2) Select “RC. setting mode”.

(3) Select the “Code no.” and “Set data”.

(Repeat)

(4) Press .

• After selecting “YES”, the unit restarts.

Code no.	Item	Set data	
		0000	0001
01	Main/Sub	Sub	Main

3.7.1.10 Appendix

3.7.1.10.1 How to Take Out Front Grille

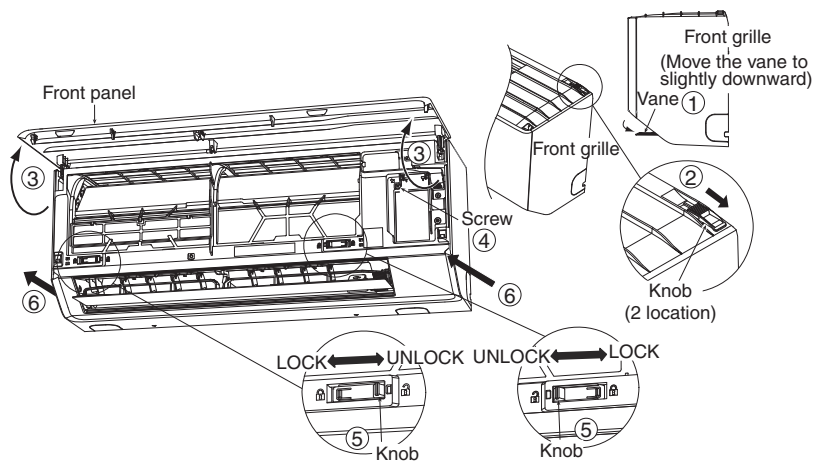
Type 2545

Please follow the steps below to take out front grille if necessary such as when installing or servicing.

- ① Set the vertical airflow vane to slightly downward.
- ② Slide the 2 knobs on the upside of front grille away from the center to release them.
- ③ Open front panel.
- ④ Remove the 1 screw on the front grille as shown in the illustration.
- ⑤ Slide the 2 knobs on the front grille to unlock position.
- ⑥ Pull the front grille towards you to remove the front grille.

When reinstalling the front grille, carry out above steps in the reverse order.

After sliders are slide to lock position, please confirm front grille is securely fixed by pulling the front grille towards you.



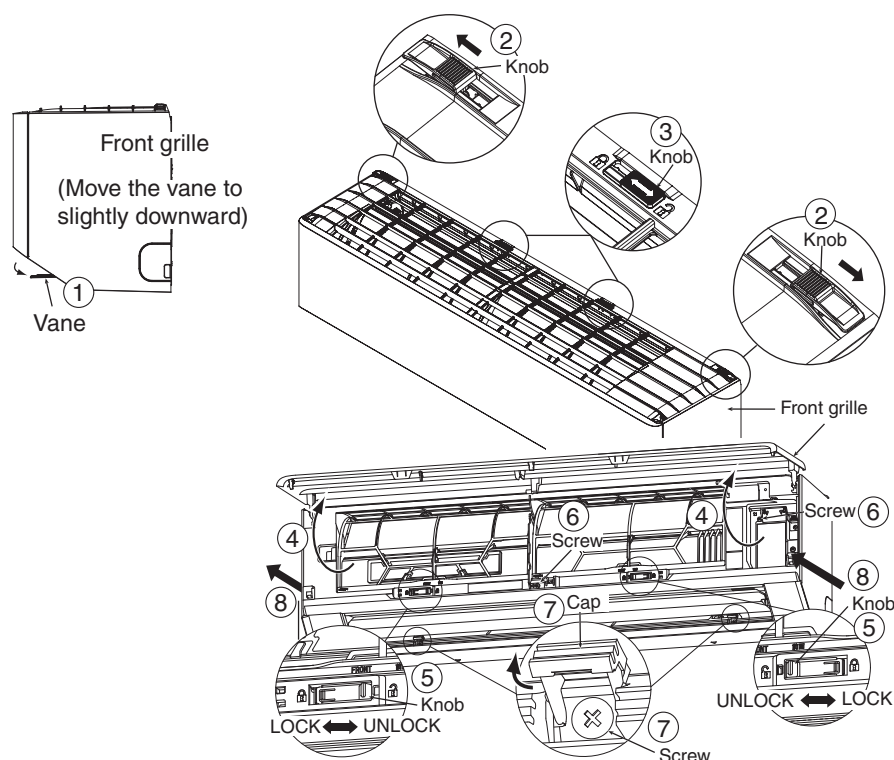
Type 5010

Please follow the steps below to take out front grille if necessary such as when installing or servicing.

- ① Set the vertical airflow vane to slightly downward.
- ② Slide 2 knobs on the upside of front grille (left and right) away from the center to release them.
- ③ Slide 2 knobs on the upside of front grille to unlock position.
- ④ Open front panel.
- ⑤ Slide 2 knobs on the front grille to unlock position.
- ⑥ Remove 2 screws on the front grille as shown in the illustration.
- ⑦ Push 2 caps upward and remove 2 screws on the front grille as shown in the illustration.
- ⑧ Pull the front grille towards you to remove the front grille.

When reinstalling the front grille, carry out above steps in the reverse order.

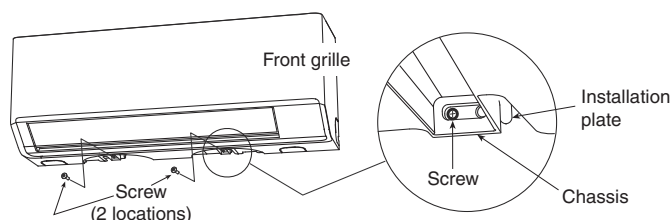
After sliders are slide to lock position, please confirm front grille is securely fixed by pulling the front grille towards you.



3.7.1.10.2 Screw Chassis to Installation Plate

Fasten the chassis to the installation plate with screws (Self purchase, Screw size: M4, max. length 10 mm) to provide a neat appearance of indoor unit.

Please refer column “How to take out front grille” to remove the front grille.



3.7.1.10.3 Auto Switch Operation

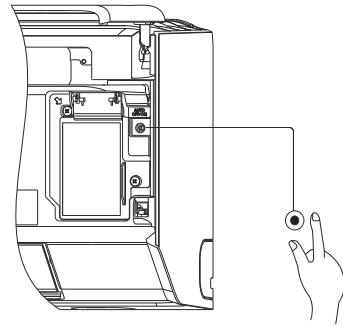
The below operations will be performed by pressing the "AUTO" switch.

This mode places a heavy load on the machines.

Therefore use it only when performing the test run.

1. Press and hold the Emergency button for 4 seconds or more.
The indication lamps (OPERATION, TIMER, STANDBY) repeatedly light one after the other for 1 second.
 - The wireless remote controller address setting mode is set.
2. Press and hold the Emergency button for 4 seconds or more again.
The indication lamps (OPERATION, TIMER, STANDBY) blink during test operation.
 - The test run can be performed using the HEAT, COOL, or FAN operation mode.
 - The temperature cannot be adjusted when in test run mode.
 - If correct operation is not possible, some of the display lamps (OPERATION, TIMER, STANDBY) will turn ON or OFF.

3. To stop test operation, press the Emergency button.
 - To prevent continuous test run, this mode includes a timer function that cancels the test run after 60 minutes.



Note

The outdoor units will not operate for approximately 3 minutes after the power is turned ON and after operation is stopped.

Should the power fail while the unit is running

If the power supply for this unit is temporarily cut off, the unit will automatically resume operation once power is restored using the same settings before the power was interrupted.

Important Information Regarding The Refrigerant Used

Refer to the Installation Instructions attached to the outdoor unit.

3.8 Capacity Table

3.8.1 Cooling Capacity Performance Data

3.8.1.1 Wall Mounted Type

			Outdoor air intake temp (°C D.B.)																	
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			43°C				
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT		
U-25PZ3E5 (S-2545PK4E(25))	220V-230V-240V 50Hz 1phase	23	16	2.5	2.1	0.427	2.4	1.8	0.502	2.2	1.7	0.573	2.1	1.7	0.652	2.0	1.6	0.694		
			19	2.8	1.6	0.425	2.6	1.2	0.499	2.5	1.2	0.570	2.4	1.1	0.649	2.3	1.0	0.694		
			22	3.1	1.1	0.419	2.9	0.7	0.492	2.8	0.6	0.562	2.6	0.5	0.639	2.5	0.5	0.681		
		25	16	2.5	2.5	0.427	2.4	2.4	0.502	2.2	2.3	0.573	2.1	2.2	0.652	2.0	2.1	0.694		
			19	2.8	2.0	0.425	2.6	2.0	0.499	2.5	1.8	0.570	2.4	1.8	0.649	2.3	1.8	0.694		
			22	3.1	1.4	0.419	2.9	1.3	0.492	2.8	1.2	0.562	2.6	1.2	0.639	2.5	1.2	0.681		
		27	16	2.5	2.6	0.427	2.4	2.5	0.502	2.2	2.3	0.573	2.1	2.2	0.652	2.0	2.1	0.694		
			19	2.8	2.3	0.425	2.6	2.3	0.499	2.5	2.2	0.570	2.4	2.1	0.649	2.3	2.1	0.694		
			22	3.1	1.8	0.419	2.9	1.7	0.492	2.8	1.6	0.562	2.6	1.5	0.639	2.5	1.5	0.681		
		29	16	2.5	2.6	0.427	2.4	2.5	0.502	2.2	2.3	0.573	2.1	2.2	0.652	2.0	2.1	0.694		
			19	2.8	2.6	0.425	2.6	2.7	0.499	2.5	2.6	0.570	2.4	2.5	0.649	2.3	2.4	0.694		
			22	3.1	2.1	0.419	2.9	2.1	0.492	2.8	2.0	0.562	2.6	1.9	0.639	2.5	1.9	0.681		
		32	16	2.5	2.6	0.427	2.4	2.5	0.502	2.2	2.3	0.573	2.1	2.2	0.652	2.0	2.1	0.694		
			19	2.8	2.9	0.425	2.6	2.8	0.499	2.5	2.6	0.570	2.4	2.5	0.649	2.3	2.4	0.694		
			22	3.1	2.6	0.419	2.9	2.6	0.492	2.8	2.5	0.562	2.6	2.4	0.639	2.5	2.4	0.681		
		U-36PZ3E5 (S-2545PK4E(36))	220V-230V-240V 50Hz 1phase	23	16	3.5	2.7	0.674	3.3	2.2	0.792	3.1	2.1	0.904	2.9	2.1	1.03	2.8	2.1	1.10
					19	3.9	2.1	0.671	3.7	1.6	0.788	3.5	1.5	0.900	3.3	1.4	1.02	3.2	1.3	1.10
					22	4.4	1.4	0.662	4.1	0.8	0.777	3.9	0.7	0.888	3.6	0.7	1.01	3.5	0.7	1.08
25	16			3.5	3.2	0.674	3.3	3.1	0.792	3.1	3.0	0.904	2.9	2.8	1.03	2.8	2.7	1.10		
	19			3.9	2.5	0.671	3.7	2.5	0.788	3.5	2.3	0.900	3.3	2.2	1.02	3.2	2.2	1.10		
	22			4.4	1.8	0.662	4.1	1.7	0.777	3.9	1.6	0.888	3.6	1.6	1.01	3.5	1.5	1.08		
27	16			3.5	3.4	0.674	3.3	3.2	0.792	3.1	3.0	0.904	2.9	2.8	1.03	2.8	2.7	1.10		
	19			3.9	3.0	0.671	3.7	3.0	0.788	3.5	2.8	0.900	3.3	2.7	1.02	3.2	2.7	1.10		
	22			4.4	2.2	0.662	4.1	2.1	0.777	3.9	2.1	0.888	3.6	2.0	1.01	3.5	2.0	1.08		
29	16			3.5	3.4	0.674	3.3	3.2	0.792	3.1	3.0	0.904	2.9	2.8	1.03	2.8	2.7	1.10		
	19			3.9	3.4	0.671	3.7	3.5	0.788	3.5	3.3	0.900	3.3	3.2	1.02	3.2	3.1	1.10		
	22			4.4	2.7	0.662	4.1	2.6	0.777	3.9	2.5	0.888	3.6	2.4	1.01	3.5	2.4	1.08		
32	16			3.5	3.4	0.674	3.3	3.2	0.792	3.1	3.0	0.904	2.9	2.8	1.03	2.8	2.7	1.10		
	19			3.9	3.7	0.671	3.7	3.5	0.788	3.5	3.4	0.900	3.3	3.2	1.02	3.2	3.1	1.10		
	22			4.4	3.4	0.662	4.1	3.3	0.777	3.9	3.2	0.888	3.6	3.1	1.01	3.5	3.1	1.08		

			Outdoor air intake temp (°C D.B.)															
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			43°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
U-50PZ3E5 (S-5010PK4E(50))	220V-230V- 240V 50Hz 1phase	23	16	5.1	4.0	1.11	4.8	3.2	1.28	4.6	3.1	1.46	4.2	3.1	1.66	4.0	2.8	1.77
			19	5.6	3.0	1.12	5.3	2.3	1.28	5.0	2.3	1.47	4.6	2.0	1.67	4.3	1.9	1.78
			22	6.1	2.0	1.12	5.8	1.3	1.28	5.5	1.2	1.47	5.1	1.1	1.67	4.8	0.9	1.79
		25	16	5.1	4.6	1.11	4.8	4.4	1.28	4.6	4.3	1.46	4.2	4.2	1.66	4.0	4.0	1.77
			19	5.6	3.7	1.12	5.3	3.5	1.28	5.0	3.4	1.47	4.6	3.2	1.67	4.3	3.2	1.78
			22	6.1	2.6	1.12	5.8	2.5	1.28	5.5	2.4	1.47	5.1	2.2	1.67	4.8	2.1	1.79
		27	16	5.1	5.1	1.11	4.8	4.8	1.28	4.6	4.6	1.46	4.2	4.2	1.66	4.0	4.0	1.77
			19	5.6	4.2	1.12	5.3	4.1	1.28	5.0	3.9	1.47	4.6	3.8	1.67	4.3	3.8	1.78
			22	6.1	3.2	1.12	5.8	3.1	1.28	5.5	3.0	1.47	5.1	2.8	1.67	4.8	2.7	1.79
		29	16	5.1	5.1	1.11	4.8	4.8	1.28	4.6	4.6	1.46	4.2	4.2	1.66	4.0	4.0	1.77
			19	5.6	4.8	1.12	5.3	4.7	1.28	5.0	4.6	1.47	4.6	4.3	1.67	4.3	4.3	1.78
			22	6.1	3.8	1.12	5.8	3.6	1.28	5.5	3.5	1.47	5.1	3.4	1.67	4.8	3.3	1.79
		32	16	5.1	5.1	1.11	4.8	4.8	1.28	4.6	4.6	1.46	4.2	4.2	1.66	4.0	4.0	1.77
			19	5.6	5.6	1.12	5.3	5.3	1.28	5.0	5.0	1.47	4.6	4.6	1.67	4.3	4.3	1.78
			22	6.1	4.7	1.12	5.8	4.5	1.28	5.5	4.4	1.47	5.1	4.3	1.67	4.8	4.1	1.79
U-60PZ3E5A (S-5010PK4E(60))	220V-230V- 240V 50Hz 1phase	23	16	6.3	4.9	1.34	6.0	4.0	1.50	5.5	3.8	1.69	5.1	3.6	1.96	4.8	3.5	2.11
			19	6.9	3.7	1.35	6.6	2.9	1.52	6.1	2.7	1.71	5.6	2.4	1.99	5.3	2.3	2.14
			22	7.8	2.6	1.36	7.3	1.7	1.53	6.8	1.6	1.72	6.3	1.3	2.00	6.0	1.3	2.15
		25	16	6.3	5.6	1.34	6.0	5.4	1.50	5.5	5.2	1.69	5.1	5.0	1.96	4.8	4.8	2.11
			19	6.9	4.5	1.35	6.6	4.3	1.52	6.1	4.1	1.71	5.6	3.9	1.99	5.3	3.7	2.14
			22	7.8	3.4	1.36	7.3	3.2	1.53	6.8	3.0	1.72	6.3	2.7	2.00	6.0	2.7	2.15
		27	16	6.3	6.3	1.34	6.0	6.0	1.50	5.5	5.5	1.69	5.1	5.1	1.96	4.8	4.8	2.11
			19	6.9	5.2	1.35	6.6	5.0	1.52	6.1	4.8	1.71	5.6	4.6	1.99	5.3	4.5	2.14
			22	7.8	4.0	1.36	7.3	3.9	1.53	6.8	3.7	1.72	6.3	3.4	2.00	6.0	3.4	2.15
		29	16	6.3	6.3	1.34	6.0	6.0	1.50	5.5	5.5	1.69	5.1	5.1	1.96	4.8	4.8	2.11
			19	6.9	5.9	1.35	6.6	5.8	1.52	6.1	5.6	1.71	5.6	5.3	1.99	5.3	5.2	2.14
			22	7.8	4.8	1.36	7.3	4.6	1.53	6.8	4.4	1.72	6.3	4.2	2.00	6.0	4.1	2.15
		32	16	6.3	6.3	1.34	6.0	6.0	1.50	5.5	5.5	1.69	5.1	5.1	1.96	4.8	4.8	2.11
			19	6.9	6.9	1.35	6.6	6.6	1.52	6.1	6.1	1.71	5.6	5.6	1.99	5.3	5.3	2.14
			22	7.8	5.9	1.36	7.3	5.6	1.53	6.8	5.5	1.72	6.3	5.2	2.00	6.0	5.2	2.15
U-71PZ3E5A (S-5010PK4E(71))	220V-230V- 240V 50Hz 1phase	23	16	6.9	5.3	1.63	6.5	4.4	1.83	6.2	4.2	2.07	5.5	3.9	2.26	5.1	3.7	2.33
			19	7.7	4.2	1.66	7.2	3.2	1.86	6.9	3.1	2.10	6.1	2.8	2.30	5.5	2.5	2.37
			22	8.6	3.0	1.69	8.1	2.0	1.89	7.8	2.0	2.14	6.9	1.6	2.33	6.2	1.4	2.41
		25	16	6.9	6.1	1.63	6.5	5.9	1.83	6.2	5.7	2.07	5.5	5.4	2.26	5.1	5.2	2.33
			19	7.7	4.9	1.66	7.2	4.6	1.86	6.9	4.5	2.10	6.1	4.2	2.30	5.5	4.0	2.37
			22	8.6	3.8	1.69	8.1	3.5	1.89	7.8	3.4	2.14	6.9	3.0	2.33	6.2	2.9	2.41
		27	16	6.9	6.8	1.63	6.5	6.6	1.83	6.2	6.4	2.07	5.5	5.7	2.26	5.1	5.2	2.33
			19	7.7	5.6	1.66	7.2	5.4	1.86	6.9	5.3	2.10	6.1	5.0	2.30	5.5	4.7	2.37
			22	8.6	4.4	1.69	8.1	4.3	1.89	7.8	4.1	2.14	6.9	3.8	2.33	6.2	3.6	2.41
		29	16	6.9	7.1	1.63	6.5	6.7	1.83	6.2	6.4	2.07	5.5	5.7	2.26	5.1	5.2	2.33
			19	7.7	6.4	1.66	7.2	6.1	1.86	6.9	6.1	2.10	6.1	5.7	2.30	5.5	5.5	2.37
			22	8.6	5.2	1.69	8.1	5.0	1.89	7.8	4.9	2.14	6.9	4.5	2.33	6.2	4.3	2.41
		32	16	6.9	7.1	1.63	6.5	6.7	1.83	6.2	6.4	2.07	5.5	5.7	2.26	5.1	5.2	2.33
			19	7.7	7.5	1.66	7.2	7.3	1.86	6.9	7.1	2.10	6.1	6.3	2.30	5.5	5.7	2.37
			22	8.6	6.3	1.69	8.1	6.1	1.89	7.8	6.0	2.14	6.9	5.6	2.33	6.2	5.4	2.41

			Outdoor air intake temp (°C D.B.)															
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			43°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
(U-100PZ3E8) (U-100PZ3E5) (S-5010PK4E(100))	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	23	16	9.6	6.7	2.53	9.0	5.6	2.70	8.5	5.3	2.87	7.7	4.9	2.87	5.9	4.2	2.16
			19	10.3	5.2	2.63	9.6	4.1	2.82	9.1	3.9	3.00	8.2	3.5	3.00	6.3	2.8	2.25
			22	11.3	3.9	2.73	10.6	2.8	2.91	9.9	2.5	3.10	9.0	2.3	3.10	7.0	1.5	2.33
		25	16	10.0	7.7	2.57	9.3	7.4	2.75	8.8	7.1	2.92	8.0	6.7	2.92	6.1	5.8	2.19
			19	10.7	6.2	2.68	10.0	5.9	2.86	9.4	5.7	3.05	8.5	5.3	3.05	6.6	4.4	2.29
			22	11.7	4.9	2.77	10.9	4.6	2.96	10.3	4.3	3.15	9.3	3.9	3.15	7.2	3.1	2.37
		27	16	10.3	8.8	2.61	9.7	8.4	2.79	9.1	8.1	2.97	8.3	7.7	2.97	6.4	6.4	2.23
			19	11.0	7.3	2.72	10.3	6.9	2.91	9.7	6.7	3.10	8.8	6.2	3.10	6.8	5.4	2.33
			22	12.1	5.8	2.82	11.3	5.5	3.01	10.6	5.3	3.21	9.7	4.9	3.21	7.4	4.1	2.41
		29	16	10.5	9.6	2.62	9.8	9.3	2.80	9.2	9.0	2.98	8.4	8.4	2.98	6.5	6.5	2.23
			19	11.2	8.1	2.73	10.5	7.8	2.92	9.8	7.5	3.11	8.9	7.1	3.11	6.9	6.3	2.33
			22	12.3	6.8	2.82	11.5	6.4	3.02	10.8	6.1	3.22	9.8	5.7	3.22	7.6	5.0	2.41
		32	16	10.6	10.6	2.62	9.9	9.9	2.81	9.4	9.4	2.99	8.5	8.5	2.99	6.5	6.5	2.24
			19	11.4	9.5	2.74	10.6	9.1	2.93	10.0	8.8	3.12	9.1	8.5	3.12	7.0	7.0	2.34
			22	12.4	8.1	2.83	11.6	7.7	3.03	10.9	7.4	3.22	10.0	7.1	3.22	7.7	6.1	2.42
(U-100PZ3E8) (U-100PZ3E5) (S-5010PK4E(50)) X 2	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	23	16	9.6	7.3	2.53	9.0	6.0	2.70	8.5	5.7	2.88	7.7	5.4	2.88	5.9	4.5	2.15
			19	10.3	5.6	2.64	9.6	4.2	2.81	9.1	3.9	3.00	8.2	3.6	3.00	6.3	2.9	2.25
			22	11.3	3.8	2.73	10.6	2.5	2.91	10.0	2.3	3.10	9.0	1.9	3.10	7.0	1.3	2.33
		25	16	10.0	8.5	2.57	9.3	8.3	2.74	8.8	8.0	2.92	8.0	7.7	2.92	6.2	6.2	2.19
			19	10.7	6.7	2.68	10.0	6.3	2.87	9.3	6.2	3.05	8.6	5.7	3.05	6.5	4.9	2.29
			22	11.6	5.0	2.77	10.9	4.8	2.96	10.3	4.5	3.15	9.3	4.1	3.15	7.2	3.4	2.36
		27	16	10.3	9.8	2.61	9.6	9.3	2.79	9.1	9.1	2.97	8.3	8.3	2.97	6.3	6.3	2.23
			19	11.0	7.8	2.72	10.3	7.6	2.91	9.7	7.3	3.10	8.8	7.0	3.10	6.8	6.2	2.33
			22	12.1	6.1	2.82	11.3	5.8	3.01	10.7	5.6	3.21	9.7	5.3	3.21	7.4	4.4	2.40
		29	16	10.5	10.4	2.62	9.8	9.8	2.80	9.3	9.3	2.98	8.4	8.4	2.98	6.4	6.4	2.23
			19	11.2	9.0	2.73	10.5	8.7	2.92	9.9	8.4	3.11	8.9	8.1	3.11	6.9	6.9	2.33
			22	12.3	7.2	2.82	11.5	6.9	3.02	10.8	6.8	3.22	9.8	6.3	3.22	7.6	5.6	2.41
		32	16	10.7	10.7	2.63	10.0	10.0	2.81	9.3	9.3	2.98	8.5	8.5	2.98	6.5	6.5	2.24
			19	11.4	10.7	2.74	10.6	10.3	2.93	10.0	10.0	3.12	9.1	9.1	3.12	7.0	7.0	2.33
			22	12.4	8.9	2.83	11.6	8.6	3.03	10.9	8.4	3.22	10.0	8.0	3.22	7.7	7.1	2.42
(U-125PZ3E8) (U-125PZ3E5) (S-5010PK4E(60)) X 2	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	23	16	13.1	10.1	3.91	12.3	8.3	4.18	11.5	7.9	4.45	10.5	7.5	4.45	8.1	6.4	3.34
			19	14.0	7.4	4.08	13.1	5.7	4.36	12.3	5.4	4.64	11.2	5.0	4.64	8.6	4.0	3.48
			22	15.4	5.2	4.22	14.4	3.4	4.51	13.5	3.0	4.80	12.3	2.6	4.80	9.5	1.7	3.60
		25	16	13.6	11.9	3.98	12.7	11.5	4.25	12.0	11.1	4.53	10.9	10.6	4.53	8.4	8.4	3.39
			19	14.5	9.2	4.15	13.6	8.9	4.43	12.8	8.6	4.72	11.6	8.1	4.72	8.9	7.0	3.54
			22	15.9	6.9	4.29	14.9	6.5	4.59	14.0	6.2	4.88	12.7	5.7	4.88	9.8	4.7	3.66
		27	16	14.0	13.6	4.04	13.1	13.0	4.32	12.4	12.4	4.60	11.2	11.2	4.60	8.7	8.7	3.45
			19	15.0	10.9	4.22	14.0	10.5	4.51	13.2	10.2	4.80	12.0	9.7	4.80	9.2	8.6	3.60
			22	16.4	8.5	4.36	15.4	8.1	4.66	14.5	7.8	4.97	13.1	7.3	4.97	10.1	6.3	3.72
		29	16	14.3	14.3	4.05	13.3	13.3	4.33	12.5	12.5	4.61	11.4	11.4	4.61	8.8	8.8	3.46
			19	15.2	12.5	4.23	14.2	12.0	4.52	13.4	11.7	4.81	12.2	11.2	4.81	9.4	9.4	3.61
			22	16.7	9.9	4.37	15.6	9.7	4.68	14.7	9.3	4.98	13.3	8.9	4.98	10.3	7.7	3.73
		32	16	14.5	14.5	4.06	13.5	13.5	4.34	12.7	12.7	4.62	11.6	11.6	4.62	8.9	8.9	3.47
			19	15.4	14.9	4.24	14.4	14.4	4.53	13.6	13.6	4.82	12.4	12.4	4.82	9.5	9.5	3.62
			22	16.9	12.4	4.38	15.8	12.0	4.69	14.9	11.6	4.99	13.5	11.1	4.99	10.4	10.0	3.74

				Outdoor air intake temp (°C D.B.)														
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			43°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
(U-140PZ3E8) (U-140PZ3E5 (S-5010PK4E(71)) X 2	220V-230V- 240V 50Hz 1phase (380V-400V- 415V 50Hz 3phase)	23	16	14.9	11.0	4.56	13.9	9.0	4.88	13.1	8.6	5.19	11.9	8.1	5.19	9.2	6.9	3.90
			19	15.9	8.4	4.76	14.9	6.4	5.09	14.0	6.1	5.42	12.7	5.6	5.42	9.8	4.4	4.06
			22	17.5	5.9	4.92	16.3	4.1	5.26	15.4	3.7	5.60	14.0	3.2	5.60	10.7	2.1	4.20
		25	16	15.4	12.7	4.64	14.4	12.2	4.96	13.6	11.9	5.28	12.3	11.2	5.28	9.5	9.5	3.96
			19	16.5	10.1	4.84	15.4	9.7	5.17	14.5	9.2	5.51	13.2	8.7	5.51	10.2	7.5	4.13
			22	18.1	7.7	5.01	16.9	7.2	5.35	15.9	6.8	5.70	14.4	6.3	5.70	11.1	5.1	4.27
		27	16	16.0	14.5	4.72	14.9	14.0	5.04	14.0	13.6	5.37	12.8	12.8	5.37	9.8	9.8	4.03
			19	17.0	11.8	4.92	15.9	11.4	5.26	15.0	10.9	5.60	13.6	10.4	5.60	10.5	9.1	4.20
			22	18.7	9.4	5.09	17.5	8.9	5.44	16.4	8.5	5.79	14.9	8.0	5.79	11.5	6.7	4.35
		29	16	16.2	16.1	4.73	15.2	15.2	5.05	14.3	14.3	5.38	13.0	13.0	5.38	10.0	10.0	4.04
			19	17.3	13.4	4.93	16.2	12.9	5.27	15.2	12.5	5.61	13.8	11.9	5.61	10.7	10.6	4.21
			22	19.0	11.0	5.10	17.7	10.5	5.45	16.7	10.1	5.81	15.2	9.5	5.81	11.7	8.2	4.36
		32	16	16.4	16.4	4.74	15.4	15.4	5.07	14.5	14.5	5.40	13.1	13.1	5.40	10.1	10.1	4.05
			19	17.6	15.8	4.94	16.4	15.3	5.29	15.4	14.9	5.63	14.0	14.0	5.63	10.8	10.8	4.22
			22	19.2	13.3	5.11	18.0	12.8	5.47	16.9	12.3	5.82	15.4	11.8	5.82	11.8	10.5	4.37

TC :Cooling Capacity
SHC :Sensible Heat Capacity
IPT :Cooling Power Consumption

unit : kW

				Outdoor air intake temp (°C D.B.)																
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			46°C				
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT		
U-36PZH3E5 (S-2545PK4E(36))	220V-230V- 240V 50Hz 1phase	23	16	3.6	2.8	0.617	3.4	2.2	0.695	3.2	2.1	0.780	2.9	2.1	0.906	2.4	1.9	0.879		
			19	4.0	2.1	0.624	3.8	1.6	0.705	3.5	1.5	0.790	3.2	1.4	0.917	2.7	1.1	0.888		
			22	4.7	1.5	0.630	4.4	1.0	0.711	4.1	0.9	0.796	3.8	0.7	0.924	3.2	0.6	0.897		
		25	16	3.6	3.3	0.617	3.4	3.2	0.695	3.2	3.1	0.780	2.9	2.8	0.906	2.4	2.3	0.879		
			19	4.0	2.6	0.624	3.8	2.4	0.705	3.5	2.3	0.790	3.2	2.3	0.917	2.7	2.1	0.888		
			22	4.7	2.1	0.630	4.4	1.9	0.711	4.1	1.8	0.796	3.8	1.7	0.924	3.2	1.4	0.897		
		27	16	3.6	3.5	0.617	3.4	3.3	0.695	3.2	3.1	0.780	2.9	2.8	0.906	2.4	2.3	0.879		
			19	4.0	3.1	0.624	3.8	2.9	0.705	3.5	2.8	0.790	3.2	2.8	0.917	2.7	2.5	0.888		
			22	4.7	2.4	0.630	4.4	2.3	0.711	4.1	2.2	0.796	3.8	2.1	0.924	3.2	1.9	0.897		
		29	16	3.6	3.5	0.617	3.4	3.3	0.695	3.2	3.1	0.780	2.9	2.8	0.906	2.4	2.3	0.879		
			19	4.0	3.5	0.624	3.8	3.4	0.705	3.5	3.3	0.790	3.2	3.1	0.917	2.7	2.6	0.888		
			22	4.7	2.9	0.630	4.4	2.8	0.711	4.1	2.7	0.796	3.8	2.5	0.924	3.2	2.3	0.897		
		32	16	3.6	3.5	0.617	3.4	3.3	0.695	3.2	3.1	0.780	2.9	2.8	0.906	2.4	2.3	0.879		
			19	4.0	3.8	0.624	3.8	3.6	0.705	3.5	3.4	0.790	3.2	3.1	0.917	2.7	2.6	0.888		
			22	4.7	3.5	0.630	4.4	3.5	0.711	4.1	3.4	0.796	3.8	3.3	0.924	3.2	3.0	0.897		
		U-50PZH3E5 (S-2545PK4E(50))	220V-230V- 240V 50Hz 1phase	23	16	5.1	4.1	0.95	4.9	3.4	1.08	4.5	3.1	1.21	4.2	3.0	1.40	3.5	2.6	1.35
					19	5.7	3.0	0.96	5.4	2.4	1.09	5.0	2.3	1.22	4.6	2.0	1.42	3.9	1.7	1.38
					22	6.4	2.1	0.97	6.0	1.4	1.10	5.6	1.3	1.23	5.2	1.1	1.43	4.4	0.8	1.39
25	16			5.1	4.6	0.95	4.9	4.6	1.08	4.5	4.3	1.21	4.2	4.2	1.40	3.5	3.5	1.35		
	19			5.7	3.6	0.96	5.4	3.6	1.09	5.0	3.4	1.22	4.6	3.2	1.42	3.9	2.9	1.38		
	22			6.4	2.8	0.97	6.0	2.6	1.10	5.6	2.4	1.23	5.2	2.3	1.43	4.4	2.0	1.39		
27	16			5.1	5.1	0.95	4.9	4.9	1.08	4.5	4.5	1.21	4.2	4.2	1.40	3.5	3.5	1.35		
	19			5.7	4.2	0.96	5.4	4.1	1.09	5.0	3.9	1.22	4.6	3.7	1.42	3.9	3.5	1.38		
	22			6.4	3.3	0.97	6.0	3.1	1.10	5.6	3.0	1.23	5.2	2.9	1.43	4.4	2.6	1.39		
29	16			5.1	5.1	0.95	4.9	4.9	1.08	4.5	4.5	1.21	4.2	4.2	1.40	3.5	3.5	1.35		
	19			5.7	4.8	0.96	5.4	4.7	1.09	5.0	4.6	1.22	4.6	4.3	1.42	3.9	3.9	1.38		
	22			6.4	3.9	0.97	6.0	3.7	1.10	5.6	3.6	1.23	5.2	3.5	1.43	4.4	3.1	1.39		
32	16			5.1	5.1	0.95	4.9	4.9	1.08	4.5	4.5	1.21	4.2	4.2	1.40	3.5	3.5	1.35		
	19			5.7	5.7	0.96	5.4	5.4	1.09	5.0	5.0	1.22	4.6	4.6	1.42	3.9	3.9	1.38		
	22			6.4	4.8	0.97	6.0	4.6	1.10	5.6	4.5	1.23	5.2	4.3	1.43	4.4	4.0	1.39		
U-60PZH3E5 (S-2545PK4E(60))	220V-230V- 240V 50Hz 1phase			23	16	6.3	4.9	1.27	6.0	4.0	1.43	5.5	3.8	1.61	5.1	3.6	1.87	4.6	3.4	2.09
					19	6.9	3.7	1.29	6.6	2.9	1.45	6.1	2.7	1.63	5.6	2.4	1.89	5.1	2.3	2.11
					22	7.8	2.6	1.30	7.3	1.7	1.46	6.8	1.6	1.64	6.3	1.3	1.91	5.7	1.2	2.14
		25	16	6.3	5.6	1.27	6.0	5.4	1.43	5.5	5.2	1.61	5.1	5.0	1.87	4.6	4.6	2.09		
			19	6.9	4.5	1.29	6.6	4.3	1.45	6.1	4.1	1.63	5.6	3.9	1.89	5.1	3.7	2.11		
			22	7.8	3.4	1.30	7.3	3.2	1.46	6.8	3.0	1.64	6.3	2.7	1.91	5.7	2.6	2.14		
		27	16	6.3	6.3	1.27	6.0	6.0	1.43	5.5	5.5	1.61	5.1	5.1	1.87	4.6	4.6	2.09		
			19	6.9	5.2	1.29	6.6	5.0	1.45	6.1	4.8	1.63	5.6	4.6	1.89	5.1	4.4	2.11		
			22	7.8	4.1	1.30	7.3	3.9	1.46	6.8	3.7	1.64	6.3	3.4	1.91	5.7	3.3	2.14		
		29	16	6.3	6.3	1.27	6.0	6.0	1.43	5.5	5.5	1.61	5.1	5.1	1.87	4.6	4.6	2.09		
			19	6.9	5.9	1.29	6.6	5.8	1.45	6.1	5.6	1.63	5.6	5.3	1.89	5.1	5.1	2.11		
			22	7.8	4.8	1.30	7.3	4.6	1.46	6.8	4.4	1.64	6.3	4.2	1.91	5.7	4.0	2.14		
		32	16	6.3	6.3	1.27	6.0	6.0	1.43	5.5	5.5	1.61	5.1	5.1	1.87	4.6	4.6	2.09		
			19	6.9	6.9	1.29	6.6	6.6	1.45	6.1	6.1	1.63	5.6	5.6	1.89	5.1	5.1	2.11		
			22	7.8	5.9	1.30	7.3	5.6	1.46	6.8	5.5	1.64	6.3	5.2	1.91	5.7	5.1	2.14		

			Outdoor air intake temp (°C D.B.)															
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			52°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
(U-71PZH4E8) U-71PZH4E5 (S-5010PK4E(71))	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	23	16	8.4	5.9	2.66	8.1	5.8	2.89	7.9	5.6	3.11	7.1	5.3	2.88	1.5	1.5	0.72
			19	9.0	4.6	2.78	8.7	4.5	3.01	8.4	4.3	3.24	7.5	4.0	3.00	1.6	1.6	0.75
			22	9.9	3.4	2.88	9.5	3.3	3.11	9.2	3.1	3.35	8.3	2.8	3.11	1.8	0.7	0.77
		25	16	8.7	6.9	2.71	8.4	6.7	2.93	8.1	6.6	3.16	7.3	6.2	2.93	1.6	1.6	0.73
			19	9.3	5.5	2.83	9.0	5.4	3.06	8.7	5.3	3.30	7.8	4.8	3.05	1.7	1.7	0.76
			22	10.2	4.3	2.92	9.9	4.2	3.17	9.5	4.0	3.41	8.6	3.7	3.16	1.8	1.3	0.78
		27	16	9.0	7.8	2.75	8.7	7.6	2.98	8.4	7.4	3.21	7.6	7.0	2.98	1.6	1.6	0.74
			19	9.6	6.4	2.87	9.3	6.2	3.11	9.0	6.1	3.35	8.1	5.7	3.11	1.7	1.7	0.77
			22	10.6	5.1	2.97	10.2	5.0	3.22	9.9	4.9	3.47	8.9	4.4	3.21	1.9	1.9	0.80
		29	16	9.2	8.6	2.76	8.9	8.4	2.99	8.6	8.3	3.22	7.7	7.7	2.98	1.7	1.7	0.74
			19	9.8	7.2	2.88	9.5	7.0	3.12	9.1	6.9	3.36	8.2	6.5	3.11	1.8	1.8	0.77
			22	10.7	5.9	2.98	10.4	5.8	3.23	10.0	5.6	3.47	9.0	5.2	3.22	1.9	1.9	0.80
		32	16	9.3	9.3	2.77	9.0	9.0	3.00	8.7	8.7	3.23	7.8	7.8	2.99	1.7	1.7	0.74
			19	9.9	8.4	2.89	9.6	8.2	3.13	9.3	8.1	3.37	8.3	7.6	3.12	1.8	1.8	0.77
			22	10.9	7.1	2.99	10.5	7.0	3.24	10.2	6.8	3.48	9.1	6.4	3.23	2.0	2.0	0.80
(U-100PZH4E8) U-100PZH4E5 (S-5010PK4E(100))	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	23	16	9.5	6.6	2.87	9.4	6.6	3.01	9.2	6.5	3.15	8.2	6.0	2.96	1.4	1.4	0.909
			19	10.1	5.2	2.99	10.0	5.1	3.14	9.8	5.0	3.29	8.7	4.6	3.09	1.5	1.5	0.948
			22	11.1	3.8	3.09	11.0	3.8	3.25	10.7	3.7	3.40	9.6	3.2	3.20	1.6	0.6	0.980
		25	16	9.8	7.6	2.91	9.7	7.6	3.06	9.5	7.5	3.21	8.5	7.0	3.01	1.4	1.4	0.924
			19	10.5	6.1	3.04	10.4	6.1	3.19	10.2	6.0	3.34	9.0	5.5	3.14	1.5	1.5	0.964
			22	11.5	4.8	3.14	11.4	4.8	3.30	11.1	4.6	3.46	9.9	4.1	3.25	1.7	1.3	1.00
		27	16	10.1	8.6	2.96	10.0	8.6	3.11	9.8	8.5	3.26	8.8	7.9	3.06	1.5	1.5	0.939
			19	10.8	7.1	3.09	10.7	7.1	3.25	10.5	7.0	3.40	9.4	6.5	3.20	1.6	1.6	0.980
			22	11.9	5.8	3.20	11.8	5.7	3.36	11.5	5.6	3.52	10.2	5.1	3.31	1.7	1.7	1.01
		29	16	10.3	9.6	2.97	10.2	9.5	3.12	10.0	9.4	3.27	8.9	8.9	3.07	1.5	1.5	0.942
			19	11.0	8.0	3.10	10.9	8.0	3.25	10.7	7.9	3.41	9.5	7.3	3.20	1.6	1.6	0.982
			22	12.0	6.6	3.21	11.9	6.6	3.37	11.7	6.5	3.53	10.4	6.0	3.31	1.8	1.8	1.02
		32	16	10.4	10.4	2.98	10.3	10.3	3.13	10.1	10.1	3.28	9.0	9.0	3.08	1.5	1.5	0.944
			19	11.1	9.4	3.11	11.0	9.3	3.26	10.8	9.2	3.42	9.6	8.6	3.21	1.6	1.6	0.985
			22	12.2	7.9	3.21	12.1	7.9	3.37	11.8	7.8	3.53	10.6	7.3	3.32	1.8	1.8	1.02

				Outdoor air intake temp (°C D.B.)														
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			46°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
U-50PZH3E5 (S-2545PK4E(25)) X 2	220V-230V- 240V 50Hz 1phase	23	16	5.1	4.6	0.95	4.9	3.8	1.08	4.5	3.5	1.21	4.2	3.3	1.40	3.5	2.9	1.35
			19	5.7	3.3	0.96	5.4	2.7	1.09	5.0	2.6	1.22	4.6	2.2	1.42	3.9	1.9	1.38
			22	6.4	2.3	0.97	6.0	1.6	1.10	5.6	1.4	1.23	5.2	1.2	1.43	4.4	0.9	1.39
		25	16	5.1	5.1	0.95	4.9	5.1	1.08	4.5	4.8	1.21	4.2	4.7	1.40	3.5	3.9	1.35
			19	5.7	4.0	0.96	5.4	4.0	1.09	5.0	3.8	1.22	4.6	3.6	1.42	3.9	3.2	1.38
			22	6.4	3.1	0.97	6.0	2.9	1.10	5.6	2.7	1.23	5.2	2.6	1.43	4.4	2.2	1.39
		27	16	5.1	5.7	0.95	4.9	5.5	1.08	4.5	5.0	1.21	4.2	4.7	1.40	3.5	3.9	1.35
			19	5.7	4.7	0.96	5.4	4.6	1.09	5.0	4.3	1.22	4.6	4.1	1.42	3.9	3.9	1.38
			22	6.4	3.7	0.97	6.0	3.5	1.10	5.6	3.3	1.23	5.2	3.2	1.43	4.4	2.9	1.39
		29	16	5.1	5.7	0.95	4.9	5.5	1.08	4.5	5.0	1.21	4.2	4.7	1.40	3.5	3.9	1.35
			19	5.7	5.4	0.96	5.4	5.2	1.09	5.0	5.1	1.22	4.6	4.8	1.42	3.9	4.3	1.38
			22	6.4	4.3	0.97	6.0	4.1	1.10	5.6	4.0	1.23	5.2	3.9	1.43	4.4	3.5	1.39
		32	16	5.1	5.7	0.95	4.9	5.5	1.08	4.5	5.0	1.21	4.2	4.7	1.40	3.5	3.9	1.35
			19	5.7	6.4	0.96	5.4	6.0	1.09	5.0	5.6	1.22	4.6	5.1	1.42	3.9	4.3	1.38
			22	6.4	5.4	0.97	6.0	5.1	1.10	5.6	5.0	1.23	5.2	4.8	1.43	4.4	4.5	1.39

			Outdoor air intake temp (°C D.B.)															
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			52°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
(U-71PZH4E8) (U-71PZH4E5 (S-2545PK4E(36)) X 2	220V-230V- 240V 50Hz 1phase (380V-400V- 415V 50Hz 3phase)	23	16	8.4	6.5	2.66	8.1	6.4	2.89	7.9	6.3	3.11	7.1	5.9	2.88	1.5	1.5	0.715
			19	9.0	4.9	2.78	8.7	4.7	3.01	8.4	4.5	3.24	7.5	4.3	3.00	1.6	1.6	0.745
			22	9.9	3.3	2.88	9.5	3.2	3.11	9.2	3.1	3.35	8.3	2.7	3.11	1.8	0.8	0.771
		25	16	8.7	7.7	2.71	8.4	7.5	2.93	8.1	7.4	3.16	7.3	7.0	2.93	1.6	1.6	0.727
			19	9.3	6.0	2.83	9.0	5.8	3.06	8.7	5.7	3.30	7.8	5.3	3.05	1.7	1.7	0.758
			22	10.2	4.4	2.92	9.9	4.3	3.17	9.5	4.2	3.41	8.6	3.8	3.16	1.8	1.5	0.784
		27	16	9.0	8.8	2.75	8.7	8.6	2.98	8.4	8.4	3.21	7.6	7.6	2.98	1.6	1.6	0.739
			19	9.6	7.1	2.87	9.3	6.9	3.11	9.0	6.8	3.35	8.1	6.4	3.11	1.7	1.7	0.771
			22	10.6	5.5	2.97	10.2	5.4	3.22	9.9	5.2	3.47	8.9	4.9	3.21	1.9	1.9	0.797
		29	16	9.2	9.2	2.76	8.9	8.9	2.99	8.6	8.6	3.22	7.7	7.7	2.98	1.7	1.7	0.740
			19	9.8	8.1	2.88	9.5	7.9	3.12	9.1	7.8	3.36	8.2	7.4	3.11	1.8	1.8	0.772
			22	10.7	6.5	2.98	10.4	6.4	3.23	10.0	6.2	3.47	9.0	5.8	3.22	1.9	1.9	0.799
		32	16	9.3	9.3	2.77	9.0	9.0	3.00	8.7	8.7	3.23	7.8	7.8	2.99	1.7	1.7	0.742
			19	9.9	9.6	2.89	9.6	9.4	3.13	9.3	9.3	3.37	8.3	8.3	3.12	1.8	1.8	0.774
			22	10.9	8.0	2.99	10.5	7.9	3.24	10.2	7.7	3.48	9.1	7.3	3.23	2.0	2.0	0.801
(U-100PZH4E8) (U-100PZH4E5 (S-5010PK4E(50)) X 2	220V-230V- 240V 50Hz 1phase (380V-400V- 415V 50Hz 3phase)	23	16	9.5	7.1	2.87	9.4	7.0	3.01	9.2	6.9	3.15	8.1	6.5	2.97	1.3	1.3	0.909
			19	10.1	5.4	2.99	10.0	5.3	3.14	9.8	5.3	3.29	8.7	4.8	3.09	1.5	1.5	0.946
			22	11.1	3.8	3.10	11.0	3.6	3.24	10.8	3.6	3.40	9.6	3.2	3.20	1.6	0.5	0.983
		25	16	9.8	8.3	2.91	9.7	8.1	3.06	9.5	8.1	3.21	8.5	7.6	3.01	1.4	1.4	0.928
			19	10.5	6.5	3.04	10.3	6.6	3.19	10.2	6.3	3.34	9.1	6.0	3.14	1.5	1.5	0.965
			22	11.4	4.8	3.14	11.3	4.9	3.30	11.1	4.8	3.46	9.9	4.2	3.25	1.7	1.7	0.992
		27	16	10.2	9.4	2.96	10.1	9.3	3.12	9.8	9.2	3.26	8.7	8.7	3.06	1.5	1.5	0.937
			19	10.8	7.6	3.09	10.8	7.6	3.24	10.5	7.5	3.40	9.3	7.1	3.20	1.6	1.6	0.983
			22	11.8	6.0	3.20	11.8	5.9	3.35	11.5	5.8	3.52	10.2	5.5	3.31	1.8	1.8	1.01
		29	16	10.2	10.2	2.97	10.2	10.2	3.12	10.0	10.0	3.27	8.9	8.9	3.07	1.5	1.5	0.937
			19	11.0	8.7	3.10	10.9	8.7	3.25	10.7	8.6	3.41	9.5	8.0	3.21	1.6	1.6	0.983
			22	12.0	7.1	3.21	11.9	7.0	3.36	11.7	6.9	3.53	10.4	6.5	3.32	1.8	1.8	1.02
		32	16	10.4	10.4	2.98	10.3	10.3	3.12	10.2	10.2	3.27	9.0	9.0	3.08	1.5	1.5	0.946
			19	11.2	10.3	3.11	11.0	10.3	3.26	10.8	10.1	3.42	9.7	9.6	3.21	1.6	1.6	0.983
			22	12.2	8.6	3.22	12.1	8.7	3.37	11.8	8.5	3.54	10.6	8.0	3.33	1.8	1.8	1.02
(U-125PZH4E8) (U-125PZH4E5 (S-5010PK4E(60)) X 2	220V-230V- 240V 50Hz 1phase (380V-400V- 415V 50Hz 3phase)	23	16	12.6	9.4	3.96	12.5	9.3	4.16	12.3	9.2	4.36	10.9	8.6	4.10	1.8	1.8	1.26
			19	13.5	7.2	4.13	13.4	7.0	4.34	13.0	7.0	4.55	11.6	6.4	4.27	1.9	1.9	1.31
			22	14.8	5.1	4.28	14.6	4.9	4.49	14.4	4.9	4.70	12.8	4.2	4.42	2.2	0.9	1.36
		25	16	13.0	10.9	4.03	13.0	10.8	4.23	12.7	10.7	4.43	11.3	10.0	4.17	1.9	1.9	1.28
			19	13.9	8.7	4.20	13.8	8.7	4.41	13.6	8.4	4.62	12.1	7.7	4.35	2.0	2.0	1.33
			22	15.3	6.4	4.35	15.1	6.5	4.57	14.9	6.2	4.78	13.2	5.8	4.50	2.2	2.0	1.38
		27	16	13.5	12.4	4.10	13.4	12.3	4.30	13.1	12.2	4.51	11.6	11.5	4.24	1.9	1.9	1.30
			19	14.4	10.1	4.27	14.3	10.0	4.49	14.0	9.9	4.70	12.5	9.2	4.42	2.1	2.1	1.35
			22	15.8	8.0	4.42	15.7	7.9	4.64	15.3	7.7	4.86	13.7	7.1	4.57	2.3	2.3	1.40
		29	16	13.7	13.7	4.11	13.6	13.6	4.31	13.3	13.3	4.52	11.8	11.8	4.25	2.0	2.0	1.30
			19	14.6	11.5	4.28	14.5	11.4	4.50	14.2	11.4	4.71	12.7	10.6	4.43	2.1	2.1	1.36
			22	16.0	9.3	4.43	15.9	9.3	4.65	15.6	9.2	4.87	13.8	8.4	4.58	2.4	2.4	1.40
		32	16	13.9	13.9	4.12	13.8	13.8	4.32	13.5	13.5	4.53	12.0	12.0	4.26	2.0	2.0	1.30
			19	14.9	13.5	4.29	14.7	13.5	4.51	14.4	13.3	4.72	12.9	12.6	4.44	2.2	2.2	1.36
			22	16.3	11.4	4.44	16.1	11.3	4.66	15.8	11.1	4.89	14.1	10.4	4.59	2.4	2.4	1.41

			Outdoor air intake temp (°C D.B.)															
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			52°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
(U-140PZH4E8) (U-140PZH4E5 (S-5010PK4E(71)) X 2	220V-230V- 240V 50Hz 1phase (380V-400V- 415V 50Hz 3phase)	23	16	14.4	10.7	5.06	14.3	10.6	5.31	14.0	10.6	5.56	12.5	9.8	5.23	2.1	2.1	1.60
			19	15.4	8.2	5.28	15.3	8.0	5.54	14.9	8.0	5.80	13.3	7.3	5.46	2.2	2.2	1.67
			22	16.9	5.8	5.46	16.7	5.6	5.73	16.4	5.6	6.00	14.6	4.8	5.64	2.5	1.0	1.73
		25	16	14.9	12.5	5.14	14.8	12.3	5.40	14.5	12.2	5.66	12.9	11.4	5.32	2.2	2.2	1.63
			19	15.9	9.9	5.36	15.8	9.9	5.63	15.5	9.6	5.90	13.8	8.8	5.55	2.3	2.3	1.70
			22	17.5	7.3	5.55	17.3	7.4	5.83	17.0	7.1	6.11	15.1	6.6	5.74	2.5	2.3	1.76
		27	16	15.4	14.3	5.23	15.3	14.1	5.49	15.0	13.9	5.75	13.3	13.1	5.41	2.2	2.2	1.66
			19	16.5	11.6	5.45	16.3	11.4	5.73	16.0	11.3	6.00	14.3	10.5	5.64	2.4	2.4	1.73
			22	18.1	9.1	5.64	17.9	9.0	5.92	17.5	8.8	6.21	15.6	8.1	5.83	2.6	2.6	1.79
		29	16	15.7	15.7	5.24	15.5	15.5	5.50	15.2	15.2	5.77	13.5	13.5	5.42	2.3	2.3	1.66
			19	16.7	13.1	5.47	16.6	13.0	5.74	16.2	13.0	6.01	14.5	12.2	5.65	2.4	2.4	1.73
			22	18.3	10.6	5.66	18.2	10.6	5.94	17.8	10.5	6.22	15.8	9.6	5.85	2.7	2.7	1.79
		32	16	15.9	15.9	5.25	15.8	15.8	5.52	15.4	15.4	5.78	13.7	13.7	5.43	2.3	2.3	1.67
			19	17.0	15.6	5.48	16.8	15.4	5.76	16.5	15.2	6.03	14.7	14.4	5.67	2.5	2.5	1.74
			22	18.6	13.1	5.67	18.4	12.9	5.95	18.1	12.7	6.24	16.1	11.9	5.86	2.7	2.7	1.80
(U-71PZH4E8) (U-71PZH4E5 (S-2545PK4E(25)) X 3	220V-230V- 240V 50Hz 1phase (380V-400V- 415V 50Hz 3phase)	23	16	8.4	7.2	2.66	8.1	7.0	2.89	7.9	6.9	3.11	7.1	6.5	2.88	1.5	1.7	0.715
			19	9.0	5.4	2.78	8.7	5.2	3.01	8.4	5.0	3.24	7.5	4.7	3.00	1.6	1.8	0.745
			22	9.9	3.6	2.88	9.5	3.5	3.11	9.2	3.4	3.35	8.3	3.0	3.11	1.8	0.9	0.771
		25	16	8.7	8.5	2.71	8.4	8.3	2.93	8.1	8.1	3.16	7.3	7.7	2.93	1.6	1.8	0.727
			19	9.3	6.6	2.83	9.0	6.4	3.06	8.7	6.3	3.30	7.8	5.8	3.05	1.7	1.9	0.758
			22	10.2	4.8	2.92	9.9	4.7	3.17	9.5	4.6	3.41	8.6	4.2	3.16	1.8	1.7	0.784
		27	16	9.0	9.7	2.75	8.7	9.5	2.98	8.4	9.2	3.21	7.6	8.4	2.98	1.6	1.8	0.739
			19	9.6	7.8	2.87	9.3	7.6	3.11	9.0	7.5	3.35	8.1	7.0	3.11	1.7	1.9	0.771
			22	10.6	6.1	2.97	10.2	5.9	3.22	9.9	5.7	3.47	8.9	5.4	3.21	1.9	2.1	0.797
		29	16	9.2	10.1	2.76	8.9	9.8	2.99	8.6	9.5	3.22	7.7	8.5	2.98	1.7	1.9	0.740
			19	9.8	8.9	2.88	9.5	8.7	3.12	9.1	8.6	3.36	8.2	8.1	3.11	1.8	2.0	0.772
			22	10.7	7.2	2.98	10.4	7.0	3.23	10.0	6.8	3.47	9.0	6.4	3.22	1.9	2.1	0.799
		32	16	9.3	10.2	2.77	9.0	9.9	3.00	8.7	9.6	3.23	7.8	8.6	2.99	1.7	1.9	0.742
			19	9.9	10.6	2.89	9.6	10.4	3.13	9.3	10.2	3.37	8.3	9.1	3.12	1.8	2.0	0.774
			22	10.9	8.8	2.99	10.5	8.7	3.24	10.2	8.5	3.48	9.1	8.0	3.23	2.0	2.2	0.801
(U-100PZH4E8) (U-100PZH4E5 (S-2545PK4E(36)) X 3	220V-230V- 240V 50Hz 1phase (380V-400V- 415V 50Hz 3phase)	23	16	9.5	7.6	2.87	9.4	7.6	3.01	9.2	7.6	3.15	8.1	7.1	2.97	1.3	1.3	0.909
			19	10.1	5.6	2.99	10.0	5.6	3.14	9.8	5.5	3.29	8.7	5.0	3.09	1.5	1.5	0.946
			22	11.1	3.7	3.10	11.0	3.7	3.24	10.8	3.5	3.40	9.6	3.2	3.20	1.6	0.5	0.983
		25	16	9.8	9.1	2.91	9.7	9.0	3.06	9.5	8.9	3.21	8.5	8.5	3.01	1.4	1.4	0.928
			19	10.5	7.0	3.04	10.3	7.0	3.19	10.2	6.9	3.34	9.1	6.4	3.14	1.5	1.5	0.965
			22	11.4	5.0	3.14	11.3	5.0	3.30	11.1	5.0	3.46	9.9	4.5	3.25	1.7	1.7	0.992
		27	16	10.2	10.2	2.96	10.1	10.1	3.12	9.8	9.8	3.26	8.7	8.7	3.06	1.5	1.5	0.937
			19	10.8	8.3	3.09	10.8	8.3	3.24	10.5	8.2	3.40	9.3	7.7	3.20	1.6	1.6	0.983
			22	11.8	6.4	3.20	11.8	6.4	3.35	11.5	6.2	3.52	10.2	5.8	3.31	1.8	1.8	1.01
		29	16	10.2	10.2	2.97	10.2	10.2	3.12	10.0	10.0	3.27	8.9	8.9	3.07	1.5	1.5	0.937
			19	11.0	9.6	3.10	10.9	9.6	3.25	10.7	9.5	3.41	9.5	9.0	3.21	1.6	1.6	0.983
			22	12.0	7.6	3.21	11.9	7.6	3.36	11.7	7.5	3.53	10.4	7.1	3.32	1.8	1.8	1.02
		32	16	10.4	10.4	2.98	10.3	10.3	3.12	10.2	10.2	3.27	9.0	9.0	3.08	1.5	1.5	0.946
			19	11.2	11.2	3.11	11.0	11.0	3.26	10.8	10.8	3.42	9.7	9.7	3.21	1.6	1.6	0.983
			22	12.2	9.5	3.22	12.1	9.5	3.37	11.8	9.3	3.54	10.6	8.9	3.33	1.8	1.8	1.02

			Outdoor air intake temp (°C D.B.)															
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			52°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
(U-125PZH4E8) (U-125PZH4E5 (S-2545PK4E(45)) X 3	220V-230V- 240V 50Hz 1phase (380V-400V- 415V 50Hz 3phase)	23	16	12.6	10.1	4.51	12.5	10.2	4.74	12.2	9.9	4.96	10.9	9.5	4.67	1.8	1.8	1.43
			19	13.5	7.5	4.70	13.4	7.5	4.94	13.1	7.2	5.18	11.6	6.8	4.86	2.0	2.0	1.49
			22	14.8	5.0	4.87	14.6	4.9	5.11	14.3	4.8	5.35	12.8	4.1	5.03	2.1	0.7	1.55
		25	16	13.1	12.1	4.59	12.9	11.9	4.82	12.7	11.9	5.04	11.3	11.3	4.75	1.9	1.9	1.46
			19	14.0	9.2	4.78	13.8	9.3	5.02	13.5	9.0	5.26	12.1	8.6	4.95	2.0	2.0	1.51
			22	15.3	6.7	4.95	15.2	6.7	5.20	14.8	6.6	5.44	13.2	6.0	5.12	2.2	2.2	1.57
		27	16	13.5	13.5	4.67	13.4	13.4	4.89	13.1	13.1	5.13	11.7	11.7	4.83	2.0	2.0	1.48
			19	14.4	11.1	4.86	14.3	10.9	5.11	14.0	10.8	5.35	12.5	10.2	5.03	2.1	2.1	1.54
			22	15.8	8.5	5.03	15.7	8.5	5.28	15.3	8.3	5.53	13.7	7.7	5.20	2.3	2.3	1.59
		29	16	13.7	13.7	4.68	13.6	13.6	4.91	13.3	13.3	5.15	11.8	11.8	4.84	2.0	2.0	1.48
			19	14.6	12.7	4.87	14.5	12.8	5.12	14.2	12.6	5.36	12.7	12.0	5.04	2.1	2.1	1.55
			22	16.0	10.2	5.04	15.9	10.0	5.29	15.6	9.9	5.54	13.9	9.2	5.21	2.3	2.3	1.59
		32	16	13.9	13.9	4.69	13.8	13.8	4.92	13.5	13.5	5.16	12.0	12.0	4.85	2.0	2.0	1.48
			19	14.9	14.9	4.88	14.7	14.7	5.13	14.4	14.4	5.37	12.8	12.8	5.05	2.2	2.2	1.55
			22	16.3	12.5	5.05	16.1	12.6	5.30	15.8	12.5	5.57	14.1	11.8	5.22	2.4	2.4	1.61
(U-140PZH4E8) (U-140PZH4E5 (S-2545PK4E(50)) X 3	220V-230V- 240V 50Hz 1phase (380V-400V- 415V 50Hz 3phase)	23	16	14.4	11.5	5.06	14.3	11.5	5.31	14.0	11.3	5.56	12.5	10.7	5.23	2.1	2.1	1.60
			19	15.4	8.5	5.28	15.3	8.4	5.54	14.9	8.3	5.80	13.3	7.7	5.46	2.2	2.2	1.67
			22	16.9	5.7	5.46	16.7	5.6	5.73	16.4	5.5	6.00	14.6	4.8	5.64	2.5	0.9	1.73
		25	16	14.9	13.5	5.14	14.8	13.5	5.40	14.5	13.3	5.66	12.9	12.6	5.32	2.2	2.2	1.63
			19	15.9	10.5	5.36	15.8	10.4	5.63	15.5	10.3	5.90	13.8	9.6	5.55	2.3	2.3	1.70
			22	17.5	7.6	5.55	17.3	7.6	5.83	17.0	7.4	6.11	15.1	6.8	5.74	2.5	2.5	1.76
		27	16	15.4	15.4	5.23	15.3	15.3	5.49	15.0	15.0	5.75	13.3	13.3	5.41	2.2	2.2	1.66
			19	16.5	12.5	5.45	16.3	12.4	5.73	16.0	12.3	6.00	14.3	11.6	5.64	2.4	2.4	1.73
			22	18.1	9.6	5.64	17.9	9.5	5.92	17.5	9.4	6.21	15.6	8.7	5.83	2.6	2.6	1.79
		29	16	15.7	15.7	5.24	15.5	15.5	5.50	15.2	15.2	5.77	13.5	13.5	5.42	2.3	2.3	1.66
			19	16.7	14.4	5.47	16.6	14.3	5.74	16.2	14.1	6.01	14.5	13.4	5.65	2.4	2.4	1.73
			22	18.3	11.4	5.66	18.2	11.4	5.94	17.8	11.3	6.22	15.8	10.5	5.85	2.7	2.7	1.79
		32	16	15.9	15.9	5.25	15.8	15.8	5.52	15.4	15.4	5.78	13.7	13.7	5.43	2.3	2.3	1.67
			19	17.0	17.0	5.48	16.8	16.8	5.76	16.5	16.5	6.03	14.7	14.7	5.67	2.5	2.5	1.74
			22	18.6	14.2	5.67	18.4	14.1	5.95	18.1	14.0	6.24	16.1	13.3	5.86	2.7	2.7	1.80
(U-100PZH4E8) (U-100PZH4E5 (S-2545PK4E(25)) X 4	220V-230V- 240V 50Hz 1phase (380V-400V- 415V 50Hz 3phase)	23	16	9.5	8.5	2.87	9.4	8.5	3.01	9.2	8.4	3.15	8.1	7.9	2.97	1.3	1.5	0.909
			19	10.1	6.3	2.99	10.0	6.3	3.14	9.8	6.2	3.29	8.7	5.6	3.09	1.5	1.7	0.946
			22	11.1	4.1	3.10	11.0	4.1	3.24	10.8	3.9	3.40	9.6	3.5	3.20	1.6	0.6	0.983
		25	16	9.8	10.1	2.91	9.7	10.0	3.06	9.5	9.9	3.21	8.5	9.4	3.01	1.4	1.6	0.928
			19	10.5	7.7	3.04	10.3	7.7	3.19	10.2	7.7	3.34	9.1	7.1	3.14	1.5	1.7	0.965
			22	11.4	5.6	3.14	11.3	5.6	3.30	11.1	5.5	3.46	9.9	4.9	3.25	1.7	1.9	0.992
		27	16	10.2	11.3	2.96	10.1	11.2	3.12	9.8	10.9	3.26	8.7	9.7	3.06	1.5	1.7	0.937
			19	10.8	9.2	3.09	10.8	9.2	3.24	10.5	9.1	3.40	9.3	8.6	3.20	1.6	1.8	0.983
			22	11.8	7.1	3.20	11.8	7.1	3.35	11.5	6.9	3.52	10.2	6.4	3.31	1.8	2.0	1.01
		29	16	10.2	11.4	2.97	10.2	11.3	3.12	10.0	11.1	3.27	8.9	9.9	3.07	1.5	1.7	0.937
			19	11.0	10.6	3.10	10.9	10.6	3.25	10.7	10.5	3.41	9.5	10.0	3.21	1.6	1.8	0.983
			22	12.0	8.5	3.21	11.9	8.4	3.36	11.7	8.3	3.53	10.4	7.8	3.32	1.8	2.0	1.02
		32	16	10.4	11.6	2.98	10.3	11.5	3.12	10.2	11.3	3.27	9.0	10.0	3.08	1.5	1.7	0.946
			19	11.2	12.4	3.11	11.0	12.2	3.26	10.8	12.0	3.42	9.7	10.7	3.21	1.6	1.8	0.983
			22	12.2	10.5	3.22	12.1	10.5	3.37	11.8	10.4	3.54	10.6	9.9	3.33	1.8	2.0	1.02

				Outdoor air intake temp (°C D.B.)														
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			52°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
(U-125PZH4E8) U-125PZH4E5 (S-2545PK4E(36)) X 4	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	23	16	12.6	11.1	3.96	12.5	11.1	4.16	12.2	11.0	4.36	10.9	10.4	4.10	1.8	1.8	1.26
			19	13.5	7.9	4.13	13.4	7.9	4.34	13.1	7.8	4.55	11.6	7.2	4.27	2.0	2.0	1.31
			22	14.8	4.9	4.28	14.6	4.9	4.49	14.3	4.8	4.70	12.8	4.2	4.42	2.1	0.6	1.36
		25	16	13.1	13.1	4.03	12.9	12.9	4.23	12.7	12.7	4.43	11.3	11.3	4.17	1.9	1.9	1.28
			19	14.0	10.0	4.20	13.8	9.9	4.41	13.5	9.8	4.62	12.1	9.3	4.35	2.0	2.0	1.33
			22	15.3	7.0	4.35	15.2	6.9	4.57	14.8	6.8	4.78	13.2	6.2	4.50	2.2	2.2	1.38
		27	16	13.5	13.5	4.10	13.4	13.4	4.30	13.1	13.1	4.51	11.7	11.7	4.24	2.0	2.0	1.30
			19	14.4	12.1	4.27	14.3	12.1	4.49	14.0	12.0	4.70	12.5	11.3	4.42	2.1	2.1	1.35
			22	15.8	9.0	4.42	15.7	9.0	4.64	15.3	8.9	4.86	13.7	8.3	4.57	2.3	2.3	1.40
		29	16	13.7	13.7	4.11	13.6	13.6	4.31	13.3	13.3	4.52	11.8	11.8	4.25	2.0	2.0	1.30
			19	14.6	14.1	4.28	14.5	14.1	4.50	14.2	14.0	4.71	12.7	12.7	4.43	2.1	2.1	1.36
			22	16.0	11.0	4.43	15.9	10.9	4.65	15.6	10.8	4.87	13.9	10.3	4.58	2.3	2.3	1.40
		32	16	13.9	13.9	4.12	13.8	13.8	4.32	13.5	13.5	4.53	12.0	12.0	4.26	2.0	2.0	1.30
			19	14.9	14.9	4.29	14.7	14.7	4.51	14.4	14.4	4.72	12.8	12.8	4.44	2.2	2.2	1.36
			22	16.3	13.9	4.44	16.1	13.9	4.66	15.8	13.7	4.89	14.1	13.1	4.59	2.4	2.4	1.41

				Outdoor air intake temp (°C D.B.)																	
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			46°C			52°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
U-200PZH4E8 (S-5010PK4E(100)) X 2	230V-240V 50Hz 1phase 400V-415V 50Hz 3phase	23	16	20.1	15.0	6.7	19.8	12.6	7.5	18.4	12.1	7.4	15.1	9.0	6.8	11.3	7.8	6.2	5.6	2.5	2.5
			19	21.7	11.1	6.9	21.4	8.6	7.7	20.0	8.1	7.5	16.7	5.9	6.9	12.9	5.2	6.3	6.0	1.7	2.6
			22	23.3	7.0	7.0	23.0	4.5	7.8	21.6	4.1	7.7	18.3	2.8	7.1	14.5	2.4	6.5	6.4	0.9	2.6
		25	16	20.1	17.7	6.7	19.8	17.6	7.5	18.4	16.9	7.4	15.1	12.5	6.8	11.3	10.6	6.2	5.6	3.4	2.5
			19	21.7	13.5	6.9	21.4	13.4	7.7	20.0	12.9	7.5	16.7	9.7	6.9	12.9	8.9	6.3	6.0	2.6	2.6
			22	23.3	9.4	7.0	23.0	9.3	7.8	21.6	8.9	7.7	18.3	6.7	7.1	14.5	6.1	6.5	6.4	1.8	2.6
		27	16	20.9	19.1	6.7	19.8	18.8	7.5	18.4	17.5	7.4	15.1	12.5	6.8	11.3	10.6	6.2	5.6	3.6	2.5
			19	22.5	16.0	6.9	21.4	15.9	7.7	20.0	15.3	7.5	16.7	11.4	6.9	12.9	10.7	6.3	6.0	3.1	2.6
			22	24.1	11.8	7.0	23.0	11.7	7.8	21.6	11.2	7.7	18.3	8.4	7.1	14.5	7.9	6.5	6.4	2.3	2.6
		29	16	20.1	19.1	6.7	19.8	18.8	7.5	18.4	17.5	7.4	15.1	12.5	6.8	11.3	10.6	6.2	5.6	3.6	2.5
			19	21.7	18.4	6.9	21.4	18.3	7.7	20.0	17.8	7.5	16.7	13.5	6.9	12.9	12.2	6.3	6.0	3.6	2.6
			22	23.3	14.2	7.0	23.0	14.1	7.8	21.6	13.7	7.7	18.3	10.5	7.1	14.5	9.8	6.5	6.4	2.8	2.6
		32	16	20.1	19.1	6.7	19.8	18.8	7.5	18.4	17.5	7.4	15.1	12.5	6.8	11.3	10.6	6.2	5.6	3.6	2.5
			19	21.7	20.6	6.9	21.4	20.3	7.7	20.0	19.0	7.5	16.7	13.7	6.9	12.9	12.2	6.3	6.0	3.9	2.6
			22	23.3	17.8	7.0	23.0	17.7	7.8	21.6	17.0	7.7	18.3	13.5	7.1	14.5	12.6	6.5	6.4	3.4	2.6
U-200PZH4E8 (S-5010PK4E(71)) X 3	230V-240V 50Hz 1phase 400V-415V 50Hz 3phase	23	16	20.1	15.0	6.7	19.8	12.6	7.5	18.4	12.1	7.4	15.1	9.0	6.8	11.3	7.8	6.2	5.6	2.5	2.5
			19	21.7	11.1	6.9	21.4	8.6	7.7	20.0	8.1	7.5	16.7	5.9	6.9	12.9	5.2	6.3	6.0	1.7	2.6
			22	23.3	7.0	7.0	23.0	4.5	7.8	21.6	4.1	7.7	18.3	2.8	7.1	14.5	2.4	6.5	6.4	0.9	2.6
		25	16	20.1	17.7	6.7	19.8	17.6	7.5	18.4	16.9	7.4	15.1	12.5	6.8	11.3	10.6	6.2	5.6	3.4	2.5
			19	21.7	13.5	6.9	21.4	13.4	7.7	20.0	12.9	7.5	16.7	9.7	6.9	12.9	8.9	6.3	6.0	2.6	2.6
			22	23.3	9.4	7.0	23.0	9.3	7.8	21.6	8.9	7.7	18.3	6.7	7.1	14.5	6.1	6.5	6.4	1.8	2.6
		27	16	20.9	19.1	6.7	19.8	18.8	7.5	18.4	17.5	7.4	15.1	12.5	6.8	11.3	10.6	6.2	5.6	3.6	2.5
			19	22.5	16.0	6.9	21.4	15.9	7.7	20.0	15.3	7.5	16.7	11.4	6.9	12.9	10.7	6.3	6.0	3.1	2.6
			22	24.1	11.8	7.0	23.0	11.7	7.8	21.6	11.2	7.7	18.3	8.4	7.1	14.5	7.9	6.5	6.4	2.3	2.6
		29	16	20.1	19.1	6.7	19.8	18.8	7.5	18.4	17.5	7.4	15.1	12.5	6.8	11.3	10.6	6.2	5.6	3.6	2.5
			19	21.7	18.4	6.9	21.4	18.3	7.7	20.0	17.8	7.5	16.7	13.5	6.9	12.9	12.2	6.3	6.0	3.6	2.6
			22	23.3	14.2	7.0	23.0	14.1	7.8	21.6	13.7	7.7	18.3	10.5	7.1	14.5	9.8	6.5	6.4	2.8	2.6
		32	16	20.1	19.1	6.7	19.8	18.8	7.5	18.4	17.5	7.4	15.1	12.5	6.8	11.3	10.6	6.2	5.6	3.6	2.5
			19	21.7	20.6	6.9	21.4	20.3	7.7	20.0	19.0	7.5	16.7	13.7	6.9	12.9	12.2	6.3	6.0	3.9	2.6
			22	23.3	17.8	7.0	23.0	17.7	7.8	21.6	17.0	7.7	18.3	13.5	7.1	14.5	12.6	6.5	6.4	3.4	2.6
U-200PZH4E8 (S-5010PK4E(50)) X 4	230V-240V 50Hz 1phase 400V-415V 50Hz 3phase	23	16	20.1	15.0	6.5	19.8	12.6	7.2	18.4	12.1	7.1	15.1	9.0	6.5	11.3	7.8	5.9	5.6	2.5	2.4
			19	21.7	11.1	6.6	21.4	8.6	7.3	20.0	8.1	7.2	16.7	5.9	6.6	12.9	5.2	6.0	6.0	1.7	2.4
			22	23.3	7.0	6.8	23.0	4.5	7.5	21.6	4.1	7.3	18.3	2.8	6.8	14.5	2.4	6.2	6.4	0.9	2.4
		25	16	20.1	17.7	6.5	19.8	17.6	7.2	18.4	16.9	7.1	15.1	12.5	6.5	11.3	10.6	5.9	5.6	3.4	2.4
			19	21.7	13.5	6.6	21.4	13.4	7.3	20.0	12.9	7.2	16.7	9.7	6.6	12.9	8.9	6.0	6.0	2.6	2.4
			22	23.3	9.4	6.8	23.0	9.3	7.5	21.6	8.9	7.3	18.3	6.7	6.8	14.5	6.1	6.2	6.4	1.8	2.4
		27	16	20.9	19.1	6.5	19.8	18.8	7.2	18.4	17.5	7.1	15.1	12.5	6.5	11.3	10.6	5.9	5.6	3.6	2.4
			19	22.5	16.0	6.6	21.4	15.9	7.3	20.0	15.3	7.2	16.7	11.4	6.6	12.9	10.7	6.0	6.0	3.1	2.4
			22	24.1	11.8	6.8	23.0	11.7	7.5	21.6	11.2	7.3	18.3	8.4	6.8	14.5	7.9	6.2	6.4	2.3	2.4
		29	16	20.1	19.1	6.5	19.8	18.8	7.2	18.4	17.5	7.1	15.1	12.5	6.5	11.3	10.6	5.9	5.6	3.6	2.4
			19	21.7	18.4	6.6	21.4	18.3	7.3	20.0	17.8	7.2	16.7	13.5	6.6	12.9	12.2	6.0	6.0	3.6	2.4
			22	23.3	14.2	6.8	23.0	14.1	7.5	21.6	13.7	7.3	18.3	10.5	6.8	14.5	9.8	6.2	6.4	2.8	2.4
		32	16	20.1	19.1	6.5	19.8	18.8	7.2	18.4	17.5	7.1	15.1	12.5	6.5	11.3	10.6	5.9	5.6	3.6	2.4
			19	21.7	20.6	6.6	21.4	20.3	7.3	20.0	19.0	7.2	16.7	13.7	6.6	12.9	12.2	6.0	6.0	3.9	2.4
			22	23.3	17.8	6.8	23.0	17.7	7.5	21.6	17.0	7.3	18.3	13.5	6.8	14.5	12.6	6.2	6.4	3.4	2.4

				Outdoor air intake temp (°C D.B.)																	
Model	Power Source	Ambient Return Air		25°C			30°C			35°C			40°C			46°C			52°C		
		DB	WB	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT	TC	SHC	IPT
U-250PZH4E8 (S-5010PK4E(60)) X 4	230V-240V 50Hz 1phase 400V-415V 50Hz 3phase	23	16	25.8	20.2	9.3	25.3	17.0	10.3	23.6	16.3	10.1	19.3	12.1	9.3	14.5	10.6	8.4	7.2	3.3	3.4
			19	27.8	15.0	9.5	27.4	11.5	10.5	25.6	10.9	10.3	21.3	7.9	9.5	16.5	7.0	8.7	7.7	2.3	3.5
			22	29.8	9.5	9.7	29.4	6.1	10.7	27.6	5.5	10.5	23.4	3.8	9.7	18.6	3.3	8.9	8.2	1.2	3.5
		25	16	25.8	23.8	9.3	25.3	23.6	10.3	23.6	22.8	10.1	19.3	16.9	9.3	14.5	14.3	8.4	7.2	4.6	3.4
			19	27.8	18.2	9.5	27.4	18.1	10.5	25.6	17.4	10.3	21.3	13.0	9.5	16.5	12.0	8.7	7.7	3.5	3.5
			22	29.8	12.7	9.7	29.4	12.5	10.7	27.6	11.9	10.5	23.4	9.0	9.7	18.6	8.2	8.9	8.2	2.4	3.5
		27	16	26.8	25.8	9.3	25.3	25.3	10.3	23.6	23.6	10.1	19.3	16.9	9.3	14.5	14.3	8.4	7.2	4.9	3.4
			19	28.8	21.5	9.5	27.4	21.4	10.5	25.6	20.6	10.3	21.3	15.4	9.5	16.5	14.4	8.7	7.7	4.1	3.5
			22	30.9	15.9	9.7	29.4	15.8	10.7	27.6	15.1	10.5	23.4	11.4	9.7	18.6	10.7	8.9	8.2	3.1	3.5
		29	16	25.8	25.8	9.3	25.3	25.3	10.3	23.6	23.6	10.1	19.3	16.9	9.3	14.5	14.3	8.4	7.2	4.9	3.4
			19	27.8	24.8	9.5	27.4	24.6	10.5	25.6	23.9	10.3	21.3	18.2	9.5	16.5	16.4	8.7	7.7	4.8	3.5
			22	29.8	19.1	9.7	29.4	19.0	10.7	27.6	18.4	10.5	23.4	14.2	9.7	18.6	13.2	8.9	8.2	3.7	3.5
		32	16	25.8	25.8	9.3	25.3	25.3	10.3	23.6	23.6	10.1	19.3	16.9	9.3	14.5	14.3	8.4	7.2	4.9	3.4
			19	27.8	27.8	9.5	27.4	27.4	10.5	25.6	25.6	10.3	21.3	18.4	9.5	16.5	16.4	8.7	7.7	5.3	3.5
			22	29.8	24.0	9.7	29.4	23.8	10.7	27.6	22.9	10.5	23.4	18.1	9.7	18.6	16.9	8.9	8.2	4.6	3.5

TC :Cooling Capacity
SHC :Sensible Heat Capacity
IPT :Cooling Power Consumption

unit : kW

3.8.2 Heating Capacity Performance Data

3.8.2.1 Wall Mounted Type

			Outdoor air intake temp (°C W.B.)									
Model	Power Source	Ambient Return Air	-16°C		-8°C		6°C		10°C		15°C	
		DB	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT
S-2545PKE (S-2545PKE(25)) U-25PZ3E5	220V-230V-240V 50Hz 1phase	16	2.6	1.00	3.3	1.08	4.7	1.22	5.1	1.28	5.6	1.35
		20	2.5	1.07	3.2	1.14	4.6	1.30	5.0	1.35	5.6	1.43
		24	2.5	1.13	3.2	1.22	4.5	1.38	4.9	1.44	5.5	1.52
S-2545PKE (S-2545PKE(36)) U-36PZ3E5	220V-230V-240V 50Hz 1phase	16	2.6	1.00	3.3	1.08	4.7	1.22	5.1	1.28	5.6	1.35
		20	2.5	1.07	3.2	1.14	4.6	1.30	5.0	1.35	5.6	1.43
		24	2.5	1.13	3.2	1.22	4.5	1.38	4.9	1.44	5.5	1.52
S-5010PKE (S-5010PKE(50)) U-50PZ3E5	220V-230V-240V 50Hz 1phase	16	3.7	1.48	4.7	1.65	6.5	1.90	7.0	2.01	7.7	2.11
		20	3.6	1.58	4.6	1.76	6.4	2.02	6.9	2.13	7.6	2.25
		24	3.6	1.67	4.5	1.87	6.3	2.15	6.8	2.27	7.4	2.36
S-5010PKE (S-5010PKE(60)) U-60PZ3E5A	220V-230V-240V 50Hz 1phase	16	4.6	1.46	5.5	1.69	7.1	2.09	7.7	2.23	8.1	2.11
		20	4.6	1.54	5.4	1.78	7.0	2.20	7.6	2.35	8.0	2.11
		24	4.5	1.65	5.3	1.91	6.9	2.35	7.4	2.35	7.9	2.11
S-5010PKE (S-5010PKE(60)) U-71PZ3E5A	220V-230V-240V 50Hz 1phase	16	4.7	1.66	5.8	1.88	8.2	2.30	8.8	2.40	8.9	2.25
		20	4.7	1.78	5.8	2.02	8.1	2.40	8.7	2.50	8.8	2.25
		24	4.5	1.90	5.6	2.16	7.8	2.50	8.2	2.50	8.6	2.25
S-5010PKE (S-5010PKE(100)) U-100PZ3E5 (U-100PZ3E8)	220V-230V-240V 50Hz 1phase	16	6.0	3.21	9.5	3.50	11.3	2.79	12.0	2.84	13.5	2.79
		20	5.6	3.39	8.8	3.71	10.5	2.95	11.1	3.01	12.5	2.96
		24	5.2	3.45	8.3	3.77	9.8	3.00	10.4	3.05	11.7	3.01
	(380V-400V-415V 50Hz 3phase)											
S-5010PKE x 2 (S-5010PKE(50)) U-100PZ3E5 (U-100PZ3E8)	220V-230V-240V 50Hz 1phase	16	6.0	3.21	9.5	3.50	11.3	2.78	12.0	2.84	13.5	2.79
		20	5.6	3.40	8.8	3.71	10.5	2.95	11.2	3.00	12.5	2.96
		24	5.3	3.45	8.3	3.77	9.8	3.00	10.4	3.06	11.8	3.00
	(380V-400V-415V 50Hz 3phase)											
S-5010PKE x 2 (S-5010PKE(60)) U-125PZ3E5 (U-125PZ3E8)	220V-230V-240V 50Hz 1phase	16	10.2	5.74	15.7	6.76	16.2	4.35	17.2	4.47	19.3	4.36
		20	9.5	6.07	14.5	7.15	15.0	4.60	15.9	4.73	17.9	4.61
		24	8.8	6.17	13.6	7.27	14.0	4.67	14.9	4.81	16.8	4.69
	(380V-400V-415V 50Hz 3phase)											

			Outdoor air intake temp (°C W.B.)									
Model	Power Source	Ambient Return Air	-16°C		-8°C		6°C		10°C		15°C	
		DB	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT
S-5010PKE x 2 (S-5010PKE(71))	220V-230V-240V 50Hz 1phase	16	10.5	5.67	15.8	6.58	17.3	4.72	18.2	4.81	20.6	4.74
		20	9.8	6.00	14.7	6.97	16.0	5.00	16.8	5.09	19.1	5.01
U-140PZ3E5 (U-140PZ3E8)	(380V-400V-415V 50Hz 3phase)	24	9.1	6.10	13.7	7.08	15.0	5.08	15.7	5.18	17.9	5.09

TC :Heating Capacity
IPT :Heating Power Consumption

unit : kW

			Outdoor air intake temp (°C W.B.)									
Model	Power Source	Ambient Return Air	-21°C		-8°C		6°C		8°C		15°C	
		DB	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT
S-2545PKE (S-2545PKE(36)) U-36PZH3E5	220V-230V-240V 50Hz 1phase	16	2.5	1.01	3.9	1.17	5.1	1.44	5.7	1.54	5.8	1.44
		20	2.5	1.05	3.9	1.22	5.0	1.50	5.5	1.60	5.7	1.44
		24	2.3	1.09	3.6	1.26	4.7	1.56	5.3	1.60	5.4	1.44
S-5010PKE (S-5010PKE(50)) U-50PZH3E5	220V-230V-240V 50Hz 1phase	16	3.3	1.42	5.1	1.65	6.6	2.04	7.4	2.16	7.6	2.02
		20	3.2	1.47	5.0	1.70	6.5	2.10	7.2	2.25	7.4	2.02
		24	3.0	1.50	4.7	1.73	6.1	2.15	6.9	2.25	7.0	2.02
S-5010PKE (S-5010PKE(60)) U-60PZH3E5	220V-230V-240V 50Hz 1phase	16	4.0	1.56	6.2	1.81	8.1	2.23	9.0	2.41	9.2	2.26
		20	4.0	1.65	6.2	1.90	8.0	2.35	8.8	2.51	9.1	2.26
		24	4.0	1.76	6.1	2.04	7.9	2.51	8.5	2.51	9.0	2.26
S-2545PKE x 2 (S-2545PKE(25)) U-50PZH3E5	220V-230V-240V 50Hz 1phase	16	3.3	1.42	5.1	1.65	6.6	2.04	7.4	2.16	7.6	2.02
		20	3.2	1.47	5.0	1.70	6.5	2.10	7.2	2.25	7.4	2.02
		24	3.0	1.50	4.7	1.73	6.1	2.15	6.9	2.25	7.0	2.02

TC :Heating Capacity
IPT :Heating Power Consumption

unit : kW

			Outdoor air intake temp (°C W.B.)									
Model	Power Source	Ambient Return Air	-21°C		-8°C		6°C		9°C		15°C	
		DB	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT
S-5010PKE (S-5010PKE(71)) U-71PZH4E5 (U-71PZH4E8)	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	16	4.6	2.02	7.4	2.40	9.7	2.69	10.0	2.74	10.5	2.59
		20	4.2	2.14	6.8	2.54	9.0	2.85	9.3	2.90	9.7	2.74
		24	4.0	2.17	6.4	2.58	8.4	2.90	8.7	2.95	9.1	2.78
S-5010PKE (S-5010PKE(100)) U-100PZH4E5 (U-100PZH4E8)	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	16	6.4	2.76	9.0	3.03	12.4	3.62	13.2	3.69	14.9	3.44
		20	6.0	2.92	8.4	3.21	11.5	3.83	12.2	3.91	13.8	3.64
		24	5.6	2.96	7.8	3.27	10.8	3.89	11.4	3.97	12.9	3.69
S-2545PKE x 2 (S-5010PKE(36)) U-71PZH4E5 (U-71PZH4E8)	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	16	4.6	2.02	7.4	2.40	9.7	2.69	10.0	2.74	10.5	2.59
		20	4.2	2.14	6.8	2.54	9.0	2.85	9.3	2.90	9.7	2.74
		24	4.0	2.17	6.4	2.58	8.4	2.90	8.7	2.95	9.1	2.78
S-5010PKE x 2 (S-5010PKE(50)) U-100PZH4E5 (U-100PZH4E8)	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	16	6.4	2.75	9.0	3.04	12.4	3.62	13.2	3.69	14.9	3.44
		20	6.0	2.91	8.4	3.21	11.5	3.83	12.2	3.91	13.8	3.64
		24	5.6	2.96	7.8	3.26	10.8	3.89	11.4	3.97	12.9	3.70
S-5010PKE x 2 (S-5010PKE(60)) U-125PZH4E5 (U-125PZH4E8)	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	16	8.3	3.66	12.8	4.07	17.3	4.82	18.3	4.99	19.5	4.36
		20	7.7	3.88	11.9	4.30	16.0	5.10	17.0	5.28	18.0	4.61
		24	7.2	3.94	11.1	4.37	15.0	5.18	15.9	5.37	16.9	4.69
S-5010PKE x 2 (S-5010PKE(71)) U-140PZH4E5 (U-140PZH4E8)	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	16	8.8	4.15	14.4	4.70	19.4	5.57	20.6	5.78	21.9	5.04
		20	8.2	4.39	13.3	4.98	18.0	5.90	19.1	6.11	20.3	5.34
		24	7.7	4.46	12.5	5.06	16.9	6.00	17.9	6.21	19.0	5.42
S-2545PKE x 3 (S-2545PKE(25)) U-71PZH4E5 (U-71PZH4E8)	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	16	4.6	2.02	7.4	2.40	9.7	2.69	10.0	2.74	10.5	2.59
		20	4.2	2.14	6.8	2.54	9.0	2.85	9.3	2.90	9.7	2.74
		24	4.0	2.17	6.4	2.58	8.4	2.90	8.7	2.95	9.1	2.78

			Outdoor air intake temp (°C W.B.)									
Model	Power Source	Ambient Return Air	-21°C		-8°C		6°C		9°C		15°C	
		DB	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT
S-2545PKE x 3 (S-2545PKE(36)) U-100PZH4E5 (U-100PZH4E8)	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	16	6.4	2.75	9.0	3.04	12.4	3.62	13.2	3.69	14.9	3.44
		20	6.0	2.91	8.4	3.21	11.5	3.83	12.2	3.91	13.8	3.64
		24	5.6	2.96	7.8	3.26	10.8	3.89	11.4	3.97	12.9	3.70
S-2545PKE x 3 (S-2545PKE(45)) U-125PZH4E5 (U-125PZH4E8)	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	16	8.3	3.66	12.8	4.07	17.3	4.82	18.3	4.99	19.5	4.36
		20	7.7	3.88	11.9	4.30	16.0	5.10	17.0	5.28	18.0	4.61
		24	7.2	3.94	11.1	4.37	15.0	5.18	15.9	5.37	16.9	4.69
S-5010PKE x 3 (S-5010PKE(50)) U-140PZH4E5 (U-140PZH4E8)	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	16	8.8	4.15	14.4	4.70	19.4	5.57	20.6	5.78	21.9	5.04
		20	8.2	4.39	13.3	4.98	18.0	5.90	19.1	6.11	20.3	5.34
		24	7.7	4.46	12.5	5.06	16.9	6.00	17.9	6.21	19.0	5.42
S-2545PKE x 4 (S-2545PKE(25)) U-100PZH4E5 (U-100PZH4E8)	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	16	6.4	2.75	9.0	3.04	12.4	3.62	13.2	3.69	14.9	3.44
		20	6.0	2.91	8.4	3.21	11.5	3.83	12.2	3.91	13.8	3.64
		24	5.6	2.96	7.8	3.26	10.8	3.89	11.4	3.97	12.9	3.70
S-2545PKE x 4 (S-2545PKE(36)) U-125PZH4E5 (U-125PZH4E8)	220V-230V-240V 50Hz 1phase (380V-400V-415V 50Hz 3phase)	16	8.3	3.66	12.8	4.07	17.3	4.82	18.3	4.99	19.5	4.36
		20	7.7	3.88	11.9	4.30	16.0	5.10	17.0	5.28	18.0	4.61
		24	7.2	3.94	11.1	4.37	15.0	5.18	15.9	5.37	16.9	4.69

TC :Heating Capacity
IPT :Heating Power Consumption

unit : kW

			Outdoor air intake temp (°C W.B.)											
Model	Power Source	Ambient Return Air	-21°C		-8°C		6°C		8°C		15°C		24°C	
		DB	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT	TC	IPT
S-5010PK4E x 2 S-5010PK4E(100) U-200PZH4E8	230V-240V 50Hz 1phase 400V-415V 50Hz 3phase	16	12.8	4.43	16.9	4.80	21.0	5.23	17.4	3.52	21.2	3.57	21.1	2.12
		20	11.8	4.71	15.9	5.07	20.0	5.50	16.4	3.80	20.2	3.84	20.1	2.40
		24	10.8	4.98	14.9	5.35	19.0	5.78	15.4	4.07	19.2	4.12	19.1	2.68
S-5010PK4E x 3 S-5010PK4E(71) U-200PZH4E8	230V-240V 50Hz 1phase 400V-415V 50Hz 3phase	16	14.1	5.64	18.6	6.11	23.1	6.65	19.1	4.48	23.3	4.54	23.2	2.70
		20	13.0	5.99	17.5	6.46	22.0	7.00	18.0	4.83	22.2	4.89	22.1	3.05
		24	11.9	6.34	16.4	6.81	20.9	7.35	16.9	5.18	21.1	5.24	21.0	3.41
S-5010PK4E x 4 S-5010PK4E(50) U-200PZH4E8	230V-240V 50Hz 1phase 400V-415V 50Hz 3phase	16	15.7	6.05	20.7	6.54	25.7	7.13	21.3	4.80	26.0	4.86	25.9	2.90
		20	14.5	6.42	19.5	6.92	24.5	7.50	20.1	5.18	24.8	5.24	24.7	3.27
		24	13.3	6.80	18.2	7.29	23.3	7.88	18.8	5.55	23.6	5.61	23.4	3.65
S-5010PK4E x 4 S-5010PK4E(60) U-250PZH4E8	230V-240V 50Hz 1phase 400V-415V 50Hz 3phase	16	17.7	7.25	23.3	7.85	29.0	8.55	24.0	5.76	29.3	5.84	29.2	3.47
		20	16.3	7.70	21.9	8.30	27.6	9.00	22.6	6.21	27.9	6.29	27.8	3.92
		24	14.9	8.15	20.5	8.75	26.2	9.45	21.2	6.66	26.5	6.74	26.4	4.38

TC :Heating Capacity

IPT :Heating Power Consumption

unit : kW

3.9 Product Information Data Sheet

Supplier name or trademark											
Indoor Model Identifier(s)											
Outdoor Model Identifier											
Inside sound power levels (Cooling mode)											
	dB(A)	55	55	55	55	55	55	55	55	57	57
	dB(A)	55	55	55	55	55	55	55	57	57	57
Outside sound power levels (Cooling mode)											
	dB(A)	64	64	65	65	65	69	69	64	62	65
Outside sound power levels (Heating mode)											
	dB(A)	66	67	67	67	67	69	69	66	64	67
Refrigerant Name / Refrigerant GWP		-/-	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675
Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 675. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 675 times higher than 1 kg of CO ₂ , over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.											
Cooling Mode	Seasonal Energy Efficiency Ratio (SEER)										
	-	6.6	8.0	6.6	6.6	6.6	6.6	6.6	6.8	7.7	6.6
	Energy Efficiency Class										
	-	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++
	Annual Electricity Consumption (*1)										
	kWh /a	133	219	377	377	377	504	504	181	160	377
	Design Load										
	kW	2.5	5.0	7.1	7.1	7.1	9.5	9.5	3.5	3.5	7.1
Heating Mode (Average)	Seasonal Coefficient Of Performance (SCOP)										
	-	4.2	4.6	4.6	4.6	4.1	4.1	4.1	4.4	4.7	4.6
	Energy Efficiency Class										
	-	A+	A++	A++	A++	A+	A+	A+	A+	A++	A++
	Annual Electricity Consumption (*1)										
	kWh /a	833	1369	1583	1583	2731	2731	2731	827	924	1583
	Design Load										
	kW	2.5	4.5	5.2	5.2	5.2	8.0	8.0	2.6	3.1	5.2
	Dedared Capacity										
	kW	2.5	4.5	5.2	5.2	5.2	8.0	8.0	2.6	3.1	5.2
	Backup Heating Capacity elbu(-10°C)										
	kW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Seasonal Coefficient Of Performance (SCOP)										
	-	-	-	-	-	-	-	-	-	-	-
	Energy Efficiency Class										
	-	-	-	-	-	-	-	-	-	-	-
Heating Mode (Warmer)	Annual Electricity Consumption (*1)										
	kWh /a	-	-	-	-	-	-	-	-	-	-
	Design Load										
	kW	-	-	-	-	-	-	-	-	-	-
	Dedared Capacity										
	kW	-	-	-	-	-	-	-	-	-	-
	Backup Heating Capacity elbu(2°C)										
	kW	-	-	-	-	-	-	-	-	-	-
Heating Mode (Colder)	Seasonal Coefficient Of Performance (SCOP)										
	-	-	-	-	-	-	-	-	-	-	-
	Energy Efficiency Class										
	-	-	-	-	-	-	-	-	-	-	-
	Annual Electricity Consumption (*1)										
	kWh /a	-	-	-	-	-	-	-	-	-	-
	Design Load										
	kW	-	-	-	-	-	-	-	-	-	-
Dedared Capacity											
kW	-	-	-	-	-	-	-	-	-	-	
Backup Heating Capacity elbu(-22°C)											
kW	-	-	-	-	-	-	-	-	-	-	

Delegated Regulation (EU) 626/2011

Actual energy consumption will depend on how the appliance is used and where it is located.

Supplier name or trademark		Panasonic	Panasonic	Panasonic	Panasonic	Panasonic	Panasonic	Panasonic	Panasonic	Panasonic	Panasonic	Panasonic	Panasonic
Indoor Model Identifier(s)		S-2545PK4E (x2)	S-2545PK4E (x3)	S-2545PK4E (x3)	S-2545PK4E (x3)	S-5010PK4E	S-5010PK4E (x2)	S-5010PK4E (x2)	S-5010PK4E (x2)	S-5010PK4E (x2)	S-5010PK4E (x2)	S-5010PK4E (x2)	S-5010PK4E (x2)
Outdoor Model Identifier		U-71PZH4E8	U-100PZH4E5	U-100PZH4E8	U-100PZH4E8	U-50PZH3E5	U-50PZH3E5	U-100PZH3E5	U-100PZH3E5	U-100PZH3E5	U-100PZH3E5	U-100PZH4E5	U-100PZH4E8
Inside sound power levels (Cooling mode)	dB(A)	57	57	57	57	57	57	57	57	57	57	57	57
Inside sound power levels (Heating mode)	dB(A)	57	57	57	57	57	57	57	57	57	57	57	57
Outside sound power levels (Cooling mode)	dB(A)	65	69	69	69	64	64	70	70	70	70	69	69
Outside sound power levels (Heating mode)	dB(A)	67	69	69	69	64	64	70	70	70	70	69	69
Refrigerant Name / Refrigerant GWP	-/-	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675	R32 / 675
Refrigerant leakage contributes to climate change. Refrigerant with lower global warming potential (GWP) would contribute less to global warming than a refrigerant with higher GWP, if leaked to the atmosphere. This appliance contains a refrigerant fluid with a GWP equal to 675. This means that if 1 kg of this refrigerant fluid would be leaked to the atmosphere, the impact on global warming would be 675 times higher than 1 kg of CO ₂ over a period of 100 years. Never try to interfere with the refrigerant circuit yourself or disassemble the product yourself and always ask a professional.													
Cooling Mode	Seasonal Energy Efficiency Ratio (SEER)	-	6.6	6.6	6.6	7.2	8.0	6.2	6.2	6.2	6.2	6.6	6.6
	Energy Efficiency Class	-	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++	A++
	Annual Electricity Consumption (*1)	kWh /a	377	504	504	243	219	508	508	508	508	504	504
	Design Load	kW	7.1	9.5	9.5	5.0	5.0	9.0	9.0	9.0	9.0	9.5	9.5
Heating Mode (Average)	Seasonal Coefficient Of Performance (SCOP)	-	4.6	4.1	4.1	4.4	4.6	4.0	4.0	4.0	4.0	4.1	4.1
	Energy Efficiency Class	-	A++	A+	A+	A++	A++	A+	A+	A+	A+	A+	A+
	Annual Electricity Consumption (*1)	kWh /a	1583	2731	2731	1271	1369	3080	3080	3080	3080	2731	2731
	Design Load	kW	5.2	8.0	8.0	4.0	4.5	8.8	8.8	8.8	8.8	8.0	8.0
Heating Mode (Warmer)	Declared Capacity	kW	5.2	8.0	8.0	4.0	4.5	8.8	8.8	8.8	8.8	8.0	8.0
	Backup Heating Capacity elbu(-10°C)	kW	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Seasonal Coefficient Of Performance (SCOP)	-	-	-	-	-	-	-	-	-	-	-	-
	Energy Efficiency Class	-	-	-	-	-	-	-	-	-	-	-	-
Heating Mode (Colder)	Annual Electricity Consumption (*1)	kWh /a	-	-	-	-	-	-	-	-	-	-	-
	Design Load	kW	-	-	-	-	-	-	-	-	-	-	-
	Declared Capacity	kW	-	-	-	-	-	-	-	-	-	-	-
	Backup Heating Capacity elbu(2°C)	kW	-	-	-	-	-	-	-	-	-	-	-
Heating Mode (Colder)	Seasonal Coefficient Of Performance (SCOP)	-	-	-	-	-	-	-	-	-	-	-	-
	Energy Efficiency Class	-	-	-	-	-	-	-	-	-	-	-	-
	Annual Electricity Consumption (*1)	kWh /a	-	-	-	-	-	-	-	-	-	-	-
	Design Load	kW	-	-	-	-	-	-	-	-	-	-	-
Heating Mode (Colder)	Declared Capacity	kW	-	-	-	-	-	-	-	-	-	-	-
	Backup Heating Capacity elbu(-22°C)	kW	-	-	-	-	-	-	-	-	-	-	-

Delegated Regulation (EU) 626/2011

(*1) Energy consumption "XYZ" kWh per year, based on standard test results.

Actual energy consumption will depend on how the appliance is used and where it is located.

Delegated Regulation (EU) 626/2011

*1) Energy consumption "XYZ" kWh per year, based on standard test results.

Actual energy consumption will depend on how the appliance is used and where it is located.

3.10 Information Table

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit Indoor Unit	U-125PZH4E5 S-2545PK4E×3
Outdoor side heat exchanger of air conditioner:	air	
Indoor side heat exchanger of air conditioner:	air	
Type: compressor driven vapour compression or sorption process	vapour compression	
if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	electric motor	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	12.2	kW	Seasonal space cooling energy efficiency	$\eta_{h,c}$	241.2	%
Refrigeration load	$P_{design,c}$	12.2	kW				
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor 27°/19°C (dry/wet bulb)							
$T_j = +35^\circ\text{C}$		12.2	kW	$T_j = +35^\circ\text{C}$		3.2	%
$T_j = +30^\circ\text{C}$		9.0	kW	$T_j = +30^\circ\text{C}$	EER _h or	4.4	%
$T_j = +25^\circ\text{C}$	P_{dc}	5.8	kW	$T_j = +25^\circ\text{C}$	GUE _{h,db} /	7.0	%
$T_j = +20^\circ\text{C}$		3.3	kW	$T_j = +20^\circ\text{C}$	AEF _{F,db}	11.7	%
Degradation co- efficient for air conditioners**	C_{dc}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.019	kW	Crankcase heater mode	P_{ck}	0.000	kW
Thermostat-off mode	P_{to}	0.016	kW	Standby mode	P_{sb}	0.019	kW
Other items							
Capacity control		variable		For air-to-air air conditioner: air flow rate, outdoor		5160	m³/h
Sound power level, outdoor	L_{WA}	73.0	dB				
Sound power level, indoor	L_{WA}	60.0	dB	if engine driven: Emissions of nitrogen oxides	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberg 15, 22525 Hamburg, Germany						

** If C_{dc} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25.

*** from 26 September 2018.

Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

**** Refer to information requirements for UnitList

Information requirements for heat pumps

Model(s):	Outdoor Unit Indoor Unit	U-125PZH4E5 S-2545PK4E×3
Outdoor side heat exchanger of heat pump:	air	
Indoor side heat exchanger of heat pump:	air	
Indication if the heater is equipped with a supplementary heater:	no	
if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	electric motor	

Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	13.2	kW	Seasonal space heating energy efficiency	$\eta_{h,h}$	148.6	%
Refrigeration load	$P_{design,h}$	9.5	kW				
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T_j							
$T_j = -7^\circ\text{C}$		8.4	kW	$T_j = -7^\circ\text{C}$		2.6	%
$T_j = +2^\circ\text{C}$		5.1	kW	$T_j = +2^\circ\text{C}$		3.7	%
$T_j = +7^\circ\text{C}$		3.3	kW	$T_j = +7^\circ\text{C}$		4.8	%
$T_j = +12^\circ\text{C}$		2.8	kW	$T_j = +12^\circ\text{C}$		5.7	%
T_{hw} = bivalent temperature	P_{dh}	9.5	kW	T_{hw} = bivalent temperature	COP _d or	2.2	%
T_{ol} = operation limit		7.2	kW	T_{ol} = operation limit	AEF _{F,db}	1.8	%
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{ol} < -20^\circ\text{C}$)		-	kW	For water-to-air heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{ol} < -20^\circ\text{C}$)		-	%
Bivalent temperature	T_{biv}	-10	°C	For water-to-air heat pumps: Operation limit temperature	T_{ol}	-20	°C
Degradation co- efficient heat pumps**	C_{dh}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.019	kW	back-up heating capacity *	elbu	0.0	kW
Thermostat-off mode	P_{to}	0.035	kW	Type of energy input			
Crankcase heater mode	P_{ck}	0.000	kW	Standby mode	P_{sb}	0.000	kW
Other items							
Capacity control		variable		For air-to-air heat pumps: air flow rate, outdoor		4880	m³/h
Sound power level, outdoor	L_{WA}	73.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L_{WA}	60.0	dB	Emissions of nitrogen oxides (if applicable)	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberg 15, 22525 Hamburg, Germany						

** If C_{dh} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25.

*** from 26 September 2018.

Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

**** Refer to information requirements for UnitList

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit	U-125PZH4E8
	Indoor Unit	S-2545PK4E×3
Outdoor side heat exchanger of air conditioner:	air	
Indoor side heat exchanger of air conditioner:	air	
Type: compressor driven vapour compression or sorption process	vapour compression	
if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	electric motor	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	12.2	kW	Seasonal space cooling energy efficiency	η _{h,c}	241.0	%
Refrigeration load	P _{design,c}	12.2	kW				
Declared cooling capacity for part load at given outdoor temperatures T _j and indoor 27°/19°C (dry/wet bulb)							
T _j = + 35 °C	P _{dc}	12.2	kW	T _j = + 35 °C	EER _o or GUE _{h,bin} / AEF _{h,bin}	3.2	%
T _j = + 30 °C		9.0	kW	T _j = + 30 °C		4.4	%
T _j = + 25 °C		5.8	kW	T _j = + 25 °C		7.0	%
T _j = + 20 °C		3.3	kW	T _j = + 20 °C		11.7	%
Degradation co-efficient for air conditioners**	C _{de}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.019	kW	Crankcase heater mode	P _{CK}	0.000	kW
Thermostat-off mode	P _{TO}	0.018	kW	Standby mode	P _{SB}	0.019	kW
Other items							
Capacity control		variable		For air-to-air air conditioner: air flow rate, outdoor		5160	m³/h
Sound power level, outdoor	L _{WA}	73.0	dB				
Sound power level, indoor	L _{WA}	60.0	dB	if engine driven: Emissions of nitrogen oxides	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Wunsbergring 15, 22525 Hamburg, Germany						
** If C _{de} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25. *** from 26 September 2018. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for heat pumps

Model(s):	Outdoor Unit	U-125PZH4E8
	Indoor Unit	S-2545PK4E x3
	Outdoor side heat exchanger of heat pump:	air
	Indoor side heat exchanger of heat pump:	air
	Indication if the heater is equipped with a supplementary heater: if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	no
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	P _{rated,h}	13.2	kW	Seasonal space heating energy efficiency	η _h	148.6	%
Refrigeration load	P _{design,h}	9.5	kW				
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T _j							
T _j = - 7 °C		8.4	kW	T _j = - 7 °C		2.6	%
T _j = + 2 °C		5.1	kW	T _j = + 2 °C		3.7	%
T _j = + 7 °C		3.3	kW	T _j = + 7 °C		4.8	%
T _j = + 12 °C		2.8	kW	T _j = + 12 °C	COP _a or GUE _{h,bin} / AEF _{h,bin}	5.7	%
T _{bw} = bivalent temperature	P _{th}	9.5	kW	T _{bw} = bivalent temperature		2.2	%
T _{OL} = operation limit		7.2	kW	T _{OL} = operation limit		1.8	%
For air-to-water heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	kW	For water-to-air heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	%
Bivalent temperature	T _{bw}	-10	°C	For water-to-air heat pumps: Operation limit temperature	T _{OL}	-20	°C
Degradation co-efficient heat pumps**	C _{th}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.019	kW	Supplementary heater back-up heating capacity *	elbu	0.0	kW
Thermostat-off mode	P _{TO}	0.037	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW	Standby mode	P _{SB}	0.000	kW
Other items							
Capacity control		variable		For air-to-air heat pumps: air flow rate outdoor		4680	m³/h
Sound power level, outdoor	L _{WA}	73.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L _{WA}	60.0	dB	Emissions of nitrogen oxides (if applicable)	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsbergring 15, 22525 Hamburg, Germany						
** If C _{th} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25. *** from 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit Indoor Unit	U-12SPZH4E5 S-2545PK4E×4
Outdoor side heat exchanger of air conditioner:	air air vapour compression electric motor	
Indoor side heat exchanger of air conditioner:		
Type: compressor driven vapour compression or sorption process		
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	12.5	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	272.1	%
Refrigeration load	$P_{design,c}$	12.5	kW				
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor $27/19^\circ\text{C}$ (dry/wet bulb)							
$T_j = +35^\circ\text{C}$		12.5	kW	$T_j = +35^\circ\text{C}$		3.4	%
$T_j = +30^\circ\text{C}$		9.2	kW	$T_j = +30^\circ\text{C}$		5.0	%
$T_j = +25^\circ\text{C}$	P_{dc}	5.9	kW	$T_j = +25^\circ\text{C}$		8.0	%
$T_j = +20^\circ\text{C}$		3.3	kW	$T_j = +20^\circ\text{C}$		13.3	%
Degradation co-efficient for air conditioners**	C_{dc}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.019	kW	Crankcase heater mode	P_{ck}	0.000	kW
Thermostat-off mode	P_{to}	0.016	kW	Standby mode	P_{sb}	0.019	kW

Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor		5160	m³/h
Sound power level, outdoor	L_{wa}	73.0	dB				
Sound power level, indoor	L_{wa}	57.0	dB	if engine driven: Emissions of nitrogen oxides	NO_x^{***}		mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)

Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberg 15, 22525 Hamburg, Germany
*** If C_{dc} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25. ***** from 26 September 2018. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. ***** Refer to information requirements for UnitList	

Information requirements for heat pumps

Model(s):	Outdoor Unit Indoor Unit	U-12SPZH4E5 S-2545PK4E×4
Outdoor side heat exchanger of heat pump:	air air no electric motor	
Indoor side heat exchanger of heat pump:		
Indication if the heater is equipped with a supplementary heater: if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.		

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	14.0	kW	Seasonal space heating energy efficiency	$\eta_{s,h}$	170.0	%
Refrigeration load	$P_{design,h}$	9.5	kW				
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperature T_j							
Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures T_j							
$T_j = -7^\circ\text{C}$		8.4	kW	$T_j = -7^\circ\text{C}$		3	%
$T_j = +2^\circ\text{C}$		5.1	kW	$T_j = +2^\circ\text{C}$		4.2	%
$T_j = +7^\circ\text{C}$		3.3	kW	$T_j = +7^\circ\text{C}$		5.5	%
$T_j = +12^\circ\text{C}$		2.8	kW	$T_j = +12^\circ\text{C}$		6.5	%
$T_{biv} = \text{bivalent temperature}$	P_{biv}	9.5	kW	$T_{biv} = \text{bivalent temperature}$	$\text{COP}_a \text{ or } \text{GUE}_{a,biv} / \text{AEF}_{a,biv}$	2.5	%
$T_{ol} = \text{operation limit}$		7.2	kW	$T_{ol} = \text{operation limit}$		2.2	%
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{ol} < -20^\circ\text{C}$)		-	kW	For water-to-air heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{ol} < -20^\circ\text{C}$)		-	%
Bivalent temperature	T_{biv}	-10	°C	For water-to-air heat pumps: Operation limit temperature	T_{ol}	-20	°C
Degradation co-efficient heat pumps**	C_{dih}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.019	kW	back-up heating capacity *	elbu	0.0	kW
Thermostat-off mode	P_{to}	0.035	kW	Type of energy input			
Crankcase heater mode	P_{ck}	0.000	kW	Standby mode	P_{sb}	0.000	kW
				Other items			

Capacity control	variable			For air-to-air heat pumps: air flow rate, outdoor		4680	m³/h
Sound power level, outdoor	L_{wa}	73.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L_{wa}	57.0	dB	Emissions of nitrogen oxides (if applicable)	NO_x^{***}		mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)

Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberggring 15, 22525 Hamburg, Germany
** If C_{dih} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25. *** from 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to Information requirements for UnitList	

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit	U-125PZH4E8
	Indoor Unit	S-2545PK4E×4
Outdoor side heat exchanger of air conditioner:	air	
Indoor side heat exchanger of air conditioner:	air	
Type: compressor driven vapour compression or sorption process	vapour compression	
if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	electric motor	

Information requirements for heat pumps

Model(s):	Outdoor Unit Indoor Unit	U-125PZH4E8 S-2545PK4E x4
Outdoor side heat exchanger of heat pump:		air
Indoor side heat exchanger of heat pump:		air
Indication if the heater is equipped with a supplementary heater: if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		no
		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	12.5	kW	Seasonal space cooling energy efficiency	η _{h,c}	272.1	%
Refrigeration load	P _{design,c}	12.5	kW				
Declared cooling capacity for part load at given outdoor temperatures T _j and indoor 27°/19°C (dry/wet bulb)							
T _j = + 35 °C	P _{dc}	12.5	kW	T _j = + 35 °C	EER _o or GUE _{h,bin} / AEF _{h,bin}	3.4	%
T _j = + 30 °C		9.2	kW	T _j = + 30 °C		5.0	%
T _j = + 25 °C		5.9	kW	T _j = + 25 °C		8.0	%
T _j = + 20 °C		3.3	kW	T _j = + 20 °C		13.3	%
Degradation co-efficient for air conditioners**	C _{de}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.019	kW	Crankcase heater mode	P _{CK}	0.000	kW
Thermostat-off mode	P _{TO}	0.016	kW	Standby mode	P _{SB}	0.019	kW
Other items							
Capacity control		variable		For air-to-air air conditioner: air flow rate, outdoor		5160	m³/h
Sound power level, outdoor	L _{WA}	73.0	dB				
Sound power level, indoor	L _{WA}	57.0	dB	if engine driven: Emissions of nitrogen oxides	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Wunsbergirg 15, 22525 Hamburg, Germany						
** If C _{de} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25. *** from 26 September 2018. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	P _{rated,h}	14.0	kW	Seasonal space heating energy efficiency	η _h	170.0	%
Refrigeration load	P _{design,h}	9.5	kW				
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T _j							
Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures T _j							
T _j = - 7 °C		8.4	kW	T _j = - 7 °C		3	%
T _j = + 2 °C		5.1	kW	T _j = + 2 °C		4.2	%
T _j = + 7 °C		3.3	kW	T _j = + 7 °C		5.5	%
T _j = + 12 °C		2.8	kW	T _j = + 12 °C	COP _a or GUE _{h,bin} / AEF _{h,bin}	6.5	%
T _{bw} = bivalent temperature	P _{th}	9.5	kW	T _{bw} = bivalent temperature		2.5	%
T _{OL} = operation limit		7.2	kW	T _{OL} = operation limit		2.2	%
For air-to-water heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	kW	For water-to-air heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	%
Bivalent temperature	T _{bw}	-10	°C	For water-to-air heat pumps: Operation limit temperature	T _{OL}	-20	°C
Degradation co-efficient heat pumps**	C _{th}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.019	kW	Supplementary heater back-up heating capacity *	elbu	0.0	kW
Thermostat-off mode	P _{TO}	0.035	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW	Standby mode	P _{SB}	0.000	kW
Other items							
Capacity control		variable		For air-to-air heat pumps: air flow rate outdoor		4680	m³/h
Sound power level, outdoor	L _{WA}	73.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L _{WA}	57.0	dB	Emissions of nitrogen oxides (if applicable)	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberggring 15, 22525 Hamburg, Germany						
** If C _{th} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25. *** from 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit Indoor Unit	U-12SPZ3E5 S-5010PK4E×2
Outdoor side heat exchanger of air conditioner:		
Indoor side heat exchanger of air conditioner:		air
Type: compressor driven vapour compression or sorption process		air
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		vapour compression
		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	12.5	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	254.1	%
Refrigeration load	$P_{design,c}$	12.5	kW				
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor $27/19^\circ\text{C}$ (dry/wet bulb)							
$T_j = +35^\circ\text{C}$		12.5	kW	$T_j = +35^\circ\text{C}$		3.3	%
$T_j = +30^\circ\text{C}$		9.2	kW	$T_j = +30^\circ\text{C}$		4.5	%
$T_j = +25^\circ\text{C}$		5.9	kW	$T_j = +25^\circ\text{C}$		7.6	%
$T_j = +20^\circ\text{C}$		3.5	kW	$T_j = +20^\circ\text{C}$		12.6	%
Degradation co-efficient for air conditioners**	C_{dc}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.021	kW	Crankcase heater mode	P_{ck}	0.000	kW
Thermostat-off mode	P_{to}	0.016	kW	Standby mode	P_{sb}	0.021	kW

Capacity control		variable		For air-to-air air conditioner: air flow rate, outdoor		4920	m³/h
Sound power level, outdoor	L_{wa}	73.0	dB				
Sound power level, indoor	L_{wa}	63.0	dB	if engine driven: Emissions of nitrogen oxides	NO_x^{***}		mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberggring 15, 22525 Hamburg, Germany						

** If C_{dc} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25.
*** from 26 September 2018.
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.
**** Refer to information requirements for UnitList

Information requirements for heat pumps

Model(s):	Outdoor Unit Indoor Unit	U-12SPZ3E5 S-5010PK4E×2
Outdoor side heat exchanger of heat pump:		
Indoor side heat exchanger of heat pump:		air
Indication if the heater is equipped with a supplementary heater:		air
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		no
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	12.5	kW	Seasonal space heating energy efficiency	$\eta_{s,h}$	152.1	%
Refrigeration load	$P_{design,h}$	12.5	kW				
Declared heating capacity for part load at indoor temperature T_i and outdoor temperature T_j							
$T_j = -7^\circ\text{C}$		11.0	kW	$T_j = -7^\circ\text{C}$		2.2	%
$T_j = +2^\circ\text{C}$		6.7	kW	$T_j = +2^\circ\text{C}$		3.7	%
$T_j = +7^\circ\text{C}$		4.3	kW	$T_j = +7^\circ\text{C}$		5.9	%
$T_j = +12^\circ\text{C}$		3.3	kW	$T_j = +12^\circ\text{C}$		6.7	%
$T_{biv} = \text{bivalent temperature}$	P_{biv}	11.0	kW	$T_{biv} = \text{bivalent temperature}$	$\text{COP}_{a,or}$		
$T_{co} = \text{operation limit}$		8.3	kW	$T_{co} = \text{operation limit}$	$\text{GUE}_{s,biv}$		
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{co} < -20^\circ\text{C}$)		-	kW	For water-to-air heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{co} < -20^\circ\text{C}$)	$\text{AEF}_{s,biv}$		
Bivalent temperature	T_{biv}	-7	°C	Operation limit temperature	T_{ol}	-15	°C
Degradation co-efficient heat pumps**	C_{din}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.021	kW	back-up heating capacity *	elbu	2.6	kW
Thermostat-off mode	P_{to}	0.037	kW	Type of energy input			
Crankcase heater mode	P_{ck}	0.000	kW	Standby mode	P_{sb}	0.000	kW

Capacity control		variable		For air-to-air heat pumps: air flow rate, outdoor		4800	m³/h
Sound power level, outdoor	L_{wa}	73.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L_{wa}	63.0	dB	Emissions of nitrogen oxides (if applicable)	NO_x^{***}		mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberggring 15, 22525 Hamburg, Germany						

** If C_{din} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25.
*** from 26 September 2018.
Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.
**** Refer to information requirements for UnitList

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit	U-125PZ3E8
	Indoor Unit	S-5010PK4E×2
	Outdoor side heat exchanger of air conditioner:	air
	Indoor side heat exchanger of air conditioner:	air
Type:	compressor driven vapour compression or sorption process	vapour compression
if applicable; driver of compressor:	electric motor or fuel driven,	electric motor
gaseous or liquid fuel, internal or external combustion engine)		

Information requirements for heat pumps

Model(s):	Outdoor Unit Indoor Unit	U-125PZ3E8 S-5010PK4E×2
Outdoor side heat exchanger of heat pump:		air
Indoor side heat exchanger of heat pump:		air
Indication if the heater is equipped with a supplementary heater: if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		no
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	12.5	kW	Seasonal space cooling energy efficiency	$\eta_{h,c}$	254.1	%
Refrigeration load	$P_{design,c}$	12.5	kW				
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor 27°/19°C (dry/wet bulb)							
$T_j = +35\text{ °C}$		12.5	kW	$T_j = +35\text{ °C}$		3.3	%
$T_j = +30\text{ °C}$		9.2	kW	$T_j = +30\text{ °C}$	EER _o or GUE _{o,bin} / AEF _{o,bin}	4.5	%
$T_j = +25\text{ °C}$	P_{dc}	5.9	kW	$T_j = +25\text{ °C}$		7.6	%
$T_j = +20\text{ °C}$		3.5	kW	$T_j = +20\text{ °C}$		12.6	%
Degradation co-efficient for air conditioners**	C_{de}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{OFF}	0.021	kW	Crankcase heater mode	P_{CK}	0.000	kW
Thermostat-off mode	P_{TO}	0.016	kW	Standby mode	P_{SB}	0.021	kW
Other items							
Capacity control		variable		For air-to-air air conditioner: air flow rate, outdoor		4920	m³/h
Sound power level, outdoor	L_{WA}	73.0	dB				
Sound power level, indoor	L_{WA}	63.0	dB	if engine driven: Emissions of nitrogen oxides	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberggring 15, 22525 Hamburg, Germany						

** If C_{de} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25.

*** from 26 September 2018.

Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

**** Refer to information requirements for UnitList

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	12.5	kW	Seasonal space heating energy efficiency	$\eta_{h,h}$	152.1	%
Refrigeration load	$P_{design,h}$	12.5	kW				
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T_j							
$T_j = -7\text{ °C}$		11.0	kW	$T_j = -7\text{ °C}$		2.2	%
$T_j = +2\text{ °C}$		6.7	kW	$T_j = +2\text{ °C}$		3.7	%
$T_j = +7\text{ °C}$		4.3	kW	$T_j = +7\text{ °C}$		5.9	%
$T_j = +12\text{ °C}$		3.3	kW	$T_j = +12\text{ °C}$		6.7	%
$T_{bin} = \text{bivalent temperature}$	P_{bin}	11.0	kW	$T_{bin} = \text{bivalent temperature}$	COP _o or GUE _{o,bin} / AEF _{o,bin}	2.2	%
$T_{OL} = \text{operation limit}$		8.3	kW	$T_{OL} = \text{operation limit}$		1.6	%
For water-to-air heat pumps: $T_j = -15\text{ °C}$ (if $T_{OL} < -20\text{ °C}$)		-	kW	For water-to-air heat pumps: $T_j = -15\text{ °C}$ (if $T_{OL} < -20\text{ °C}$)		-	%
Bivalent temperature	T_{biv}	-7	°C	For water-to-air heat pumps: Operation limit temperature	T_{OL}	-15	°C
Degradation co-efficient heat pumps**	C_{de}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{OFF}	0.021	kW	back-up heating capacity *	elbu	2.6	kW
Thermostat-off mode	P_{TO}	0.037	kW	Type of energy input			
Crankcase heater mode	P_{CK}	0.000	kW	Standby mode	P_{SB}	0.000	kW
Other items							
Capacity control		variable		For air-to-air heat pumps: air flow rate outdoor		4800	m³/h
Sound power level, outdoor	L_{WA}	73.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L_{WA}	63.0	dB	Emissions of nitrogen oxides (if applicable)	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberggring 15, 22525 Hamburg, Germany						

** If C_{de} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25.

*** from 26 September 2018.

Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.

**** Refer to information requirements for UnitList

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit Indoor Unit	U-12SPZH4E5 S-5010PK4E×2
Outdoor side heat exchanger of air conditioner:		
Indoor side heat exchanger of air conditioner:		air
Type: compressor driven vapour compression or sorption process		air
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		vapour compression
		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	12.5	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	272.1	%
Refrigeration load	$P_{design,c}$	12.5	kW				
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor $27/19^\circ\text{C}$ (dry/wet bulb)							
$T_j = +35^\circ\text{C}$		12.5	kW	$T_j = +35^\circ\text{C}$		3.4	%
$T_j = +30^\circ\text{C}$		9.2	kW	$T_j = +30^\circ\text{C}$		5.0	%
$T_j = +25^\circ\text{C}$		5.9	kW	$T_j = +25^\circ\text{C}$		8.0	%
$T_j = +20^\circ\text{C}$		3.3	kW	$T_j = +20^\circ\text{C}$		13.3	%
Degradation co-efficient for air conditioners**	C_{dc}	0.25	-				
Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures T_j							
$T_j = +35^\circ\text{C}$				$T_j = +35^\circ\text{C}$			
$T_j = +30^\circ\text{C}$				$T_j = +30^\circ\text{C}$			
$T_j = +25^\circ\text{C}$				$T_j = +25^\circ\text{C}$			
$T_j = +20^\circ\text{C}$				$T_j = +20^\circ\text{C}$			
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.019	kW	Crankcase heater mode	P_{ck}	0.000	kW
Thermostat-off mode	P_{to}	0.016	kW	Standby mode	P_{sb}	0.019	kW

Capacity control	variable	For air-to-air air conditioner: air flow rate, outdoor	5160	m³/h
Sound power level, outdoor	L_{wa}	73.0	dB	
Sound power level, indoor	L_{wa}	63.0	dB	
		if engine driven: Emissions of nitrogen oxides	NO _x ***	mg/kWh fuel input GCV
		GWP of the refrigerant		kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsbergstr 15, 22525 Hamburg, Germany			

** If C_{dc} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25.
*** from 26 September 2018.
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.
**** Refer to information requirements for UnitList

Information requirements for heat pumps

Model(s):	Outdoor Unit Indoor Unit	U-12SPZH4E5 S-5010PK4E×2
Outdoor side heat exchanger of heat pump:		
Indoor side heat exchanger of heat pump:		air
Indication if the heater is equipped with a supplementary heater:		air
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		no
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	14.0	kW	Seasonal space heating energy efficiency	$\eta_{s,h}$	170.0	%
Refrigeration load	$P_{design,h}$	9.5	kW				
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperature T_j							
$T_j = -7^\circ\text{C}$		8.4	kW	$T_j = -7^\circ\text{C}$		3	%
$T_j = +2^\circ\text{C}$		5.1	kW	$T_j = +2^\circ\text{C}$		4.2	%
$T_j = +7^\circ\text{C}$		3.3	kW	$T_j = +7^\circ\text{C}$		5.5	%
$T_j = +12^\circ\text{C}$		2.8	kW	$T_j = +12^\circ\text{C}$		6.5	%
$T_{biv} = \text{bivalent temperature}$	P_{biv}	9.5	kW	$T_{biv} = \text{bivalent temperature}$			
$T_{ol} = \text{operation limit}$		7.2	kW	$T_{ol} = \text{operation limit}$			
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{ol} < -20^\circ\text{C}$)		-	kW	For water-to-air heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{ol} < -20^\circ\text{C}$)			
Bivalent temperature	T_{biv}	-10	°C	Operation limit temperature	T_{ol}	-20	°C
Degradation co-efficient heat pumps**	C_{dc}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.019	kW	back-up heating capacity *	el_{bu}	0.0	kW
Thermostat-off mode	P_{to}	0.035	kW	Type of energy input			
Crankcase heater mode	P_{ck}	0.000	kW	Standby mode	P_{sb}	0.000	kW

Capacity control	variable	For air-to-air heat pumps: air flow rate, outdoor	4680	m³/h
Sound power level, outdoor	L_{wa}	73.0	dB	
Sound power level, indoor	L_{wa}	63.0	dB	
		Emissions of nitrogen oxides (if applicable)	NO _x ***	mg/kWh fuel input GCV
		GWP of the refrigerant		kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsbergstr 15, 22525 Hamburg, Germany			

** If C_{dc} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25.
*** from 26 September 2018.
Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.
**** Refer to information requirements for UnitList

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit	U-125PZH4E8
	Indoor Unit	S-5010PK4E×2
Outdoor side heat exchanger of air conditioner:	air	
Indoor side heat exchanger of air conditioner:	air	
Type: compressor driven vapour compression or sorption process	vapour compression	
if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	electric motor	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	12.5	kW	Seasonal space cooling energy efficiency	η _{h,c}	272.1	%
Refrigeration load	P _{design,c}	12.5	kW				
Declared cooling capacity for part load at given outdoor temperatures T _j and indoor 27°/19°C (dry/wet bulb)							
T _j = + 35 °C	P _{dc}	12.5	kW	T _j = + 35 °C	EER _o or GUE _{o,bin} / AEF _{o,bin}	3.4	%
T _j = + 30 °C		9.2	kW	T _j = + 30 °C		5.0	%
T _j = + 25 °C		5.9	kW	T _j = + 25 °C		8.0	%
T _j = + 20 °C		3.3	kW	T _j = + 20 °C		13.3	%
Degradation co-efficient for air conditioners**	C _{de}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.019	kW	Crankcase heater mode	P _{CK}	0.000	kW
Thermostat-off mode	P _{TO}	0.016	kW	Standby mode	P _{SB}	0.019	kW
Other items							
Capacity control		variable		For air-to-air air conditioner: air flow rate, outdoor		5160	m³/h
Sound power level, outdoor	L _{WA}	73.0	dB				
Sound power level, indoor	L _{WA}	63.0	dB	if engine driven: Emissions of nitrogen oxides	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsbergirg 15, 22525 Hamburg, Germany						
** If C _{de} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25. *** from 26 September 2018. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for heat pumps

Model(s):	Outdoor Unit	U-125PZH4E8
	Indoor Unit	S-5010PK4E×2
	Outdoor side heat exchanger of heat pump:	air
	Indoor side heat exchanger of heat pump:	air
	Indication if the heater is equipped with a supplementary heater: if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	no
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	P _{rated,h}	14.0	kW	Seasonal space heating energy efficiency	η _h	170.0	%
Refrigeration load	P _{design,h}	9.5	kW	Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures T _j			
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T _j							
T _j = - 7 °C		8.4	kW	T _j = - 7 °C		3	%
T _j = + 2 °C		5.1	kW	T _j = + 2 °C		4.2	%
T _j = + 7 °C		3.3	kW	T _j = + 7 °C		5.5	%
T _j = + 12 °C		2.8	kW	T _j = + 12 °C	COP _a or GUE _{h,bin} / AEF _{h,bin}	6.5	%
T _{bw} = bivalent temperature	P _{th}	9.5	kW	T _{bw} = bivalent temperature		2.5	%
T _{OL} = operation limit		7.2	kW	T _{OL} = operation limit		2.2	%
For air-to-water heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	kW	For water-to-air heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	%
Bivalent temperature	T _{bw}	-10	°C	For water-to-air heat pumps: Operation limit temperature	T _{OL}	-20	°C
Degradation co-efficient heat pumps**	C _{th}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.019	kW	Supplementary heater back-up heating capacity *	elbu	0.0	kW
Thermostat-off mode	P _{TO}	0.035	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW	Standby mode	P _{SB}	0.000	kW
Other items							
Capacity control		variable		For air-to-air heat pumps: air flow rate outdoor		4680	m³/h
Sound power level, outdoor	L _{WA}	73.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L _{WA}	63.0	dB	Emissions of nitrogen oxides (if applicable)	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberggring 15, 22525 Hamburg, Germany						
** If C _{th} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25. *** from 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit Indoor Unit	U-140PZ3E5 S-5010PK4E×2
Outdoor side heat exchanger of air conditioner:		air
Indoor side heat exchanger of air conditioner:		air
Type: compressor driven vapour compression or sorption process		vapour compression
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	13.4	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	247.2	%
Refrigeration load	$P_{design,c}$	13.4	kW				
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor $27/19^\circ\text{C}$ (dry/wet bulb)							
$T_j = +35^\circ\text{C}$		13.4	kW	$T_j = +35^\circ\text{C}$		3.2	%
$T_j = +30^\circ\text{C}$		9.9	kW	$T_j = +30^\circ\text{C}$		4.5	%
$T_j = +25^\circ\text{C}$		6.4	kW	$T_j = +25^\circ\text{C}$		7.3	%
$T_j = +20^\circ\text{C}$		3.8	kW	$T_j = +20^\circ\text{C}$		12.1	%
Degradation co-efficient for air conditioners**	C_{dc}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.022	kW	Crankcase heater mode	P_{ck}	0.000	kW
Thermostat-off mode	P_{to}	0.020	kW	Standby mode	P_{sb}	0.022	kW

Capacity control	variable		For air-to-air air conditioner: air flow rate, outdoor		5040	m³/h
Sound power level, outdoor	L_{wa}	74.0	dB			
Sound power level, indoor	L_{wa}	63.0	dB	if engine driven: Emissions of nitrogen oxides	NO _x ***	mg/kWh fuel input GCV
				GWP of the refrigerant		kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberggring 15, 22525 Hamburg, Germany					

** If C_{dc} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25.
*** from 26 September 2018.
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.
**** Refer to information requirements for UnitList

Information requirements for heat pumps

Model(s):	Outdoor Unit Indoor Unit	U-140PZ3E5 S-5010PK4E×2
Outdoor side heat exchanger of heat pump:		air
Indoor side heat exchanger of heat pump:		air
Indication if the heater is equipped with a supplementary heater:		no
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		electric motor

Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	13.4	kW	Seasonal space heating energy efficiency	$\eta_{s,h}$	151.0	%
Refrigeration load	$P_{design,h}$	13.6	kW				
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T_j							
Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures T_j							
$T_j = -7^\circ\text{C}$		12.0	kW	$T_j = -7^\circ\text{C}$		2.1	%
$T_j = +2^\circ\text{C}$		7.5	kW	$T_j = +2^\circ\text{C}$		3.7	%
$T_j = +7^\circ\text{C}$		4.8	kW	$T_j = +7^\circ\text{C}$		5.9	%
$T_j = +12^\circ\text{C}$		3.5	kW	$T_j = +12^\circ\text{C}$		6.9	%
$T_{biv} = \text{bivalent temperature}$	P_{biv}	12.0	kW	$T_{biv} = \text{bivalent temperature}$	COP _{a,or} / GUE _{b,bin} / AEF _{b,bin}	2.1	%
$T_{oL} = \text{operation limit}$		8.9	kW	$T_{oL} = \text{operation limit}$		1.6	%
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{oL} < -20^\circ\text{C}$)		-	kW	For water-to-air heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{oL} < -20^\circ\text{C}$)		-	%
Bivalent temperature	T_{biv}	-7	°C	For water-to-air heat pumps: Operation limit temperature	T_{oL}	-15	°C
Degradation co-efficient heat pumps**	C_{dih}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.022	kW	back-up heating capacity *	elbu	2.8	kW
Thermostat-off mode	P_{to}	0.042	kW	Type of energy input			
Crankcase heater mode	P_{ck}	0.000	kW	Standby mode	P_{sb}	0.000	kW

Outer items						
Capacity control		variable		For air-to-air heat pumps: air flow rate outdoor	4920	m³/h
Sound power level, outdoor	L _{WA}	74.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger	-	m³/h
Sound power level, indoor	L _{WA}	63.0	dB	Emissions of nitrogen oxides (if applicable)	NO _x ***	mg/kWh fuel input GCV
				GWP of the refrigerant	675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberggring 15, 22525 Hamburg, Germany					

** If C_{dih} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25.
*** from 26 September 2018.
Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.
**** Refer to information requirements for UnitList

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit	U-140PZ3E8
	Indoor Unit	S-5010PK4E×2
Outdoor side heat exchanger of air conditioner:		
Indoor side heat exchanger of air conditioner:	air	
Type: compressor driven vapour compression or sorption process if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	vapour compression	
	electric motor	

Information requirements for heat pumps

Model(s):	Outdoor Unit	U-140PZ3E8
	Indoor Unit	S-5010PK4E×2
	Outdoor side heat exchanger of heat pump:	air
	Indoor side heat exchanger of heat pump:	air
	Indication if the heater is equipped with a supplementary heater: if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	no
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	13.4	kW	Seasonal space cooling energy efficiency	η _{h,c}	247.2	%
Refrigeration load	P _{design,c}	13.4	kW				
Declared cooling capacity for part load at given outdoor temperatures T _j and indoor 27°/19°C (dry/wet bulb)							
T _j = + 35 °C	P _{dc}	13.4	kW	T _j = + 35 °C	EER _o or GUE _{h,bin} / AEF _{h,bin}	3.2	%
T _j = + 30 °C		9.9	kW	T _j = + 30 °C		4.5	%
T _j = + 25 °C		6.4	kW	T _j = + 25 °C		7.3	%
T _j = + 20 °C		3.8	kW	T _j = + 20 °C		12.1	%
Degradation co- efficient for air conditioners**	C _{de}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.022	kW	Crankcase heater mode	P _{CK}	0.000	kW
Thermostat-off mode	P _{TO}	0.020	kW	Standby mode	P _{SB}	0.022	kW
Other items							
Capacity control		variable		For air-to-air air conditioner: air flow rate, outdoor		5040	m³/h
Sound power level, outdoor	L _{WA}	74.0	dB				
Sound power level, indoor	L _{WA}	63.0	dB	if engine driven: Emissions of nitrogen oxides	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Wunsbergirg 15, 22525 Hamburg, Germany						
** If C _{de} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25. *** from 26 September 2018. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	P _{rated,h}	13.4	kW	Seasonal space heating energy efficiency	η _{h,h}	151.0	%
Refrigeration load	P _{design,h}	13.6	kW				
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T _j							
T _j = - 7 °C		12.0	kW	T _j = - 7 °C		2.1	%
T _j = + 2 °C		7.5	kW	T _j = + 2 °C		3.7	%
T _j = + 7 °C		4.8	kW	T _j = + 7 °C		5.9	%
T _j = + 12 °C		3.5	kW	T _j = + 12 °C	COP _a or GUE _{h,bin} / AEF _{h,bin}	6.9	%
T _{bw} = bivalent temperature	P _{th}	12.0	kW	T _{bw} = bivalent temperature		2.1	%
T _{OL} = operation limit		8.9	kW	T _{OL} = operation limit		1.6	%
For air-to-water heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	kW	For water-to-air heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	%
Bivalent temperature	T _{bw}	-7	°C	For water-to-air heat pumps: Operation limit temperature	T _{OL}	-15	°C
Degradation co- efficient heat pumps**	C _{th}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.022	kW	Supplementary heater back-up heating capacity *	elbu	2.8	kW
Thermostat-off mode	P _{TO}	0.042	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW	Standby mode	P _{SB}	0.000	kW
Other items							
Capacity control		variable		For air-to-air heat pumps: air flow rate outdoor		4920	m³/h
Sound power level, outdoor	L _{WA}	74.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L _{WA}	63.0	dB	Emissions of nitrogen oxides (if applicable)	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsbergirg 15, 22525 Hamburg, Germany						
** If C _{th} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25. *** from 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit Indoor Unit	U-140PZH4E5 S-5010PK4E×2
Outdoor side heat exchanger of air conditioner:	air	
Indoor side heat exchanger of air conditioner:		
Type: compressor driven vapour compression or sorption process		
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		
	vapour compression	
	electric motor	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	13.4	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	269.0	%
Refrigeration load	$P_{design,s,c}$	13.4	kW				
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor $27/19^\circ\text{C}$ (dry/wet bulb)							
$T_j = +35^\circ\text{C}$		13.4	kW	$T_j = +35^\circ\text{C}$		3.4	%
$T_j = +30^\circ\text{C}$		9.8	kW	$T_j = +30^\circ\text{C}$		4.9	%
$T_j = +25^\circ\text{C}$	P_{dc}	6.3	kW	$T_j = +25^\circ\text{C}$		7.8	%
$T_j = +20^\circ\text{C}$		3.1	kW	$T_j = +20^\circ\text{C}$		12.9	%
Degradation co-efficient for air conditioners**	C_{dc}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.019	kW	Crankcase heater mode	P_{ck}	0.000	kW
Thermostat-off mode	P_{to}	0.020	kW	Standby mode	P_{sb}	0.019	kW

Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor		5340	m³/h
Sound power level, outdoor	L_{wa}	74.0	dB				
Sound power level, indoor	L_{wa}	63.0	dB	if engine driven: Emissions of nitrogen oxides	NO_x^{***}		mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)

Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberg 15, 22525 Hamburg, Germany
*** If C_{dc} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25. **** from 26 September 2018. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. ***** Refer to information requirements for UnitList	

Information requirements for heat pumps

Model(s):	Outdoor Unit Indoor Unit	U-140PZH4E5 S-5010PK4E×2
Outdoor side heat exchanger of heat pump:	air	
Indoor side heat exchanger of heat pump:		
Indication if the heater is equipped with a supplementary heater:		
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		
	no	
	electric motor	

Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	15.2	kW	Seasonal space heating energy efficiency	$\eta_{s,h}$	169.4	%
Refrigeration load	$P_{design,h}$	10.6	kW				
Declared heating capacity for part load at indoor temperature 20°C and outdoor temperature T_j							
$T_j = -7^\circ\text{C}$		9.4	kW	$T_j = -7^\circ\text{C}$		2.8	%
$T_j = +2^\circ\text{C}$		5.7	kW	$T_j = +2^\circ\text{C}$		4.2	%
$T_j = +7^\circ\text{C}$		3.7	kW	$T_j = +7^\circ\text{C}$		5.7	%
$T_j = +12^\circ\text{C}$		2.8	kW	$T_j = +12^\circ\text{C}$		6.5	%
$T_{biv} = \text{bivalent temperature}$	P_{biv}	10.6	kW	$T_{biv} = \text{bivalent temperature}$	$\text{COP}_a \text{ or } \text{GUE}_{a,biv} / \text{AEF}_{a,biv}$		
$T_{ol} = \text{operation limit}$		8.0	kW	$T_{ol} = \text{operation limit}$		2.0	%
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{ol} < -20^\circ\text{C}$)		-	kW	For water-to-air heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{ol} < -20^\circ\text{C}$)		-	%
Bivalent temperature	T_{biv}	-10	°C	For water-to-air heat pumps: Operation limit temperature	T_{ol}	-20	°C
Degradation co-efficient heat pumps**	C_{din}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.019	kW	back-up heating capacity *	elbu	0.0	kW
Thermostat-off mode	P_{to}	0.039	kW	Type of energy input			
Crankcase heater mode	P_{ck}	0.000	kW	Standby mode	P_{sb}	0.000	kW

Capacity control	variable			For air-to-air heat pumps: air flow rate, outdoor		4980	m³/h
Sound power level, outdoor	L_{wa}	74.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L_{wa}	63.0	dB	Emissions of nitrogen oxides (if applicable)	NO_x^{***}		mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)

Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsbergstr 15, 22525 Hamburg, Germany
** If C_{Gib} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25. *** from 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to Information requirements for UnitList	

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit	U-140PZH4E8
	Indoor Unit	S-5010PK4E×2
Outdoor side heat exchanger of air conditioner:		
Indoor side heat exchanger of air conditioner:	air	
Type: compressor driven vapour compression or sorption process if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	vapour compression	
	electric motor	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	13.4	kW	Seasonal space cooling energy efficiency	η _{h,c}	269.0	%
Refrigeration load	P _{design,c}	13.4	kW				
Declared cooling capacity for part load at given outdoor temperatures T _j and indoor 27°/19°C (dry/wet bulb)							
T _j = + 35 °C	P _{dc}	13.4	kW	T _j = + 35 °C	EER _o or GUE _{h,bin} / AEF _{h,bin}	3.4	%
T _j = + 30 °C		9.8	kW	T _j = + 30 °C		4.9	%
T _j = + 25 °C		6.3	kW	T _j = + 25 °C		7.8	%
T _j = + 20 °C		3.1	kW	T _j = + 20 °C		12.9	%
Degradation co- efficient for air conditioners**	C _{de}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.019	kW	Crankcase heater mode	P _{CK}	0.000	kW
Thermostat-off mode	P _{TO}	0.020	kW	Standby mode	P _{SB}	0.019	kW
Other items							
Capacity control		variable		For air-to-air air conditioner: air flow rate, outdoor		5340	m³/h
Sound power level, outdoor	L _{WA}	74.0	dB				
Sound power level, indoor	L _{WA}	63.0	dB	if engine driven: Emissions of nitrogen oxides	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Wunsbergirg 15, 22525 Hamburg, Germany						
** If C _{de} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25. *** from 26 September 2018. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for heat pumps

Model(s):	Outdoor Unit	U-140PZH4E8
	Indoor Unit	S-5010PK4E×2
	Outdoor side heat exchanger of heat pump:	air
	Indoor side heat exchanger of heat pump:	air
	Indication if the heater is equipped with a supplementary heater: if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	no
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	P _{rated,h}	15.2	kW	Seasonal space heating energy efficiency	η _h	169.4	%
Refrigeration load	P _{design,h}	10.6	kW				
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T _j							
T _j = - 7 °C		9.4	kW	T _j = - 7 °C		2.8	%
T _j = + 2 °C		5.7	kW	T _j = + 2 °C		4.2	%
T _j = + 7 °C		3.7	kW	T _j = + 7 °C		5.7	%
T _j = + 12 °C		2.8	kW	T _j = + 12 °C	COP _a or GUE _{h,bin} / AEF _{h,bin}	6.5	%
T _{bw} = bivalent temperature	P _{th}	10.6	kW	T _{bw} = bivalent temperature		2.4	%
T _{OL} = operation limit		8.0	kW	T _{OL} = operation limit		2.0	%
For air-to-water heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	kW	For water-to-air heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	%
Bivalent temperature	T _{bw}	-10	°C	For water-to-air heat pumps: Operation limit temperature	T _{OL}	-20	°C
Degradation co- efficient heat pumps**	C _{th}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.019	kW	Supplementary heater back-up heating capacity *	elbu	0.0	kW
Thermostat-off mode	P _{TO}	0.039	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW	Standby mode	P _{SB}	0.000	kW
Other items							
Capacity control		variable		For air-to-air heat pumps: air flow rate outdoor		4980	m³/h
Sound power level, outdoor	L _{WA}	74.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L _{WA}	63.0	dB	Emissions of nitrogen oxides (if applicable)	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberggring 15, 22525 Hamburg, Germany						
** If C _{th} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25. *** from 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for air-to-air conditioners

Model(s):	Outdoor Unit	U-140PZH4E5
	Indoor Unit	S-5010PK4E*3
	Outdoor side heat exchanger of air conditioner;	air
	Indoor side heat exchanger of air conditioner;	air
	Type: compressor driven vapour compression or sorption process	vapour compression
	If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	electric motor

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Information requirements for heat pumps

Model(s):	Outdoor Unit	
	Indoor Unit	
	U-140PZH4E5	
	S-5010PK4E*3	
Outdoor side heat exchanger of heat pump:	air	
Indoor side heat exchanger of heat pump:	air	
Indication if the heater is equipped with a supplementary heater:	no	
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	electric motor	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit	
Rated heating capacity	P _{rated,h}	15.2	kW	Seasonal space heating energy efficiency	η _{s,h}	169.4	%	
Refrigeration load	P _{design,h}	10.6	kW					
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T _j								
T _j = - 7 °C	P _{ph}		9.4	kW	Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures T _j			
T _j = + 2 °C			5.7	kW				
T _j = + 7 °C			3.7	kW				
T _j = + 12 °C			2.8	kW				
T _{bw} = bivalent temperature			10.6	kW				
T _{col} = operation limit	P _{ph}		8.0	kW				
For water-to-air heat pumps:			-	kW				
T _j = - 15 °C (if T _{col} < - 20 °C)			-10	°C				
Bivalent temperature			T _{bw}					
Degradation co-efficient heat pumps**			C _{dh}	0.25	-			
Power consumption in modes other than 'active mode'								
Standby mode	P _{off}	0.019	kW	back-up heating capacity *	elbu	0.0	kW	
Thermostat-off mode	P _{to}	0.039	kW	Type of energy input				
Crankcase heater mode	P _{ck}	0.000	kW	Standby mode	P _{sb}	0.000	kW	
Other items								
Capacity control		variable		For air-to-air heat pumps: air flow rate outdoor		4980	m³/h	
Sound power level, outdoor	L _{wa}	74.0	dB	For water/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h	
Sound power level, indoor	L _{wa}	57.0	dB	Emissions of nitrogen oxides (if applicable)	NO _x ***	-	mg/kWh fuel input GCV	
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)	
Contact details				Panasonic Testing Centre, Panasonic Marketing Europe GmbH Wunsbergweg 15, 22525 Hamburg, Germany				

*** If C_{dh} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25.
** From 26 September 2018.
* Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.
**** Refer to information requirements for UnitList

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit	U-140PZH4E8
	Indoor Unit	S-5010PK4E×3
Outdoor side heat exchanger of air conditioner:		
Indoor side heat exchanger of air conditioner:	air	
Type: compressor driven vapour compression or sorption process	air	
if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	vapour compression	
	electric motor	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	13.4	kW	Seasonal space cooling energy efficiency	η _{h,c}	269.0	%
Refrigeration load	P _{design,c}	13.4	kW				
Declared cooling capacity for part load at given outdoor temperatures T _j and indoor 27°/19°C (dry/wet bulb)							
T _j = + 35 °C	P _{dc}	13.4	kW	T _j = + 35 °C	EER _o or GUE _{h,bin} / AEF _{h,bin}	3.4	%
T _j = + 30 °C		9.8	kW	T _j = + 30 °C		4.9	%
T _j = + 25 °C		6.3	kW	T _j = + 25 °C		7.8	%
T _j = + 20 °C		3.1	kW	T _j = + 20 °C		12.9	%
Degradation co- efficient for air conditioners**	C _{de}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.019	kW	Crankcase heater mode	P _{CK}	0.000	kW
Thermostat-off mode	P _{TO}	0.020	kW	Standby mode	P _{SB}	0.019	kW
Other items							
Capacity control		variable		For air-to-air air conditioner: air flow rate, outdoor		5340	m³/h
Sound power level, outdoor	L _{WA}	74.0	dB				
Sound power level, indoor	L _{WA}	57.0	dB	if engine driven: Emissions of nitrogen oxides	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Wunsbergring 15, 22525 Hamburg, Germany						
** If C _{de} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25. *** from 26 September 2018. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for heat pumps

Model(s):	Outdoor Unit	U-140PZH4E8
	Indoor Unit	S-5010PK4E x3
Outdoor side heat exchanger of heat pump:		air
Indoor side heat exchanger of heat pump:		air
Indication if the heater is equipped with a supplementary heater: [indication if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		no
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	P _{rated,h}	15.2	kW	Seasonal space heating energy efficiency	η _h	169.4	%
Refrigeration load	P _{design,h}	10.6	kW				
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T _j							
T _j = - 7 °C		9.4	kW	T _j = - 7 °C		2.8	%
T _j = + 2 °C		5.7	kW	T _j = + 2 °C		4.2	%
T _j = + 7 °C		3.7	kW	T _j = + 7 °C		5.7	%
T _j = + 12 °C		2.8	kW	T _j = + 12 °C	COP _a or GUE _{h,bin} / AEF _{h,bin}	6.5	%
T _{bw} = bivalent temperature	P _{th}	10.6	kW	T _{bw} = bivalent temperature		2.4	%
T _{OL} = operation limit		8.0	kW	T _{OL} = operation limit		2.0	%
For air-to-water heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	kW	For water-to-air heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	%
Bivalent temperature	T _{bw}	-10	°C	For water-to-air heat pumps: Operation limit temperature	T _{OL}	-20	°C
Degradation co- efficient heat pumps**	C _{th}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.019	kW	Supplementary heater back-up heating capacity *	elbu	0.0	kW
Thermostat-off mode	P _{TO}	0.039	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW	Standby mode	P _{SB}	0.000	kW
Other items							
Capacity control		variable		For air-to-air heat pumps: air flow rate outdoor		4980	m³/h
Sound power level, outdoor	L _{WA}	74.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L _{WA}	57.0	dB	Emissions of nitrogen oxides (if applicable)	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsbergring 15, 22525 Hamburg, Germany						
** If C _{th} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25. *** from 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit Indoor Unit	U-200PZH4E8 S-5010PK4E×2
Outdoor side heat exchanger of air conditioner:		
Indoor side heat exchanger of air conditioner:		air
Type: compressor driven vapour compression or sorption process		air
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		vapour compression
		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	16.0	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	239.9	%
Refrigeration load	$P_{design,c}$	16.0	kW				
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor $27/19^\circ\text{C}$ (dry/wet bulb)							
$T_j = +35^\circ\text{C}$		16.0	kW	$T_j = +35^\circ\text{C}$		3.2	%
$T_j = +30^\circ\text{C}$		11.8	kW	$T_j = +30^\circ\text{C}$		4.4	%
$T_j = +25^\circ\text{C}$		7.6	kW	$T_j = +25^\circ\text{C}$		7.1	%
$T_j = +20^\circ\text{C}$		6.0	kW	$T_j = +20^\circ\text{C}$		11.8	%
Degradation co-efficient for air conditioners**	C_{dc}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.024	kW	Crankcase heater mode	P_{ck}	0.000	kW
Thermostat-off mode	P_{to}	0.027	kW	Standby mode	P_{sb}	0.024	kW

Capacity control	variable			For air-to-air air conditioner: air flow rate, outdoor		6960	m³/h
Sound power level, outdoor	L_{wa}	76.0	dB				
Sound power level, indoor	L_{wa}	65.0	dB	if engine driven: Emissions of nitrogen oxides	NO _x ***	mg/kWh fuel input GCV	
				GWP of the refrigerant		kg CO ₂ eq (100 years)	675

Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberg 15, 22525 Hamburg, Germany
*** If C_{dc} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25. **** from 26 September 2018. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. ***** Refer to information requirements for UnitList	

Information requirements for heat pumps

Model(s):	Outdoor Unit Indoor Unit	U-200PZH4E8 S-5010PK4E×2
Outdoor side heat exchanger of heat pump:		
Indoor side heat exchanger of heat pump:		air
Indication if the heater is equipped with a supplementary heater:		air
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		no
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	17.5	kW	Seasonal space heating energy efficiency	$\eta_{s,h}$	152.0	%
Refrigeration load	$P_{design,h}$	15.7	kW				
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T_j							
$T_j = -7^\circ\text{C}$		13.9	kW	$T_j = -7^\circ\text{C}$		2.3	%
$T_j = +2^\circ\text{C}$		8.5	kW	$T_j = +2^\circ\text{C}$		3.7	%
$T_j = +7^\circ\text{C}$		5.4	kW	$T_j = +7^\circ\text{C}$		5.6	%
$T_j = +12^\circ\text{C}$		6.0	kW	$T_j = +12^\circ\text{C}$		6.8	%
$T_{biv} = \text{bivalent temperature}$	P_{biv}	15.7	kW	$T_{biv} = \text{bivalent temperature}$		2.0	%
$T_{co} = \text{operation limit}$		11.8	kW	$T_{co} = \text{operation limit}$		1.8	%
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{co} < -20^\circ\text{C}$)		-	kW	For water-to-air heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{co} < -20^\circ\text{C}$)		-	%
Bivalent temperature	T_{biv}	-10	°C	For water-to-air heat pumps: Operation limit temperature	T_{ol}	-20	°C
Degradation co-efficient heat pumps**	C_{dh}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.024	kW	back-up heating capacity *	elbu	0.0	kW
Thermostat-off mode	P_{to}	0.051	kW	Type of energy input			
Crankcase heater mode	P_{ck}	0.000	kW	Standby mode	P_{sb}	0.000	kW

Capacity control	variable			For air-to-air heat pumps: air flow rate, outdoor		8880	m³/h
Sound power level, outdoor	L_{wa}	80.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L_{wa}	65.0	dB	Emissions of nitrogen oxides (if applicable)	NO _x ***	mg/kWh fuel input GCV	
				GWP of the refrigerant		kg CO ₂ eq (100 years)	675

Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberggring 15, 22525 Hamburg, Germany
** If C_{Gh} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25. *** from 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to Information requirements for UnitList	

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit	U-200PZH4E8
	Indoor Unit	S-5010PK4E×3
Outdoor side heat exchanger of air conditioner:		
Indoor side heat exchanger of air conditioner:	air	
Type: compressor driven vapour compression or sorption process if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	vapour compression	
	electric motor	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	17.5	kW	Seasonal space cooling energy efficiency	η _{h,c}	253.4	%
Refrigeration load	P _{design,c}	17.5	kW				
Declared cooling capacity for part load at given outdoor temperatures T _j and indoor 27°/19°C (dry/wet bulb)							
T _j = + 35 °C	P _{dc}	17.5	kW	T _j = + 35 °C	EER _o or GUE _{o,bin} / AEF _{o,bin}	3.2	%
T _j = + 30 °C		12.9	kW	T _j = + 30 °C		4.6	%
T _j = + 25 °C		8.3	kW	T _j = + 25 °C		7.7	%
T _j = + 20 °C		6.0	kW	T _j = + 20 °C		12.2	%
Degradation co- efficient for air conditioners**	C _{de}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.024	kW	Crankcase heater mode	P _{CK}	0.000	kW
Thermostat-off mode	P _{TO}	0.027	kW	Standby mode	P _{SB}	0.024	kW
Other items							
Capacity control		variable		For air-to-air air conditioner: air flow rate, outdoor		6960	m³/h
Sound power level, outdoor	L _{WA}	76.0	dB				
Sound power level, indoor	L _{WA}	63.0	dB	if engine driven: Emissions of nitrogen oxides	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Wunsbergirg 15, 22525 Hamburg, Germany						
** If C _{de} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25. *** from 26 September 2018. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for heat pumps

Model(s):	Outdoor Unit	U-200PZH4E8
	Indoor Unit	S-5010PK4E x3
	Outdoor side heat exchanger of heat pump:	air
	Indoor side heat exchanger of heat pump:	air
	Indication if the heater is equipped with a supplementary heater: if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	no
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	P _{rated,h}	19.0	kW	Seasonal space heating energy efficiency	η _h	152.6	%
Refrigeration load	P _{design,h}	15.7	kW	Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures T _j			
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T _j							
T _j = - 7 °C		13.9	kW	T _j = - 7 °C		2.3	%
T _j = + 2 °C		8.5	kW	T _j = + 2 °C		3.7	%
T _j = + 7 °C		5.4	kW	T _j = + 7 °C		5.7	%
T _j = + 12 °C		6.0	kW	T _j = + 12 °C	COP _a or GUE _{a,bin} / AEF _{a,bin}	6.8	%
T _{bw} = bivalent temperature	P _{th}	15.7	kW	T _{bw} = bivalent temperature		2.0	%
T _{OL} = operation limit		11.8	kW	T _{OL} = operation limit		1.8	%
For air-to-water heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	kW	For water-to-air heat pumps: T _j = - 15 °C (if T _{OL} < - 20 °C)		-	%
Bivalent temperature	T _{bw}	-10	°C	For water-to-air heat pumps: Operation limit temperature	T _{OL}	-20	°C
Degradation co- efficient heat pumps**	C _{th}	0.25	-				
Power consumption in modes other than 'active mode'				Supplementary heater			
Off mode	P _{OFF}	0.024	kW	back-up heating capacity *	elbu	0.0	kW
Thermostat-off mode	P _{TO}	0.051	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW	Standby mode	P _{SB}	0.000	kW
Other items							
Capacity control		variable		For air-to-air heat pumps: air flow rate outdoor		8880	m³/h
Sound power level, outdoor	L _{WA}	80.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L _{WA}	63.0	dB	Emissions of nitrogen oxides (if applicable)	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberggring 15, 22525 Hamburg, Germany						
** If C _{th} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25. *** from 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit Indoor Unit	U-200PZH4E8 S-5010PK4E×4
Outdoor side heat exchanger of air conditioner:	air	
Indoor side heat exchanger of air conditioner:	air	
Type: compressor driven vapour compression or sorption process	vapour compression	
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	electric motor	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	$P_{rated,c}$	19.0	kW	Seasonal space cooling energy efficiency	$\eta_{s,c}$	281.0	%
Refrigeration load	$P_{design,s,c}$	19.0	kW				
Declared cooling capacity for part load at given outdoor temperatures T_j and indoor $27/19^\circ\text{C}$ (dry/wet bulb)							
$T_j = +35^\circ\text{C}$		19.0	kW	$T_j = +35^\circ\text{C}$		3.4	%
$T_j = +30^\circ\text{C}$		14.0	kW	$T_j = +30^\circ\text{C}$		5.0	%
$T_j = +25^\circ\text{C}$	P_{dc}	9.0	kW	$T_j = +25^\circ\text{C}$		8.8	%
$T_j = +20^\circ\text{C}$		6.2	kW	$T_j = +20^\circ\text{C}$		13.4	%
Degradation co-efficient for air conditioners**	C_{dc}	0.25	-				
Declared energy efficiency ratio or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures T_j							
$T_j = -7^\circ\text{C}$		13.9	kW	$T_j = -7^\circ\text{C}$		2.6	%
$T_j = +2^\circ\text{C}$		8.5	kW	$T_j = +2^\circ\text{C}$		3.7	%
$T_j = +7^\circ\text{C}$		5.4	kW	$T_j = +7^\circ\text{C}$		5.4	%
$T_j = +12^\circ\text{C}$		5.0	kW	$T_j = +12^\circ\text{C}$		6.7	%
$T_{low} = \text{bivalent temperature}$	P_{in}	15.7	kW	$T_{low} = \text{bivalent temperature}$		2.2	%
$T_{co} = \text{operation limit}$		12.8	kW	$T_{co} = \text{operation limit}$		1.9	%
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{co} < -20^\circ\text{C}$)		-	kW	For water-to-air heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{co} < -20^\circ\text{C}$)		-	%
Bivalent temperature	T_{bw}	-10	$^\circ\text{C}$	For water-to-air heat pumps: Operation limit temperature	T_{ol}	-20	$^\circ\text{C}$
Degradation co-efficient heat pumps**	C_{in}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.024	kW	Crankcase heater mode	P_{ck}	0.000	kW
Thermostat-off mode	P_{to}	0.027	kW	Standby mode	P_{sb}	0.024	kW
Other items							

Capacity control	variable	For air-to-air air conditioner: air flow rate, outdoor	6960	m³/h
Sound power level, outdoor	L_{wa}	76.0	dB	
Sound power level, indoor	L_{wa}	57.0	dB	
		if engine driven: Emissions of nitrogen oxides	NO _x ***	mg/kWh fuel input GCV
		GWP of the refrigerant		kg CO ₂ eq (100 years)

Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsbergstr 15, 22525 Hamburg, Germany
** If C_{dc} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25.	
*** from 26 September 2018.	
Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.	
**** Refer to information requirements for UnitList	

Information requirements for heat pumps

Model(s):	Outdoor Unit Indoor Unit	U-200PZH4E8 S-5010PK4E×4
Outdoor side heat exchanger of heat pump:	air	
Indoor side heat exchanger of heat pump:	air	
Indication if the heater is equipped with a supplementary heater:	no	
If applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	electric motor	

Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	$P_{rated,h}$	22.4	kW	Seasonal space heating energy efficiency	$\eta_{s,h}$	154.5	%
Refrigeration load	$P_{design,h}$	15.7	kW				
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T_j							
Declared coefficient of performance or gas utilization efficiency / auxiliary energy factor for part load at given outdoor temperatures T_j							
$T_j = -7^\circ\text{C}$		13.9	kW	$T_j = -7^\circ\text{C}$		2.6	%
$T_j = +2^\circ\text{C}$		8.5	kW	$T_j = +2^\circ\text{C}$		3.7	%
$T_j = +7^\circ\text{C}$		5.4	kW	$T_j = +7^\circ\text{C}$		5.4	%
$T_j = +12^\circ\text{C}$		5.0	kW	$T_j = +12^\circ\text{C}$		6.7	%
$T_{low} = \text{bivalent temperature}$	P_{in}	15.7	kW	$T_{low} = \text{bivalent temperature}$		2.2	%
$T_{co} = \text{operation limit}$		12.8	kW	$T_{co} = \text{operation limit}$		1.9	%
For air-to-water heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{co} < -20^\circ\text{C}$)		-	kW	For water-to-air heat pumps: $T_j = -15^\circ\text{C}$ (if $T_{co} < -20^\circ\text{C}$)		-	%
Bivalent temperature	T_{bw}	-10	$^\circ\text{C}$	For water-to-air heat pumps: Operation limit temperature	T_{ol}	-20	$^\circ\text{C}$
Degradation co-efficient heat pumps**	C_{in}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P_{off}	0.024	kW	back-up heating capacity *	elbu	0.0	kW
Thermostat-off mode	P_{to}	0.051	kW	Type of energy input			
Crankcase heater mode	P_{ck}	0.000	kW	Standby mode	P_{sb}	0.000	kW
Other items							

Capacity control	variable	For air-to-air heat pumps: air flow rate, outdoor	8880	m³/h
Sound power level, outdoor	L_{wa}	80.0	dB	
Sound power level, indoor	L_{wa}	57.0	dB	
		Emissions of nitrogen oxides (if applicable)	NO _x ***	mg/kWh fuel input GCV
		GWP of the refrigerant		kg CO ₂ eq (100 years)

Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsbergstr 15, 22525 Hamburg, Germany
** If C_{in} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25.	
*** from 26 September 2018.	
Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer.	
**** Refer to information requirements for UnitList	

Information requirements for air-to-air air conditioners

Model(s):	Outdoor Unit Indoor Unit	U-250PZH4E8 S-50T0PK4E×4
Outdoor side heat exchanger of air conditioner:	air	
Indoor side heat exchanger of air conditioner:	air	
Type: compressor driven vapour compression or sorption process	vapour compression	
if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]	electric motor	

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated cooling capacity	P _{rated,c}	22.0	kW	Seasonal space cooling energy efficiency	η _{s,c}	256.1	%
Refrigeration load	P _{design,c}	22.0	kW				
Declared cooling capacity for part load at given outdoor temperatures T _j and indoor 27°/19°C (dry/wet bulb)							
T _j = + 35 °C	P _{dc}	22.0	kW	T _j = + 35 °C	EER _d or GUE _{d,bin} / AEF _{d,bin}	3.3	%
T _j = + 30 °C		16.2	kW	T _j = + 30 °C		4.6	%
T _j = + 25 °C		10.4	kW	T _j = + 25 °C		7.9	%
T _j = + 20 °C		6.3	kW	T _j = + 20 °C		11.3	%
Degradation co-efficient for air conditioners**	C _{dc}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.024	kW	Crankcase heater mode	P _{CK}	0.000	kW
Thermostat-off mode	P _{TO}	0.031	kW	Standby mode	P _{SB}	0.024	kW
Other items							
Capacity control		variable		For air-to-air air conditioner: air flow rate, outdoor		6960	m³/h
Sound power level, outdoor	L _{WA}	76.0	dB				
Sound power level, indoor	L _{WA}	63.0	dB	if engine driven: Emissions of nitrogen oxides	NO _x ***	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberg 15, 22525 Hamburg, Germany						
** If C _{dc} is not determined by measurement then the default degradation coefficient air conditioners shall be 0.25. *** from 26 September 2018. Where information relates to multi-split air conditioners, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

Information requirements for heat pumps

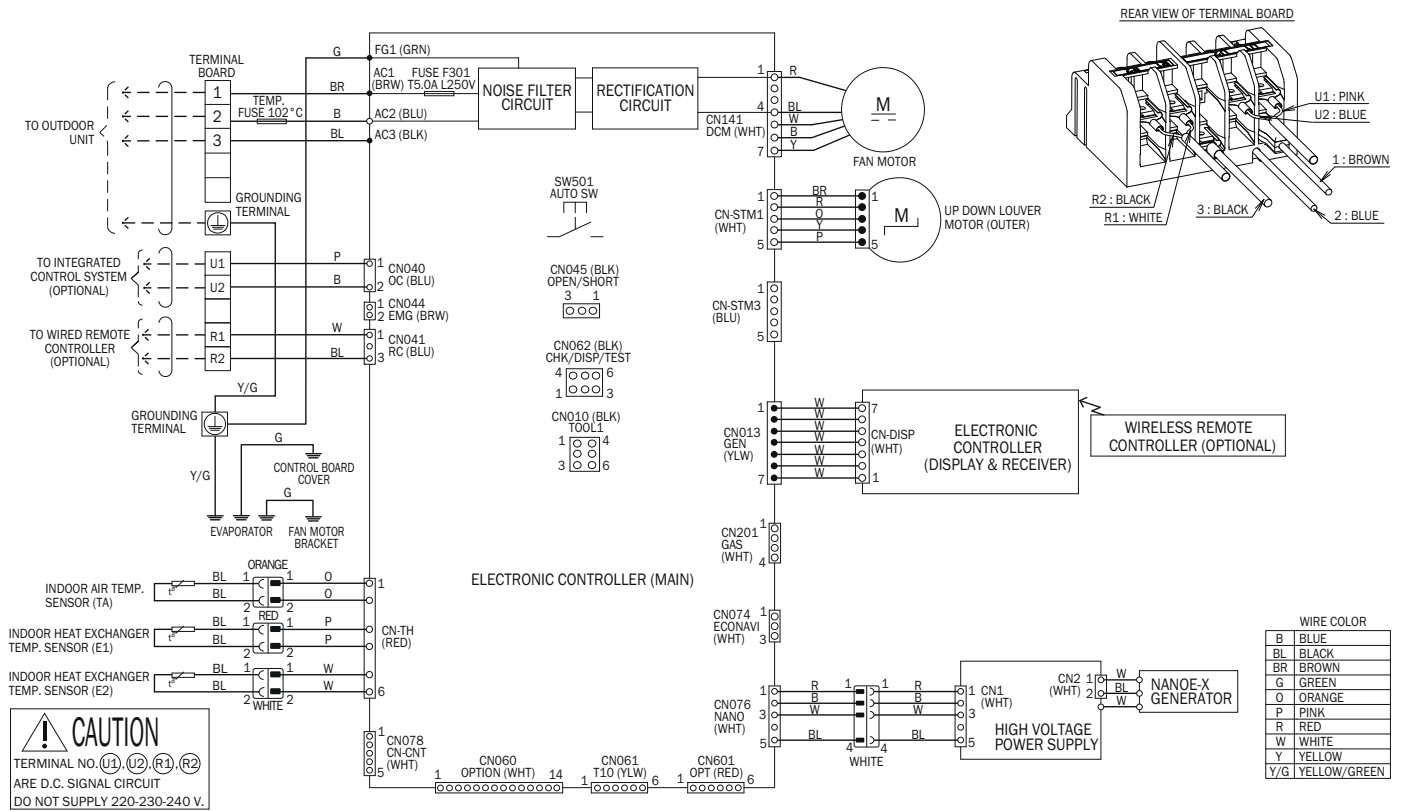
Model(s):	Outdoor Unit Indoor Unit	U-250PZH4E8 S-5010PK4E×4
Outdoor side heat exchanger of heat pump:		air
Indoor side heat exchanger of heat pump:		air
Indication if the heater is equipped with a supplementary heater: if applicable: driver of compressor: [electric motor or fuel driven, gaseous or liquid fuel, internal or external combustion engine]		no
Parameters shall be declared for the average heating season, parameters for the warmer and colder heating seasons are optional.		electric motor

Item	Symbol	Value	Unit	Item	Symbol	Value	Unit
Rated heating capacity	P _{rated,h}	24.0	kW	Seasonal space heating energy efficiency	η _{s,h}	153.0	%
Refrigeration load	P _{design,h}	16.7	kW				
Declared heating capacity for part load at indoor temperature 20 °C and outdoor temperature T _j							
T _j = - 7 °C		14.8	kW	T _j = - 7 °C		2.6	%
T _j = + 2 °C		9.0	kW	T _j = + 2 °C		3.7	%
T _j = + 7 °C		5.8	kW	T _j = + 7 °C		5.3	%
T _j = + 12 °C		5.0	kW	T _j = + 12 °C	COP _a or GUE _{a,bin} / AEF _{a,bin}	6.0	%
T _{bin} = bivalent temperature	P _{bin}	16.7	kW	T _{bin} = bivalent temperature		2.4	%
T _{oa} = operation limit		12.3	kW	T _{oa} = operation limit		1.9	%
For air-to-water heat pumps: T _j = - 15 °C (if T _{oa} < - 20 °C)		-	kW	For water-to-air heat pumps: Operation limit temperature	T _{oL}	- 20	°C
Bivalent temperature	T _{bw}	-10	°C				
Degradation co-efficient heat pumps**	C _{dh}	0.25	-				
Power consumption in modes other than 'active mode'							
Off mode	P _{OFF}	0.024	kW	Supplementary heater back-up heating capacity *	elbu	0.0	kW
Thermostat-off mode	P _{TO}	0.055	kW	Type of energy input			
Crankcase heater mode	P _{CK}	0.000	kW	Standby mode	P _{SB}	0.000	kW
Other items							
Capacity control		variable		For air-to-air heat pumps: air flow rate outdoor		9300	m³/h
Sound power level, outdoor	L _{WA}	84.0	dB	For water-/brine-to-air heat pumps: Rated brine or water flow rate, outdoor side heat exchanger		-	m³/h
Sound power level, indoor	L _{WA}	63.0	dB	Emissions of nitrogen oxides (if applicable)	NO _{xxx}	-	mg/kWh fuel input GCV
				GWP of the refrigerant		675	kg CO ₂ eq (100 years)
Contact details	Panasonic Testing Centre, Panasonic Marketing Europe GmbH Winsberg 15, 22525 Hamburg, Germany						
** If C _{dh} is not determined by measurement then the default degradation coefficient of heat pumps shall be 0.25. *** from 26 September 2018. Where information relates to multi-split heat pumps, the test result and performance data may be obtained on the basis of the performance of the outdoor unit, with a combination of indoor unit(s) recommended by the manufacturer or importer. **** Refer to information requirements for UnitList							

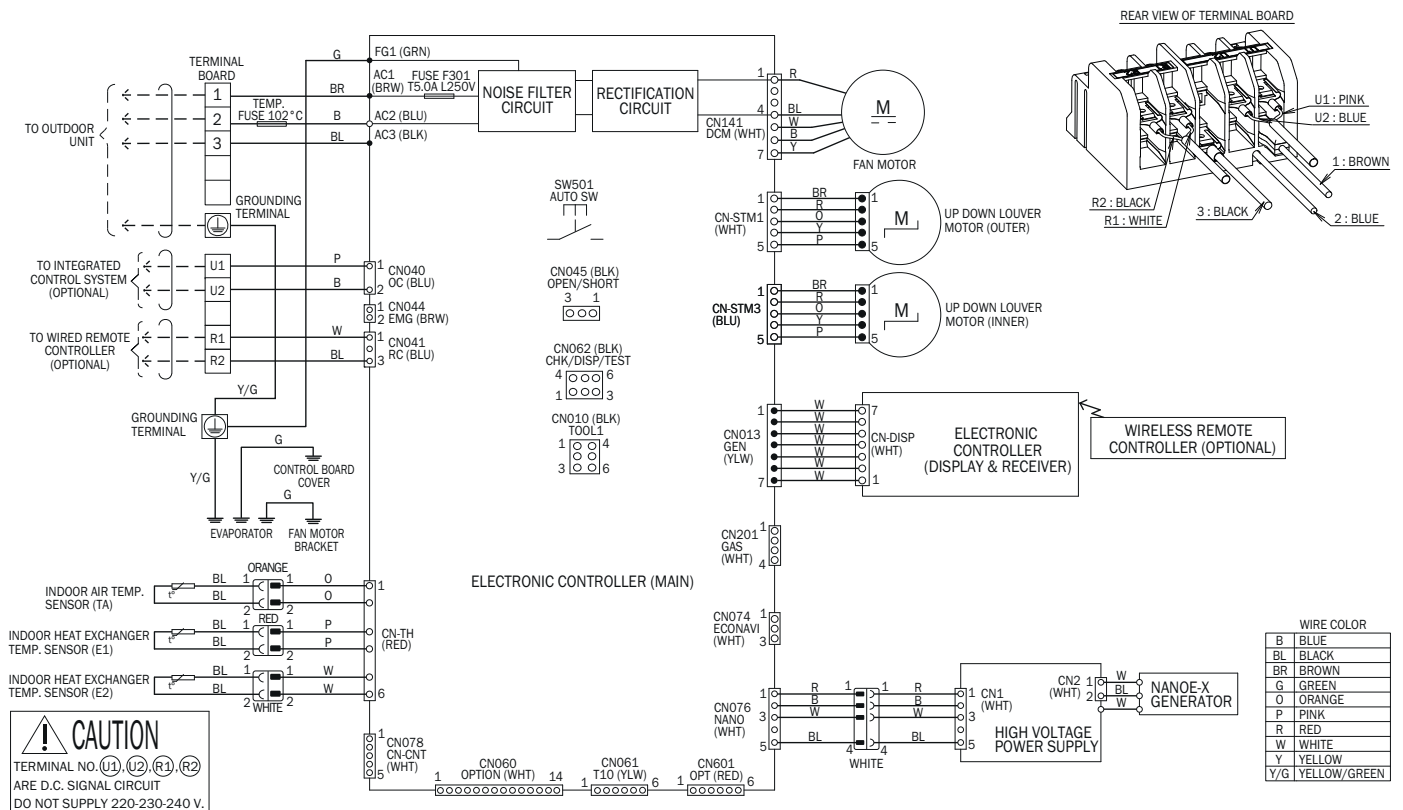
4. Electrical Data

4.1 Wall Mounted Type

S-2545PK4E



S-5010PK4E

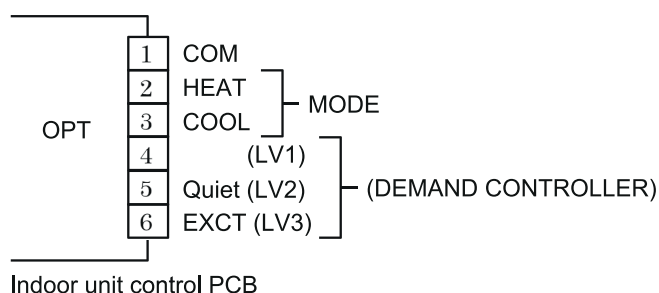


5. Control Functions

5.1 Indoor Unit Control PCB Switches and Functions

[Indoor unit control PCB]

- T10 (CN061):** **6P plug (YEL)** / Used for remote control operation. (See the Remote Control Section.)
Control items: (1) Start/stop input (2) Remote controller prohibit input
(3) Start signal output (4) Alarm signal output
- EXCT (CN073):** **2P plug (RED)** / Can be used for demand control. When input is present, forces the unit to operate with the thermostat OFF.
- DISP (CN062):** **6P plug (BLK)** 2-5pin / Short-circuiting this pin allows operation to be controlled by the remote controller even when an outdoor unit is not connected. (In this case, alarm "E04," which indicates trouble in the serial communication between the indoor and outdoor unit, does not occur.)
- CHK (CN062):** **6P plug (BLK)** 1-4pin / Test pin. Short-circuiting this pin allows the indoor FM (H fan speed), drain pump, flap motor (F1 position), and electronic expansion valve full-open position to be checked.
However, this function turns OFF if the indoor unit protection mechanism is activated.
The components will operate even if the remote controller and outdoor unit are not connected, however, the remote control cannot be used for control even if it is connected.
This pin can be used for short-term tests.
- JP1 (JP001):** **Jumper wire** / Allows selection of the T10 terminal start/stop signal. (See the Remote Control Section.)
Setting at time of shipment: Pulse signal
Jumper wire cut: Static signal (continuous signal)
- FAN DRIVE (CN032):** **2P plug (WHT)** / This terminal sends the signal to the ventilation fan when a commercially available ventilation fan is operated by the FAN button on the wired remote controller. (See the Remote Control Section.)
Use a ventilation fan which can accept the no-voltage contact A signal as the external input signal.
- POWER LED:** **LED (RED)** / Illuminates when the power is ON. Flashes when there is trouble with the EEPROM (IC010: nonvolatile memory).
- EEPROM (IC010):** **Nonvolatile memory** / Used to store model information and other data. When replacing the PCB, remove the EEPROM from the old PCB and install it onto the new PCB. If there is IC trouble, replace with a new IC (provided with the servicing PCB), and set the necessary information using the wired remote controller. (For the setting procedure, see the servicing technical materials.)
- OPT(CN601):** **Used for 6P plug (RED)** / MODE, DEMAND control.
1 pin: For COM setting, 2-3 pin: For MODE setting, 4-6 pin: For DEMAND / Quiet, EXCT setting



* When using these functions, use the lead wires described below.
Lead wire with 6P socket (Service parts: Parts code / ACPA60C7898)
Check the delivery date in advance because of BTO (build-to-order manufacturing).

NOTE:

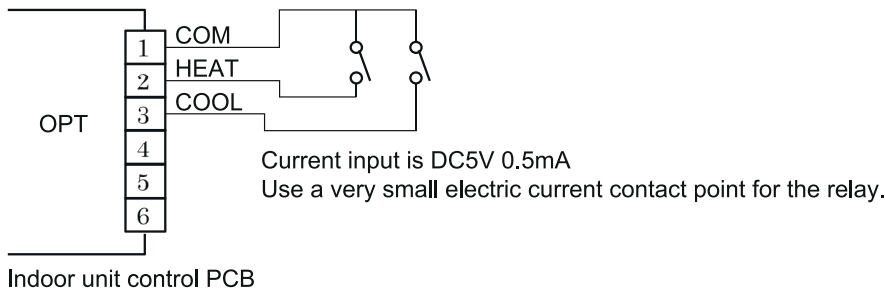
- Wire length between the indoor control PCB and the electrical contact should be less than 2 m.
- Nonuse lead wires should be insulated.

1. **MODE** / Indoor Unit Cooling and Heating mode select pin

1-2 pin short circuit: Heating mode, 1-3 pin short circuit: Cooling mode

- When the heating side is shorted in cooling mode, it changes to heating mode. When the cooling side is shorted in heating mode, it changes to cooling mode.

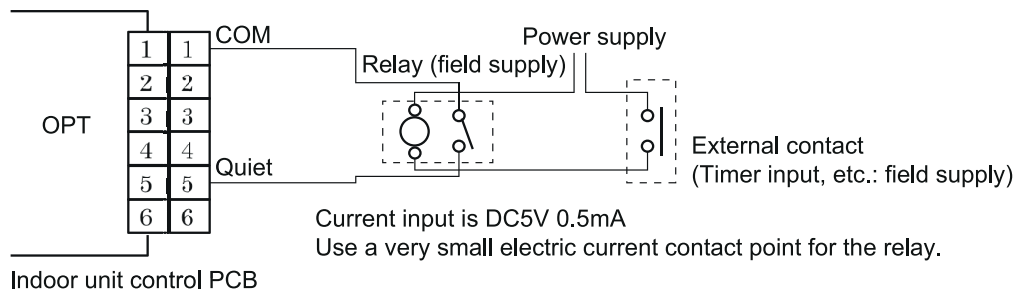
● **Wiring example**



2. **Quiet** / Low noise mode operation is available.

- Operating with limited outdoor fan and compressor frequencies.
- When the relay is switched ON, low noise operation is performed.
(Non-voltage contact "a")

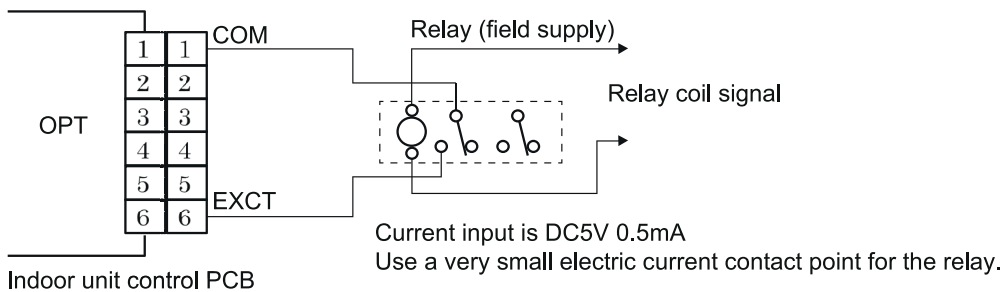
● **Wiring example**



3. **EXCT** / DEMAND control available

- When input, the thermos is forcibly switched OFF.

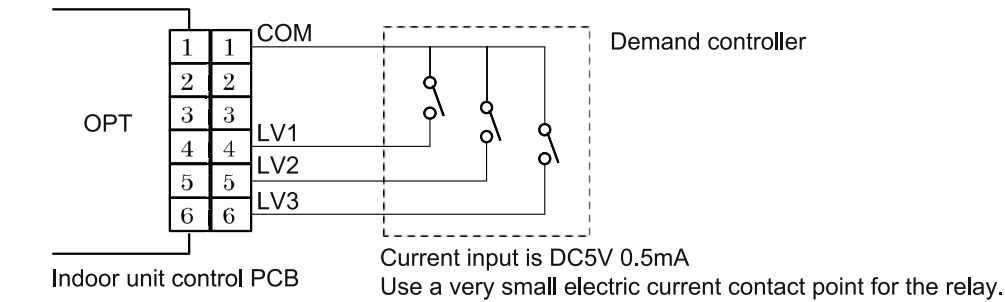
● **Wiring example**



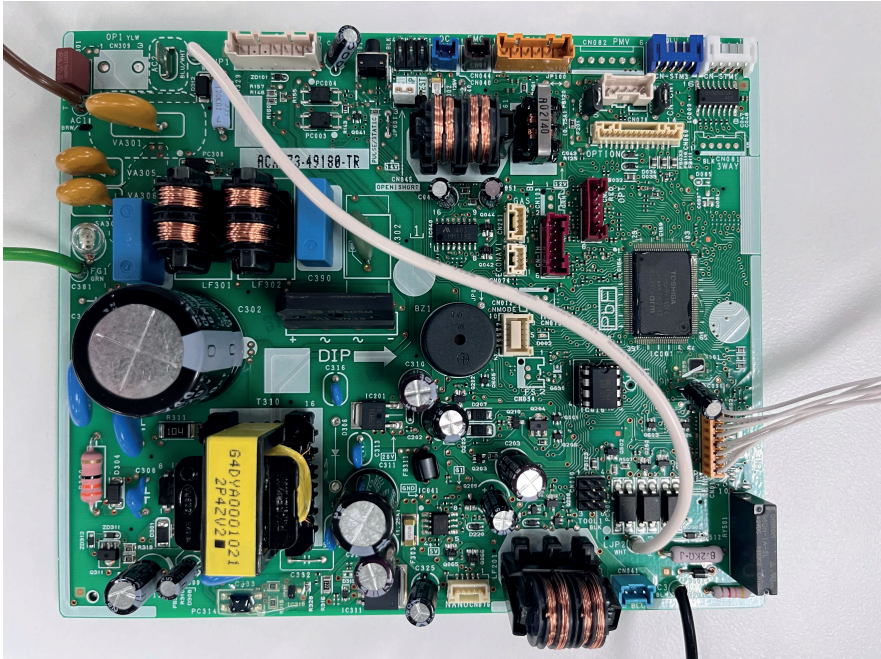
4. LV1, LV2, LV3 / Use this terminal for demand control.
- When using the demand function, use the CZ-RTC6 series remote controller for setting.
 - The below table shows the operating range.
- Select the operating range. See the following table.

pin no. for demand section	Operating range
LV1	Approx. 75% of rated current
LV2	Approx. 50% of rated current
LV3	Stop

- **Wiring example**
- Connect the wires. See the below diagram and above table.



Wall Mounted Type



6. Trouble Diagnosis

6.1 PAC System Alarm Codes

6.1.1 Indoor

Alarms for indoor units

Alarm Code	Alarm Meaning
E01	Remote Controller Reception Error
E02	Remote Controller Transmission Error
E03	Error in Indoor Unit Receiving Signal from Remote Controller (central)
E04	Error in Indoor Unit Receiving Signal from the Outdoor Unit
E08	Duplicate Indoor Unit Address Settings Error
E09	More Than One Remote Controller Set to Main Error
E14	Main Unit duplication in Simultaneous-operation Multi Control (detected outdoor unit)
E15	Auto Address Alarm (The total capacity of indoor units is too low.)
E16	Auto Address Alarm (The total capacity of indoor units is too high or the total number of indoor units is too many.)
E18	Faulty Communication in Group Control Wiring

P09	Faulty wiring connections of (ceiling) indoor unit panel
P31	Group Control Error

Check Prior to Auto Address Setting

In the case of below, conduct this process after diagnosing the problem.

- The remote controller or the outdoor unit displays an alarm
- The “Assigning” screen appears on the LCD display for more than 10 minutes

1 Auto Address	1-1	Is the power of the indoor unit(s) and outdoor unit(s) on?	Yes	2-1
			No	Power on
2 Indoor / outdoor wiring	2-1	Has the wiring of the indoor / outdoor been completed? Is it all connected correctly?	Yes	3-1
			No	Connect the wiring correctly
3 Installation or setting related	3-1	Be sure that the indoor and outdoor units are connected with correct combination written in catalog.	Yes	3-2
			No	Correct the connection
	3-2	Is the remote control wiring connected with two indoor / outdoor combinations or more for group control?	Yes	3-3
			No	3-4
	3-3	Turn on the power of only one system and run auto address setting again. Upon completion of the auto address setting, turn on the power for the next system and run auto address setting while still power switched on, units whose auto address setting have completed. (In the case of multiple systems, run the auto address setting respectively in due order for each system.)		
	3-4	Run the auto address setting.		
4 Relocation and resetting of address [U3, F3, K3, T3]	4-1	Be sure that the indoor and outdoor units are connected with correct combination described in the catalog.	Yes	4-2
			No	Correct the connection
	4-2	Be sure that the detailed setting items are made at factory setting.	Yes	4-3
			No	Correct the setting
	4-3	Run the auto address setting.		

- For information on the remote control's detailed settings, see 7-3 and 7-4.

• Factory setting

Item code	Item	Value
11	Indoor unit capacity	0
12	System address	99
13	Indoor unit address	99
14	Group control address	99

NOTE

The Item code numbers 11, 12, 13 and 14 can automatically be changed to the appropriate settings from factory settings listed above by making the auto address settings according to the connected outdoor unit capacity and the number of indoor units.

If needed to reset the settings after once changed, return all the item codes to the factory shipment-time settings. It is necessary to set the auto address settings once again.

E01 Remote Controller Reception Error (When indoor unit(s) are connected)

1. Error Detection Method

It is judged an error if no self-addressed communication is sent to the remote controller in a 3-minute period.

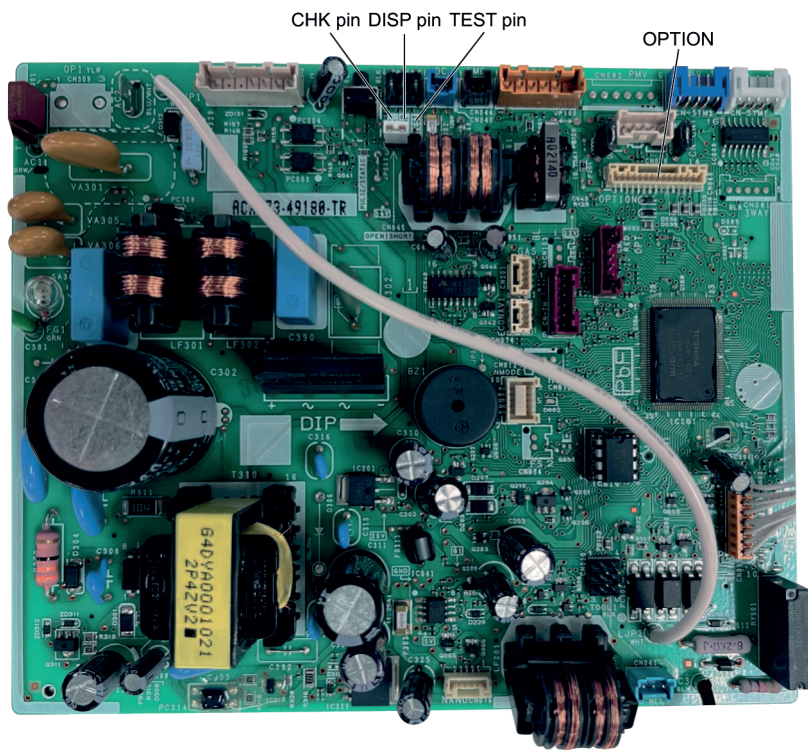
- When a remote controller is set to sub remote controller.
- When there are nine or more indoor units in a remote control group's wiring.
- When the CHK (check pin) and / or TEST (test pin) on the indoor unit control PC board are short circuited.
- The nonvolatile memory (EEPROM) is not installed or faulty when turning on the power.
- Indoor unit control PC board error.
- Remote controller check mode.
- Malfunctions of the remote controller itself (reception circuit error).

2. Error Diagnosis

1 Auto Address	1-1	Is auto address setting complete?	Yes	1-2
			No	1-3
	1-2	Is there an auto address setting error (Is the outdoor unit showing an alarm)?	Yes	1-3
			No	2-1
	1-3	Conduct checks prior to auto address setting.		
2 Group Control Wiring	2-1	Is that indoor unit under group control?	Yes	2-2
			No	3-1
	2-2	Are there any indoor units with their power off in the remote control group's wiring?	Yes	Power on
			No	2-3
	2-3	Are nine or more indoor units connected in one remote control group's wiring?	Yes	Correct the wiring
			No	2-4
	2-4	Was the remote control group's wiring changed after auto address setting was complete? Alternatively, were group settings changed in the remote control detailed settings mode?	Yes	2-5
			No	3-1
	2-5	No main unit in the remote control group's wiring? Re-execute auto address setting.		
3 Installation or setting related	3-1	Are the CHK pin and TEST pin on the indoor unit control board short-circuited?	Yes	Remove the short
			No	3-2
	3-2	Is the wireless remote controller connected to on the indoor unit's control PC board?	Yes	3-3
			No	3-5
	3-3	Disconnect the connector mentioned above on the PC board of the indoor unit control PC board, and see whether the E01 goes off after several minutes. (When doing so, if two remote controllers are being used and the wireless remote controller is the main remote controller, set the other remote controller as the main.)	Yes	3-4
			No	3-5
	3-4	Replace wireless remote control parts including wiring.		
	3-5	Is the LED blinking on the indoor unit's control PC board?	Yes	3-6
			No	3-7
	3-6	The nonvolatile memory (EEPROM) on the indoor unit's control PC board is either not installed, improperly installed or the nonvolatile memory is faulty. Correct this or after replacing the nonvolatile memory, write model data to it in the remote control detailed settings mode.		
	3-7	Is there a short, miswiring, disconnection, wrong contact or grounding in the remote control's wiring?	Yes	Correct the wiring
			No	Replace the indoor unit's control board.

- Regarding the remote controller check, refer to the Reference Materials.
- For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit and / or replacing the indoor unit's control board, refer to the manual that is packaged with the indoor unit service board.

Wall Mounted Type Indoor Unit Control Board



E02 Remote Controller Transmission Error

1. Error Detection Method

When the remote controller itself cannot transmit. Or when it cannot receive the signal it transmitted itself, or when they are different and judged an error.

- Malfunction of the remote controller itself (transmit circuit error).

2. Error Diagnosis

1 Remote Control Group Wiring	1-1	Is the indoor unit under group control?	Yes	1-2
			No	2-1
2 Group Control Wiring	1-2	Are the wires 1 (white) & 2 (black) to the remote control group shorted or opened?	Yes	Correct the wiring
			No	2-1
	2-1	Is the wireless remote controller connected to on the indoor unit's control PC board?	Yes	2-2
			No	2-4
	2-2	Disconnect the connector mentioned above on the board of the indoor unit control PC board, and see whether the E02 goes off after several minutes. (When doing so, if two remote controllers are being used and the wireless remote controller is the main remote controller, set the other remote controller as the main.)	Yes	2-3
			No	2-4
	2-3	Replace wireless remote control parts including wiring.		
	2-4	Is there a short, miswiring, open, wrong contact or grounding in the remote control's wiring?	Yes	Correct the wiring
			No	Replace the indoor unit's control PC board

- Regarding the remote controller check, refer to the Reference Materials.
- For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit and / or replacing the indoor unit's control board, refer to the manual that is packaged with the indoor unit service board.

E03 Error in Indoor Unit Receiving Signal from Remote Controller (central)

(When indoor unit(s) are connected)

1. Error Detection Method

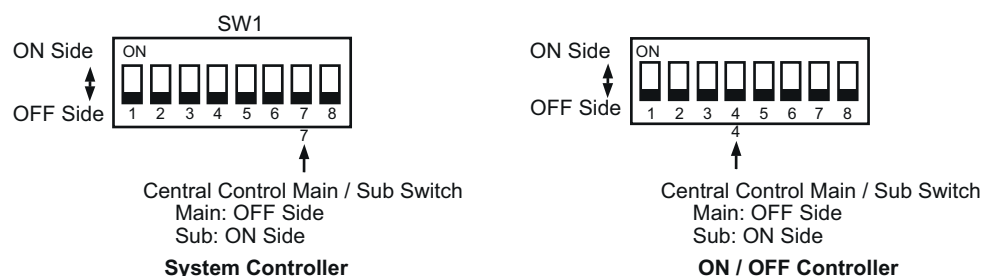
It is judged an error when there is no communication from any remote controller (collectively) in a 3-minute period or if there is no communication from the central device in a 15-minute period.

- When there was once communication, but during use the remote control wiring is opened or miswired.
- The line to the central control unit for indoor / outdoor operations is opened.
- Settings are made only for sub remote controller.
- The power to the central control unit is not on and remote controllers are not being used (or the inter-unit control wiring to the central control unit is opened).
- When remote controller are not being used, only the sub remote controller is set up.

2. Error Diagnosis

1 Central control unit	1-1	Is the central control unit connected?	Yes	1-2
			No	2-1
	1-2	Is the central control unit's powered off?	Yes	Power on
			No	1-3
	1-3	Are all the Main / Sub switches on the connected central control unit set to Sub?	Yes	1-4
			No	1-5
2 Remote controller	1-4	Of the central control units that are connected, set only the uppermost central control unit to Main and the others to Sub. The order from top to bottom is communication adaptor → system controller → ON / OFF controller.		
	1-5	Is the inter-unit control wiring connected to the central control unit opened?	Yes	Correct the setting
			No	2-1
	2-1	Is the indoor unit under group control?	Yes	2-2
			No	3-1
3 Indoor unit control PC board	2-2	Are the wires 1 (white) & 2 (black) to the remote control group opened, have wrong contact or grounded?	Yes	Correct the setting
			No	3-1
	3-1	Is the wireless remote controller connected to on the indoor unit's control PC board?	Yes	3-2
			No	3-4
	3-2	Disconnect the connector mentioned above on the control PC board of the indoor unit control PC board, and see whether the E03 goes off after several minutes. (When doing so, if two remote controllers are being used and the wireless remote controller is the main remote controller, set the other remote controller as the main.)	Yes	3-3
			No	3-4
	3-3	Replace wireless remote control parts including wiring.		
	3-4	Is there a short, miswiring, open, wrong contact or grounding in the remote control's wiring?	Yes	Correct the wiring
			No	Replace the indoor unit control board

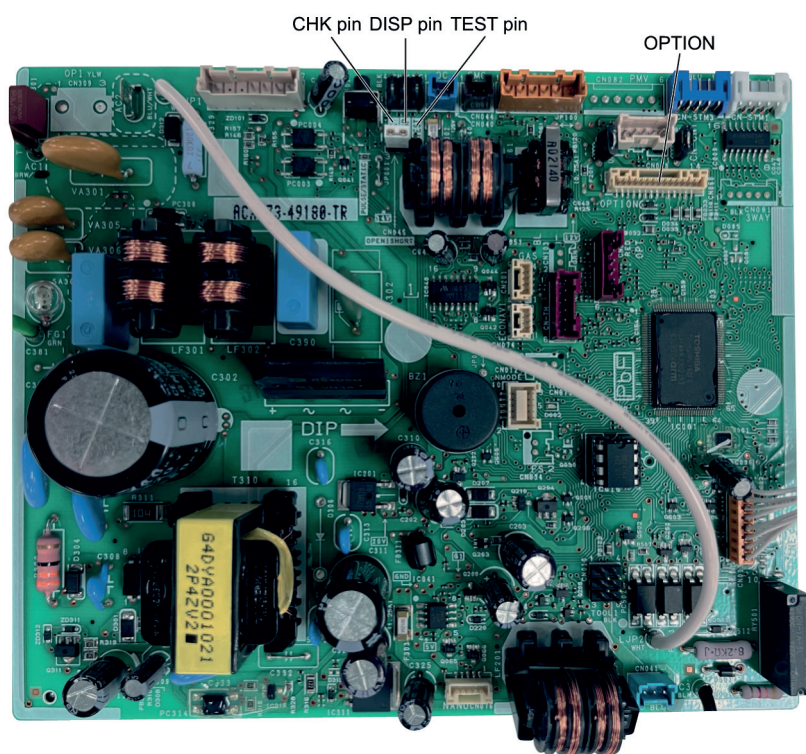
- Regarding the remote controller check, refer to the Reference Materials.
- For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit and / or replacing the indoor unit's control board, refer to the manual that is packaged with the indoor unit service board.



- For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit, refer to the manual that is packaged with the indoor unit service board.
- For information on the remote control's detailed settings, see 7-3 and 7-4.
- The alarm also occurs when the indoor unit cannot be recognized (indoor unit only blackout, disconnection of indoor / outdoor control line*, etc.) during auto address setting.

* indoor / outdoor control line* : Connection cable between outdoor and indoor unit

Wall Mounted Type Indoor Unit Control Board



E04 Error in Indoor Unit Receiving Signal from the Outdoor unit

1. Error Detection Method

When there is no communication within a 3-minute period from the outdoor unit. Or, judged an error when no reply comes from the outdoor unit.

- The outdoor unit is not turned on.
- When the power was turned on after auto address setting was completed, the number of indoor units had been changed.
- Forgot to turn on the indoor unit.
- The CHK pin and / or TEST pin on the indoor unit's control PC board are shorted.
- Forgot to install the nonvolatile memory (EEPROM) when replacing the indoor unit control PC board.
- Mistakenly set the indoor unit address to Not Set in the remote control's detailed setting mode.
- When indoor unit addresses are duplicated.
- There is a short, open, wrong contact or grounding of the indoor / outdoor control line*.
- There is an error in the receiving circuit on the signal output PC board (optional control PC board).
- Malfunctions of the outdoor unit
- The thermistor inside the indoor unit is grounded.
- The capacity setting is mismatched between indoor units and the outdoor unit.

2. Error Diagnosis

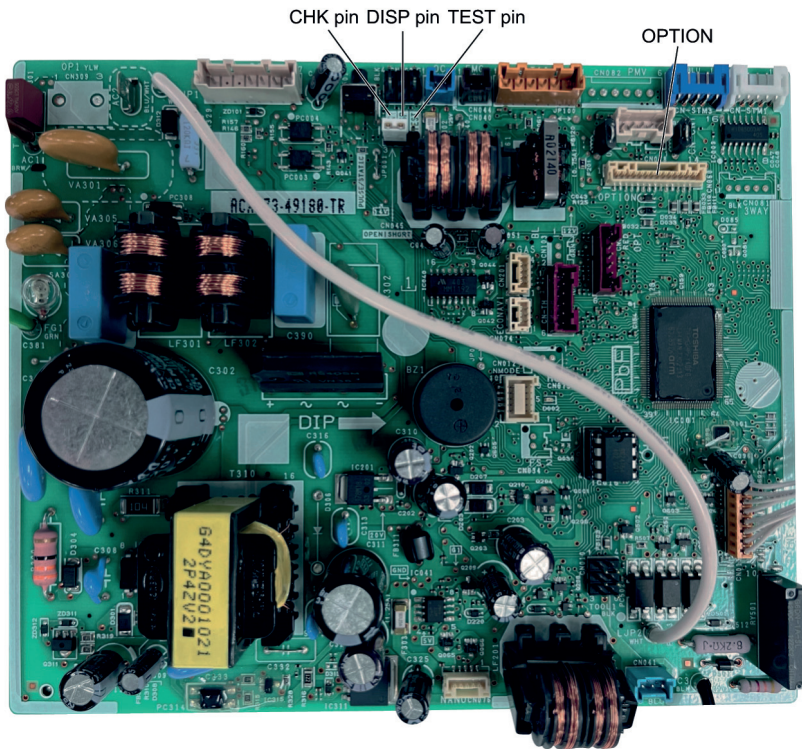
1 Power Source	1-1	Is / was the power to the outdoor unit cut off?	Yes	After turning the power on, wait three minutes		
			No	1-2		
	1-2	Is the indoor unit powered off?	Yes	Power on		
			No	2-1		
2 Indoor / outdoor wiring	2-1	Is the indoor / outdoor wiring connected correctly?	Yes	3-1		
			No	Correct the wiring		
3 Number and setting of indoor units	3-1	Was the number of indoor units increased or decreased after auto address setting was complete?	Yes	3-2		
			No	3-3		
	3-2	Conduct checks prior to auto address setting.				
	3-3	Check the indoor unit addresses from the remote control's detailed settings mode. Is it Not Set (99), or is the indoor unit's address duplicated?	Yes	3-2		
			No	3-4		
	3-4	Check the indoor unit capacity from the remote control's detailed settings mode. Does it match the capacity of outdoor unit?	Yes	4-1		
			No	3-2		
	4 Indoor unit control PC board	4-1	Are the CHK pin and / or TEST pin on the indoor unit control PC board short-circuited?	Yes	Remove the short	
No				4-2		
4-2		Is the wireless remote controller connected to on the indoor unit's control PC board?	Yes	4-3		
			No	4-5		
4-3		Disconnect the connector mentioned above on the control PC board of the indoor unit control PC board, and see whether the E04 goes off after several minutes. (When doing so, if two remote controllers are being used and the wireless remote controller is the main remote controller, set the other remote controller as the main.)	Yes	4-4		
			No	4-5		
4-4		Replace wireless remote control parts including wiring.				
4-5		Is the LED on the indoor unit control PC board blinking?	Yes	4-6		
			No	4-7		
4-6		The nonvolatile memory (EEPROM) on the indoor unit's control PC board is either not installed, improperly installed or the nonvolatile memory is faulty. Correct this or after replacing the nonvolatile memory, write model data to it in the remote control detailed settings mode.				
4-7	Are all the remote controllers of the other indoor units connected to that outdoor unit displaying E04?	Yes	Replace the outdoor unit control board			
		No	Replace the indoor unit control board			

* indoor / outdoor control line* : Connection cable between outdoor and indoor unit

- Regarding the remote controller check, refer to the Reference Materials.
- For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit and / or replacing the indoor unit's control board, refer to the manual that is packaged with the indoor unit service board.

Indoor Unit Control PCB

Wall Mounted Type Indoor Unit Control Board



E08 Duplicate Indoor Unit Address Settings Error

1. Error Detection Method

It is judged an error if the addresses of indoor units are duplicated.

- The indoor unit address settings are duplicated in the remote control detailed settings mode.
- The multiple unit DISP pin is shorted across the indoor unit whose address is Not Set.

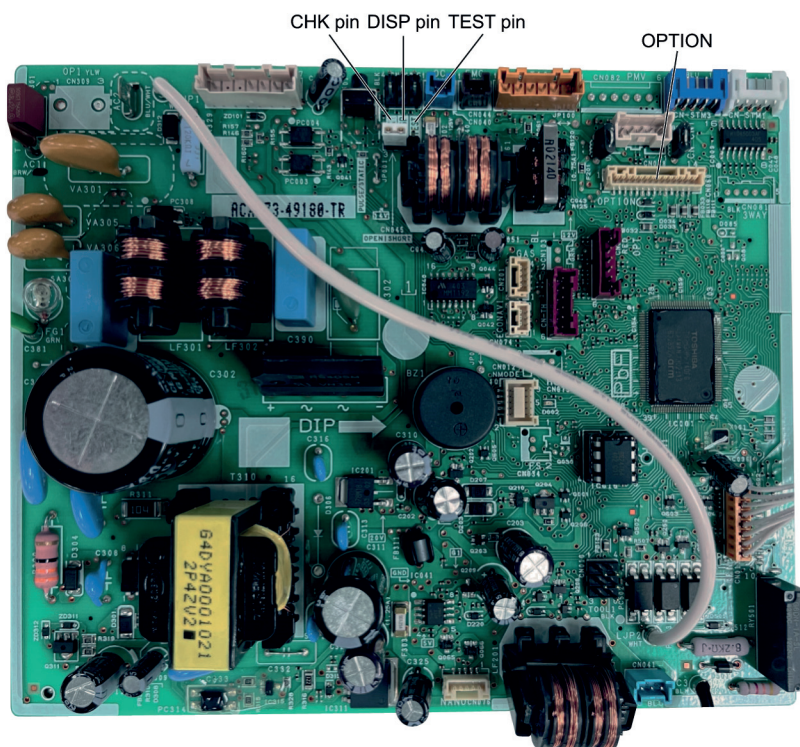
2. Error Diagnosis

1 Indoor unit control PC board	1-1	Is the DISP pin on the indoor unit control PC board shorted?	Yes	Remove the short
			No	1-2
	1-2	Conduct checks prior to auto address setting. Does E08 fail to go off even after running auto address setting again?	Yes	1-3
			No	1-4
	1-3	The nonvolatile memory (EEPROM) on the indoor unit board has failed. ↓ Replace the EEPROM.		
	1-4	Do not make changes to indoor unit addresses with the detailed settings of the remote controller. Make them in the remote control address change mode.		

- For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit, refer to the manual that is packaged with the indoor unit service board.
- For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit, refer to the manual that is packaged with the indoor unit service board.
- For information on the remote control's detailed settings, see 7-3 and 7-4.
- The alarm also occurs when the indoor unit cannot be recognized (indoor unit only blackout, disconnection of indoor / outdoor control line*, etc.) during auto address setting.

* indoor / outdoor control line* : Connection cable between outdoor and indoor unit

Wall Mounted Type Indoor Unit Control Board



E09 More Than One Remote Controller Set to Main Error

1. Error Detection Method

It is judged an error when more than one remote controller in a remote control group is set as the main remote controller.

- Forgot to set one remote controller to sub in a 2-remote control group.
- When using one wireless and one wired remote controller in a control group, forgot to set one of them to sub.

2. Error Diagnosis

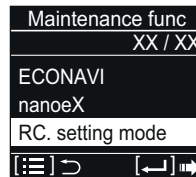
1 Remote controller	1-1	Set one of the 2 remote controllers to sub.
---------------------	-----	---

- Method for setting a remote controller to sub

<CZ-RTC6 series>

(1) Press and hold the ,  and  for 4 seconds or more simultaneously.

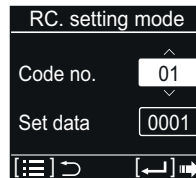
(2) Select "RC. setting mode".



(3) Select the "Code no." and "Set data".



(Repeat)



CZ-RTC6 series

Code no.	Item	Set data	
		0000	0001
01	Main/Sub	Sub	Main

(4) Press .

- After selecting "YES", the unit restarts.

<CZ-RTC5B>

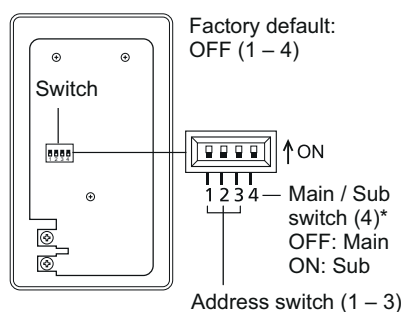
1. Press and hold  +  +  buttons for 4 seconds or more simultaneously.
2. Press  /  buttons to select the "3. RC. setting mode" and press the  button.
3. The Code no. "01" and the Set data "0001" or the like on the remote controller's display.
4. Press  /  buttons to select the Code no. to "01" and press the  button.
5. Press  /  buttons to select the Set data to "0000" (0000: Sub 0001: Main) and press the  button.
6. Press  button. After selecting [YES], the unit restarts.

<CZ-RTC4>

1. Press and hold  +  +  buttons for several seconds simultaneously.
2. This will display , the CODE No. "01" and the SET DATA "0001" or the like on the remote controller's display.
3. Press  /  buttons to select the CODE No. to "01".
4. Press  /  buttons to select the SET DATA to "0000". (0000: Sub 0001: Main)
5. Press  button (Once the display changes from flashing to steady, the setting is complete).
6. Once you press  button, the remote controller returns to its normal display.

Wireless remote controller

CZ-RWRC3

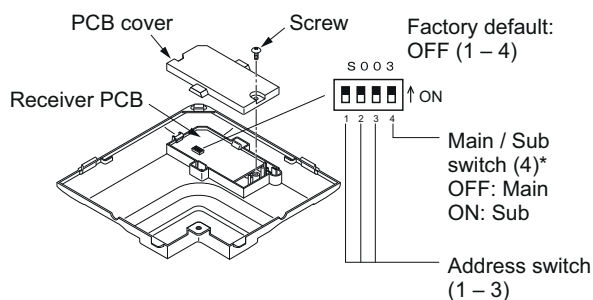


Main / Sub setting

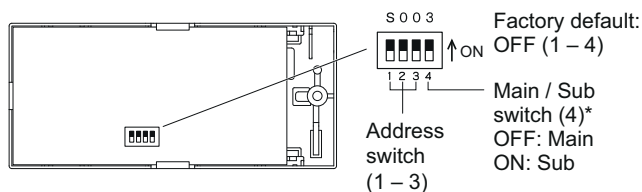
- Use this to set Main / Sub for the remote controller and the receiver.
- Set one to [Main] and the other to [Sub].
- Factory default: [Main]
- It is recommended to set the wired remote controller to [Main].

Main / Sub	MAIN	SUB
Main / Sub switch position		
	1 2 3 4	1 2 3 4

CZ-RWRU3, CZ-RWRU3W

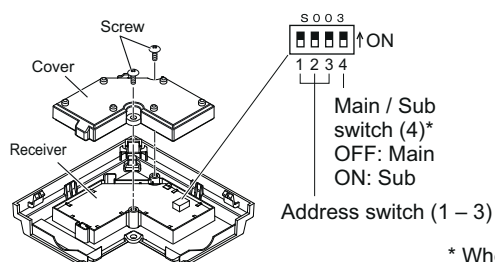


CZ-RWRT3



* When using the infrared remote controller and the wired remote controller in combination, set the wired remote controller to [Main].

CZ-RWRY3



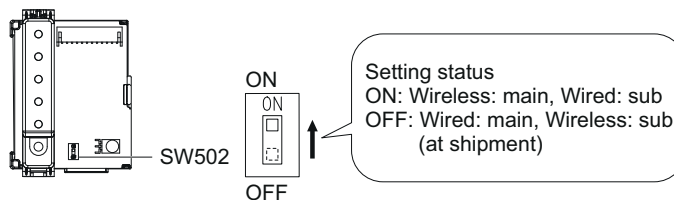
* When using the receiver and wired remote controller in combination, set the receiver to [Sub].

Wall Mounted Type

<When Using Wireless Remote Controller Instead of Wired Remote Controller>

When the wireless remote controller is to be used, slide the switch (SW502) to the ON position.

- If this setting is not made, an alarm will occur
(The operation lamp on the display blinks.)
See "8-3-2-1. <Optional parts setting and wiring>".



E14 Main Unit duplication in Simultaneous-operation Multi Control (detected outdoor unit)**1. Error Detection Method**

It is judged an error that the main units are duplicated in the indoor unit group.

- Main unit setting was made in the indoor unit group control setting of the remote control detailed settings mode.

2. Failure Diagnosis

1 Group Control Address	1-1	Are multiple indoor units set up as the main unit?	Yes	2-1
			No	2-2
2 Installation & Setting	2-1	Set up only one indoor unit as the main unit and other indoor units to the sub-unit.		
	2-2	Carry out the auto address setting.		

E15 Auto Address Alarm (The total capacity of indoor units is too low.)

1. Error Detection Method

Connecting indoor unit

It is judged an error the total capacity of indoor units replied by communication is lower than that of outdoor unit.

- The total capacity of indoor units is lower than that of outdoor unit.
- Some indoor unit(s) are connected but power is not turned on.
- The CHK pin (CN062 / CN071) and / or TEST pin (CN064) of the indoor unit is shorted when its power is turned on.

2. Error Diagnosis

1 Power Source	1-1	Is the indoor unit powered off?	Yes	Power on
			No	2-1
2 Indoor / outdoor wiring	2-1	Is the indoor / outdoor wiring connected correctly?	Yes	3-1
			No	Correct the wiring
3 Number of Indoor Units	3-1	Was the number of indoor units changed after auto address setting finished?	Yes	3-2
	3-2	Conduct checks prior to auto address setting.	No	4-1
4 Indoor unit control PC board	4-1	Be sure that the detailed setting items are made at factory setting. [U3, F3, K3, T3]	Yes	4-2
			No	Correct the setting Run the auto address
	4-2	Are the CHK pin and TEST pin on the indoor unit control board short-circuited?	Yes	Remove the short
			No	4-3
	4-3	Is the wireless remote controller connected to on the indoor unit's control PC board?	Yes	4-4
			No	4-6
	4-4	Disconnect the connector mentioned above on the control PC board of the indoor unit control PC board and see whether the E15 goes off after several minutes. (When doing so, if two remote controllers are being used and the wireless remote controller is the main remote controller, set the other remote controller as the main.)	Yes	4-5
			No	4-6
	4-5	Replace wireless remote control parts including wiring.		
	4-6	Is the LED blinking on the indoor unit's control PC board?	Yes	4-7
			No	5-1
	4-7	The nonvolatile memory (EEPROM) on the indoor unit's control board is either not installed, improperly installed or the nonvolatile memory is faulty. Correct this or after replacing the nonvolatile memory, write model data to it in the remote control detailed settings mode.		
5 Outdoor unit control PC board	5-1	Check all items under the section "Check Prior to Auto Address Setting".		

• Factory setting

Item code	Item	Value
11	Indoor unit capacity	0
12	System address	99
13	Indoor unit address	99
14	Group control address	99

NOTE

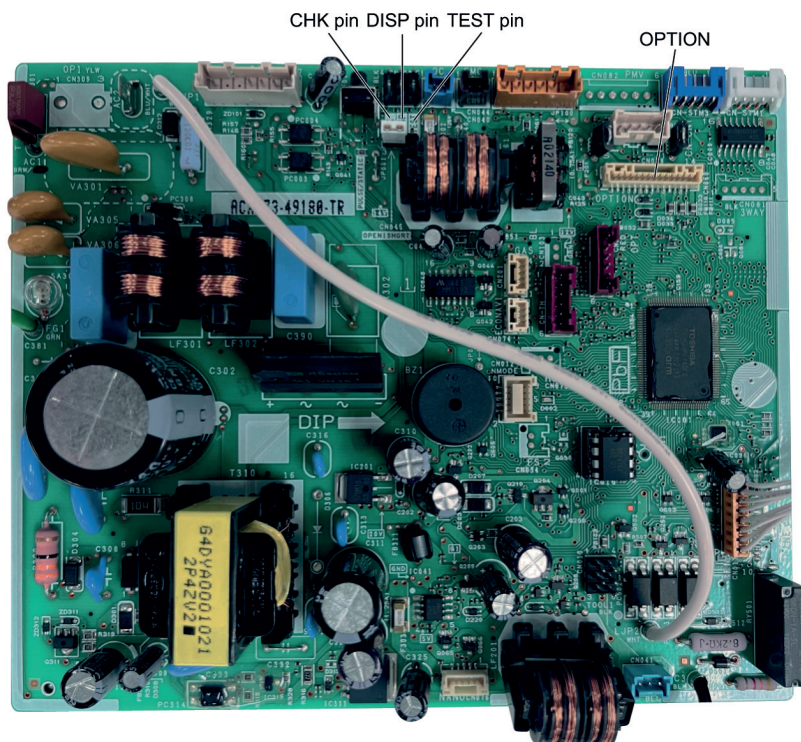
The Item code numbers 11, 12, 13 and 14 can automatically be changed to the appropriate settings from factory settings listed above by making the auto address settings according to the connected outdoor unit capacity and the number of indoor units.

If needed to reset the settings after once changed, return all the item codes to the factory shipment-time settings. It is necessary to set the auto address settings once again.

- For information on the procedures for replacing the nonvolatile memory (EEPROM) of the indoor unit, refer to the manual that is packaged with the indoor unit service board.
- For information on the remote control's detailed settings, see 7-3 and 7-4.
- The alarm also occurs when the indoor unit cannot be recognized (indoor unit only blackout, disconnection of indoor / outdoor control line*, etc.) during auto address setting.

* indoor / outdoor control line* : Connection cable between outdoor and indoor unit

Wall Mounted Type Indoor Unit Control Board



E16 Auto Address Alarm (The total capacity of indoor units is too high.)

1. Error Detection Method

It is judged an error the total capacity of indoor units is too high or the total number of indoor units is too many.

- The total capacity of indoor units is too high.
- The total number of indoor units is too many.
- When making group control of the different refrigerant system, the steps to turn on the systems one at a time have not been performed.

2. Error Diagnosis

1 Auto Address	1-1	Conduct checks prior to auto address setting.
----------------	-----	---

E18 Faulty Communication in Group Control Wiring

1. Error Detection Method

When the main remote controller cannot communicate with a sub remote controller in the remote control group. It is judged an error if a sub remote controller in a remote control group fails to communicate with the main remote controller for a period of three minutes.

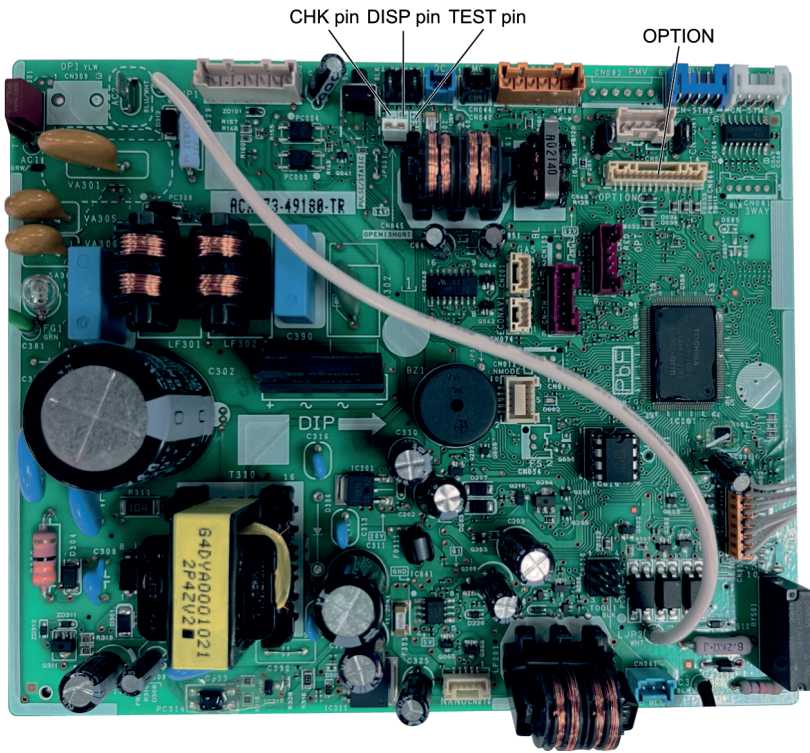
- An indoor unit within the control group does not have its power on.
- The CHK pin and TEXT pin on the indoor unit in the control group are shorted.
- The DISP pin of an indoor unit sub remote controller in the control group is shorted.
- Remote control group wiring is opened.
- More than one indoor unit in the control group is set to Main.
- An indoor unit in the control group is set to Separate.

2. Error Diagnosis

1 Indoor Unit	1-1	Is the indoor unit powered off?	Yes	Power on
			No	1-2
	1-2	Are the CHK pin, TEST pin and DISP pin on the indoor unit control PC board short-circuited?	Yes	Remove the short
			No	2-1
2 Substitute Sub Remote Controller	2-1	Is the remote control group's wiring opened?	Yes	Correct the wiring
			No	2-2
	2-2	Check the group settings (Item Code 14) from the remote control's detailed settings mode. Is the main remote controller (1) set to more than one remote controller or to separate (0)?	Yes	2-3
			No	3-1
	2-3	Is the wiring of the remote control group wired according to the wiring diagram?	Yes	2-4
			No	2-5
	2-4	Run the auto address setting again.		
	2-5	Run the auto address setting again after correcting the wiring of the remote control group.		
3 Indoor unit control PCB	3-1	Is the wireless remote controller connected to on the indoor unit's control PC board?	Yes	3-2
			No	3-4
	3-2	Disconnect the connector mentioned above on the control PC board of the indoor unit control PC board, and see whether the E18 goes off after several minutes. (When doing so, if two remote controllers are being used and the wireless remote controller is the main remote controller, set the other remote controller as the main.)	Yes	3-3
			No	3-4
	3-3	Replace wireless remote control parts including wiring.		
	3-4	Replace the indoor unit control PC board.		

- For information on the remote control's detailed settings, see 7-3 and 7-4.
- For information on the procedures for replacing the Indoor unit control PCB, refer to the manual that is packaged with the indoor unit service board.

Wall Mounted Type Indoor Unit Control Board



P31 Group Control Error

1. Error Detection Method

- Other indoor unit alarms within the group.

1 Other indoor unit	1-1	Survey the indoor unit that alarms other than "P31" in the indoor unit group and specify the causes of failure.
---------------------	-----	---

⚠ WARNING

High Voltage is generated in the electrical parts area by the capacitor. Ensure that the capacitor has discharged sufficiently before proceeding with repair work. Failure to heed this caution may result in electric shocks.
Working at a height involves risk of a person falling. Practice safety standards according to each country requirement.

6.2 Indoor Electronic Controllers, Cross Flow Fan and Indoor Fan Motor Removal Procedures (S-2545PK4E)

6.2.1 To Remove Front Grille

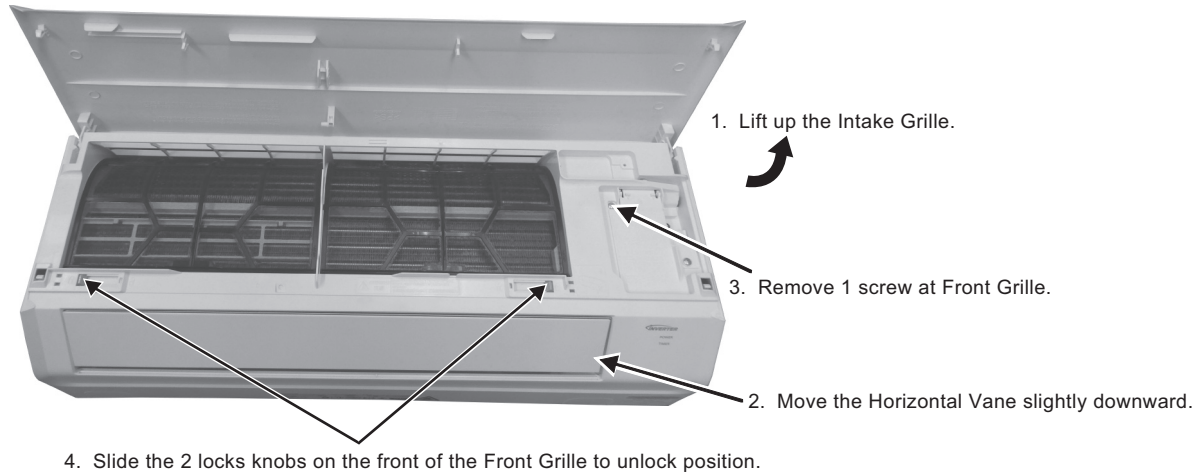


Figure 1

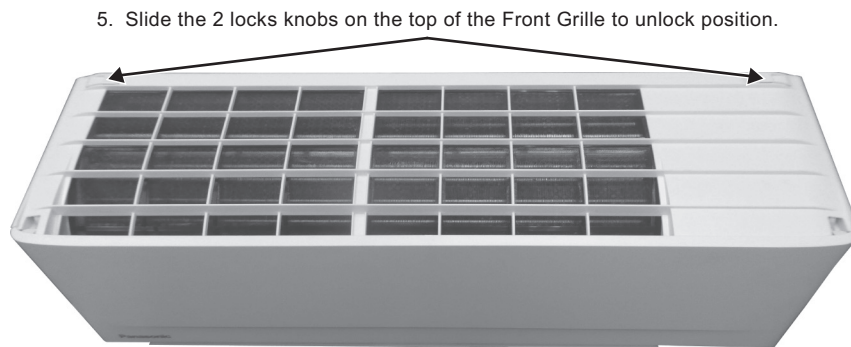


Figure 2



Figure 3

6.2.2 To Remove Electronic Controller

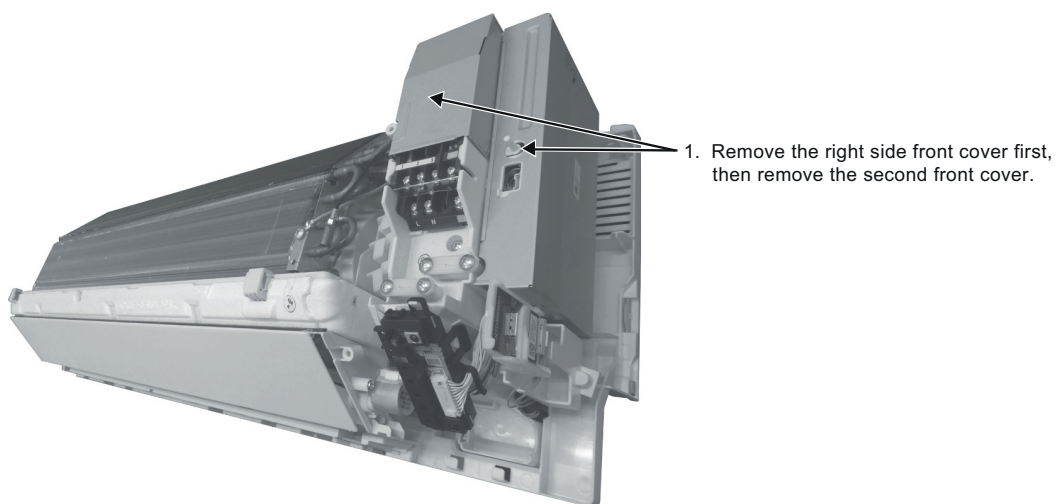


Figure 4

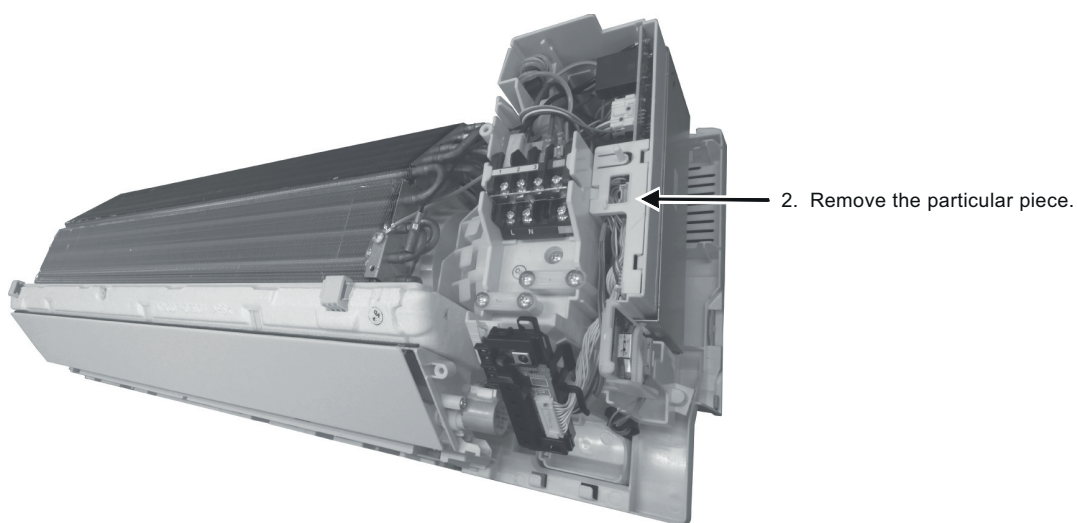


Figure 5

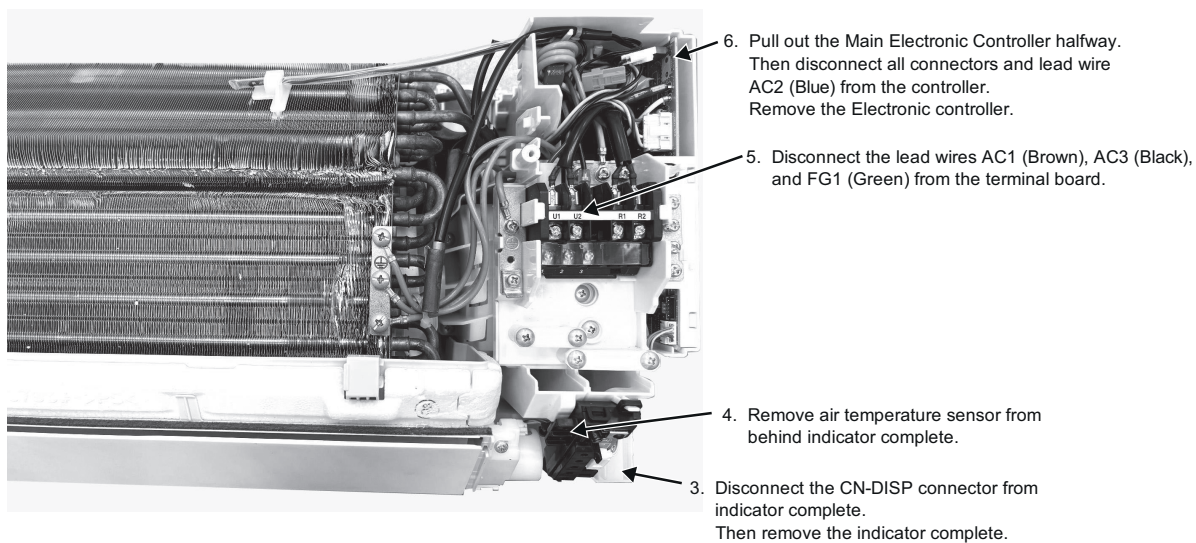
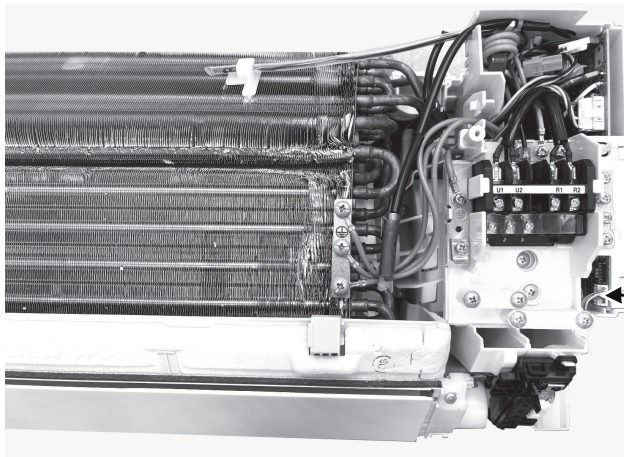


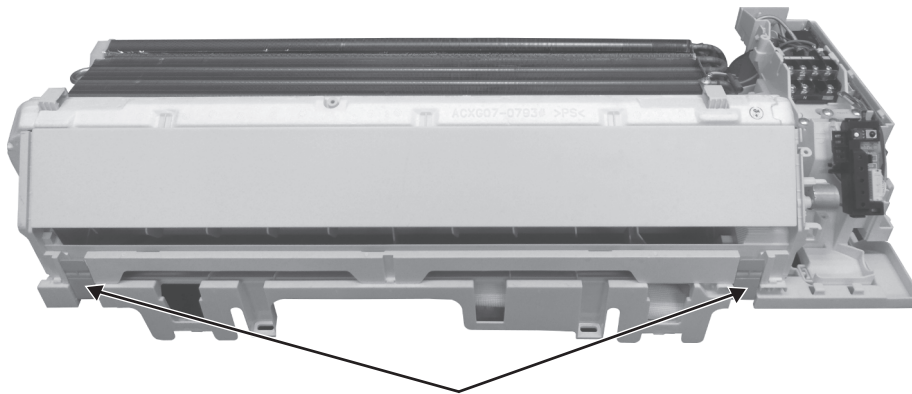
Figure 6

6.2.3 To Remove Discharge Grille



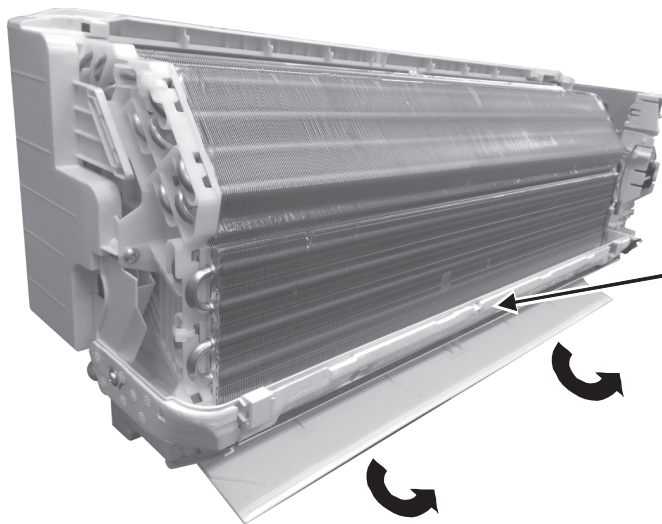
1. Disconnect CN-STM1 from electronic controller.

Figure 7



2. Pull out the 2 locks knobs on the bottom of the Discharge Grille to unlock position.

Figure 8



3. Pull out the discharge grille to remove.

Figure 9

6.2.4 To Remove Cross Flow Fan

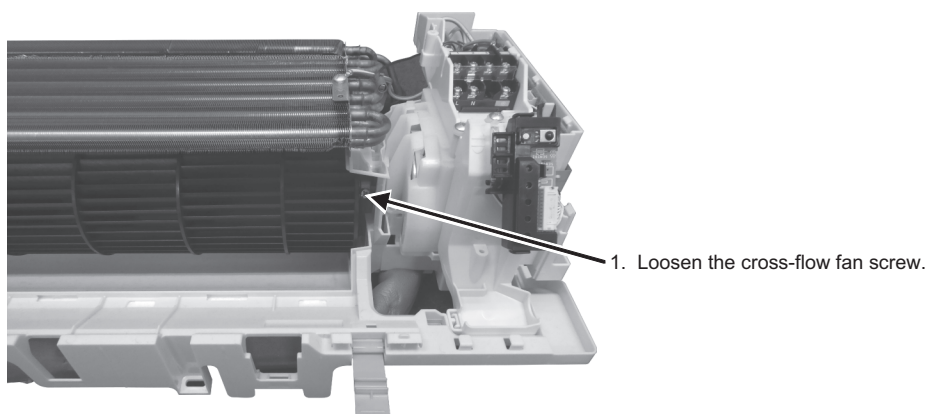


Figure 10

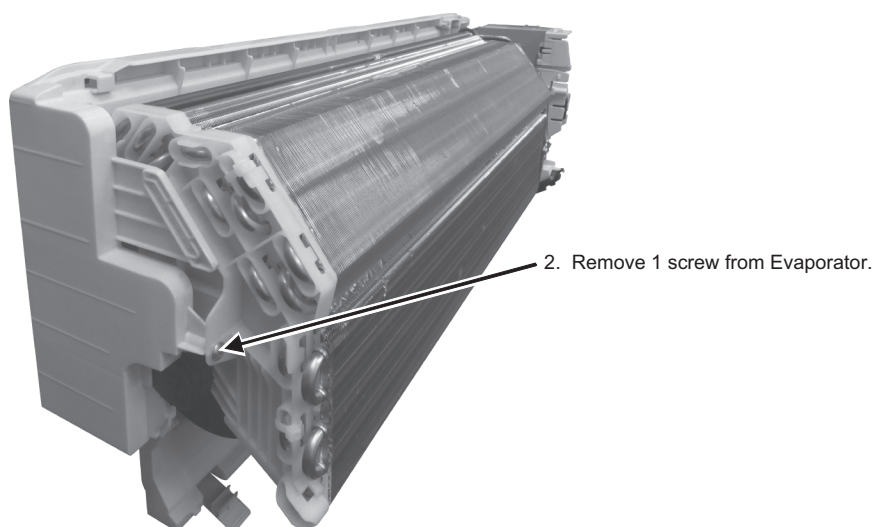


Figure 11

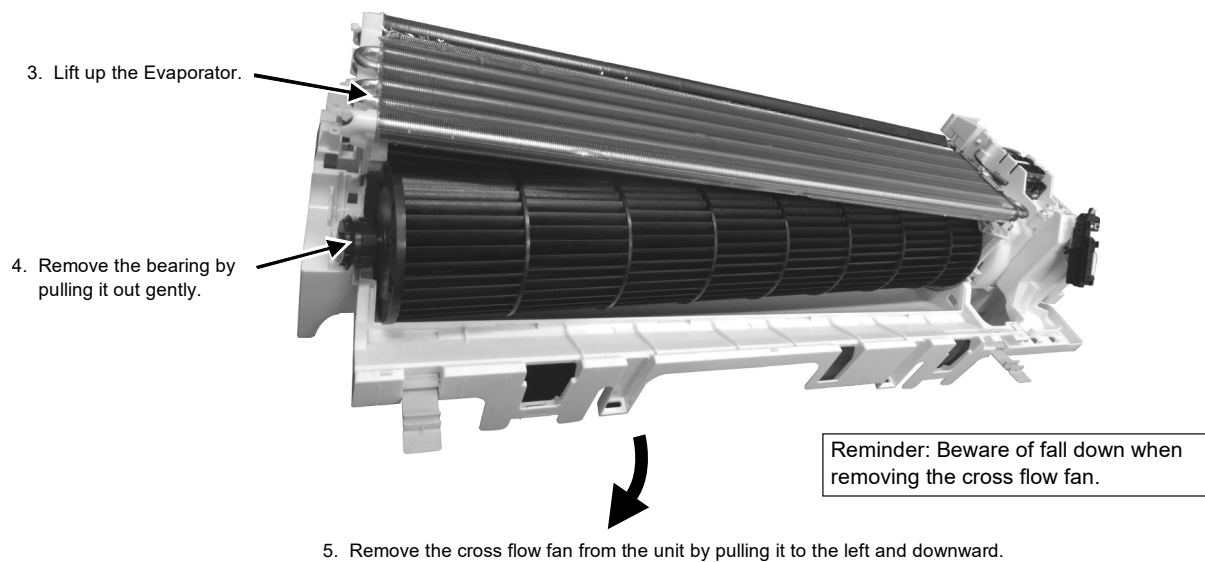


Figure 12

6.2.5 To Remove Fan Motor

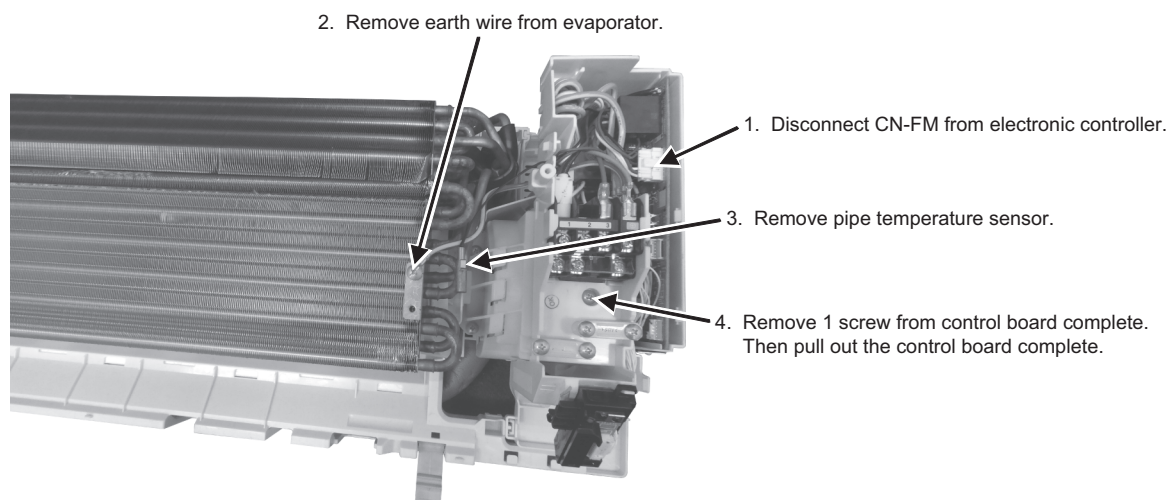


Figure 13

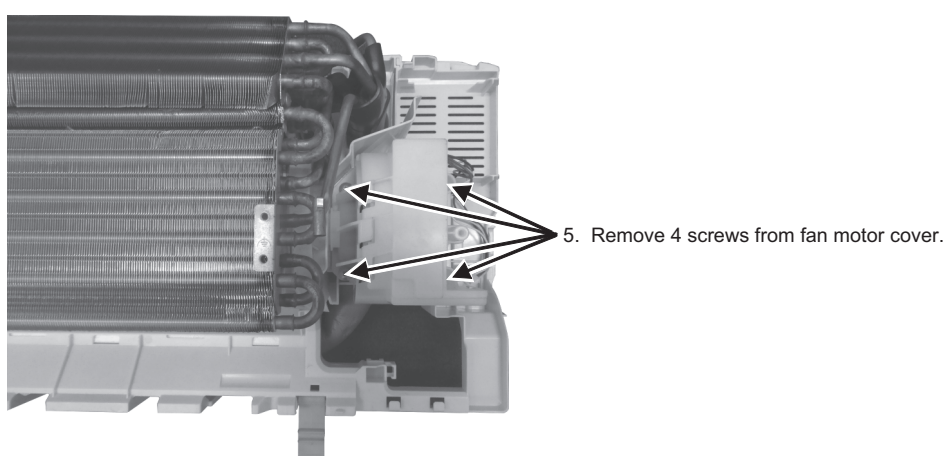


Figure 14

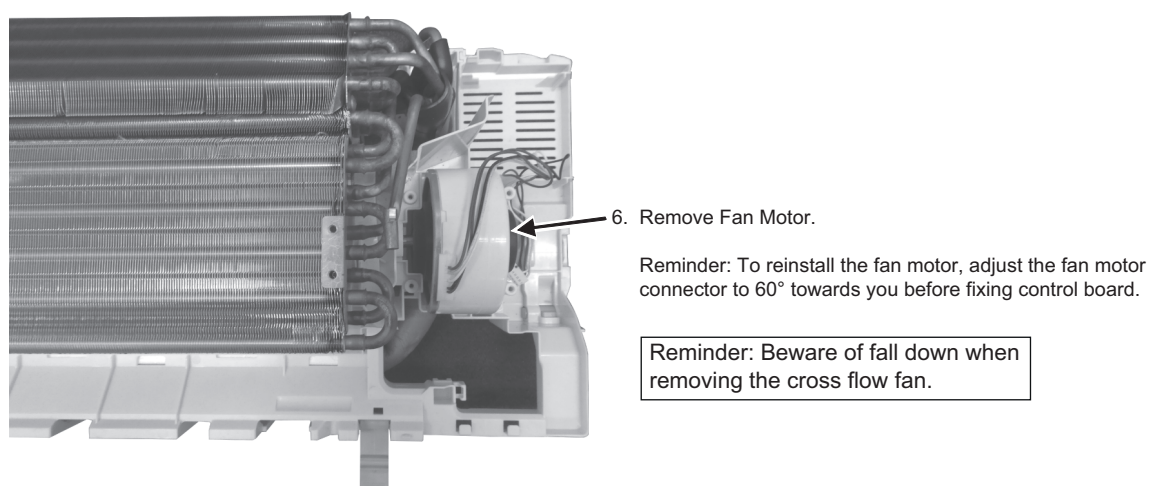


Figure 15

 "Precaution of Maintenance"
Removed all electrical parts before doing wet servicing



WARNING

High Voltage is generated in the electrical parts area by the capacitor. Ensure that the capacitor has discharged sufficiently before proceeding with repair work. Failure to heed this caution may result in electric shocks.
Working at a height involves risk of a person falling. Practice safety standards according to each country requirement.

6.3 Indoor Electronic Controllers, Cross Flow Fan and Indoor Fan Motor Removal Procedures (S-5010PK4E)

6.3.1 To Remove Front Grille

5. Slide the 2 locks knobs on the front of the Front Grille to unlock position.

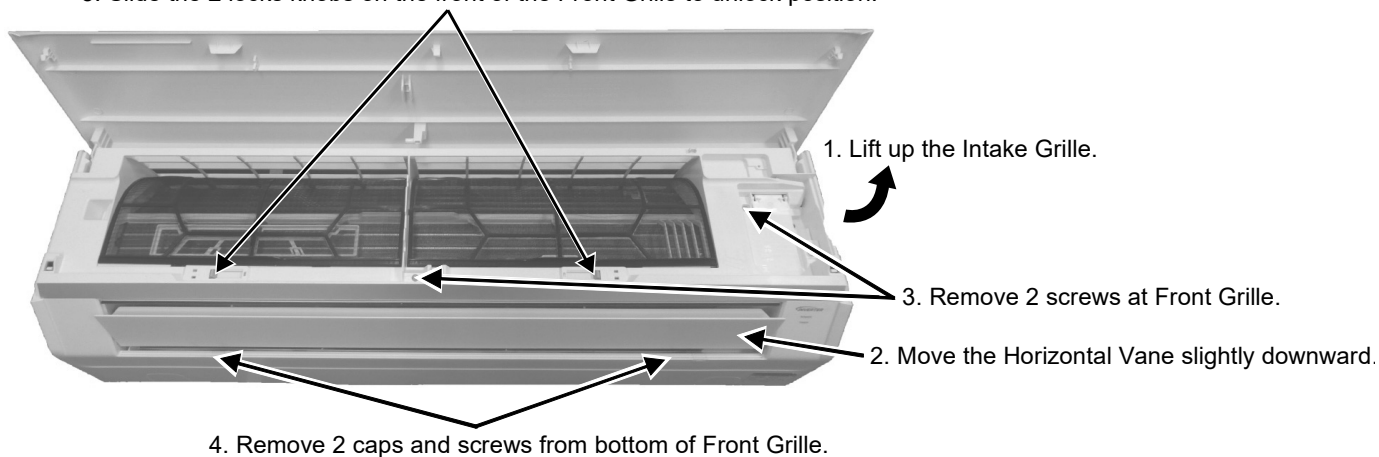


Figure 1

6. Slide the 4 locks knobs on the top of the Front Grille to unlock position.

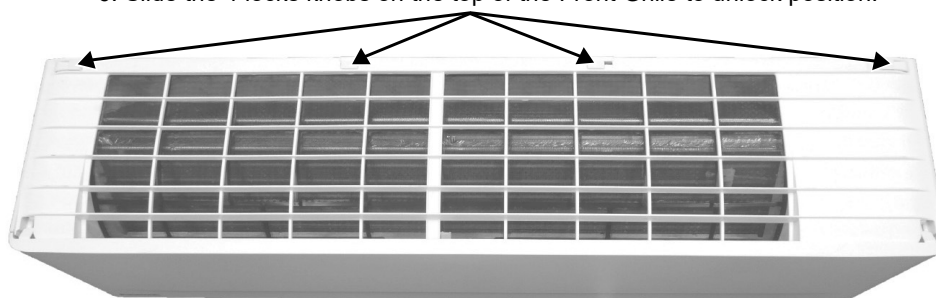


Figure 2

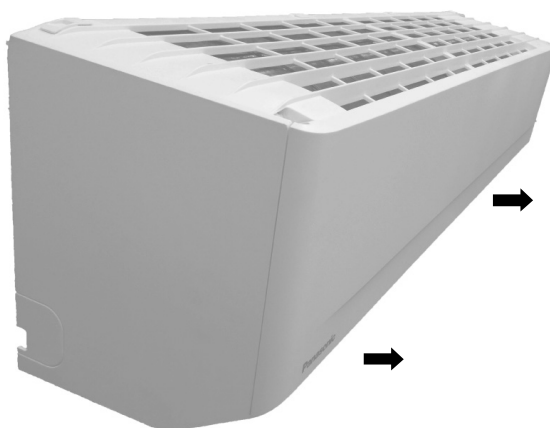


Figure 3

6.3.2 To Remove Electronic Controller

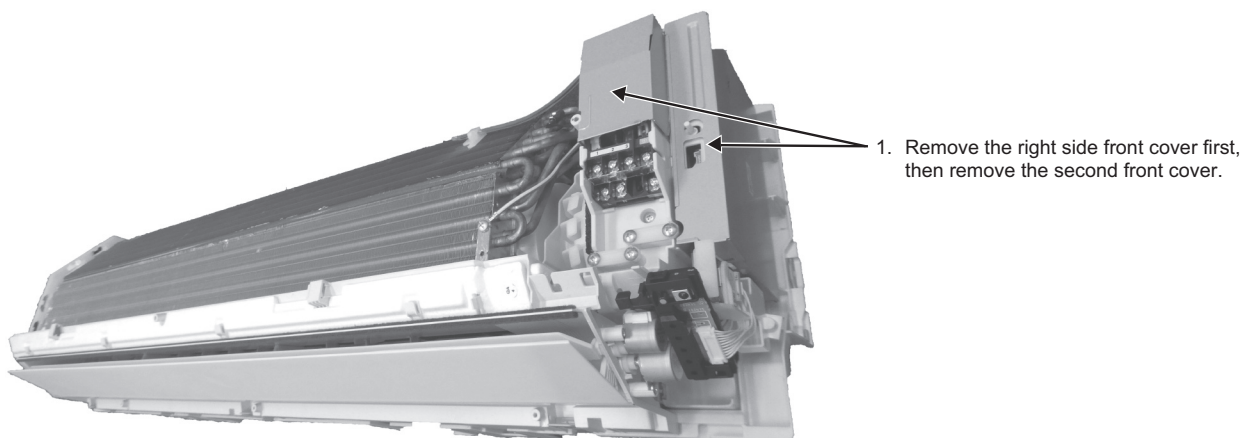


Figure 4

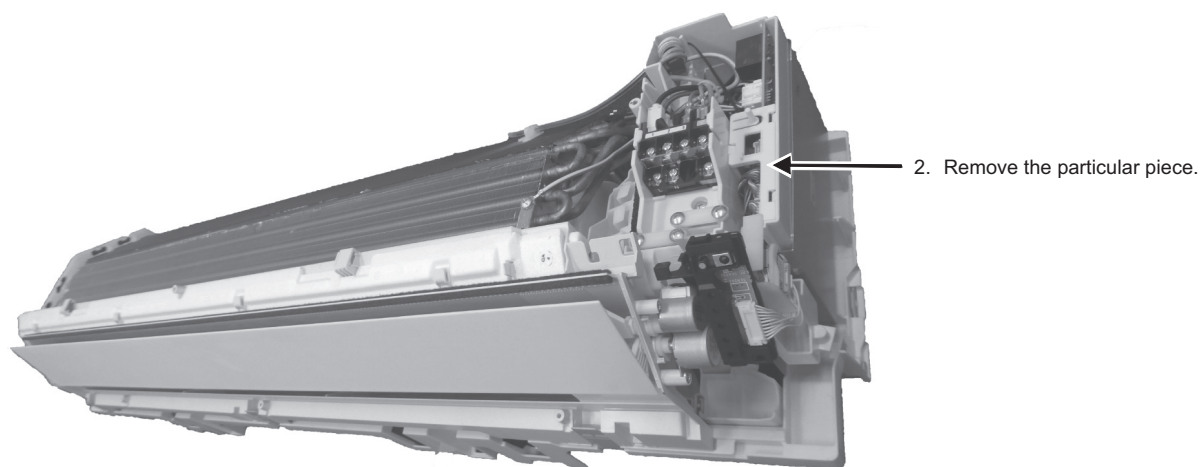


Figure 5

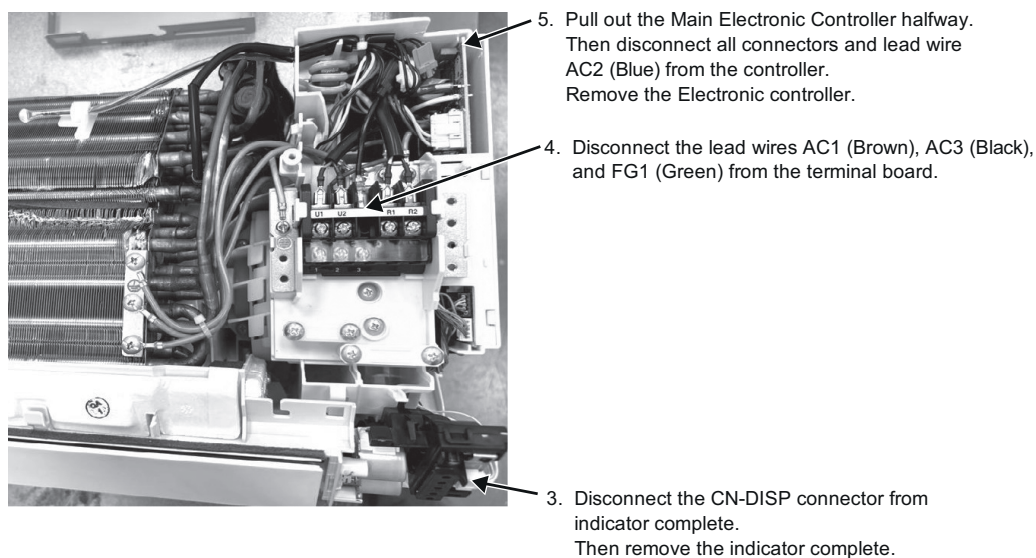


Figure 6

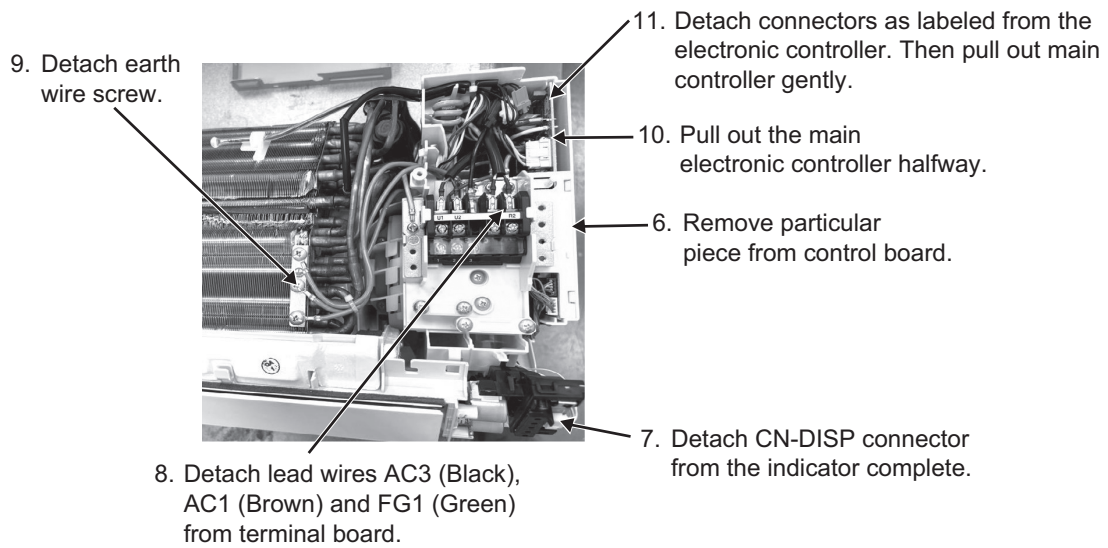


Figure 7

6.3.3 To Remove Discharge Grille

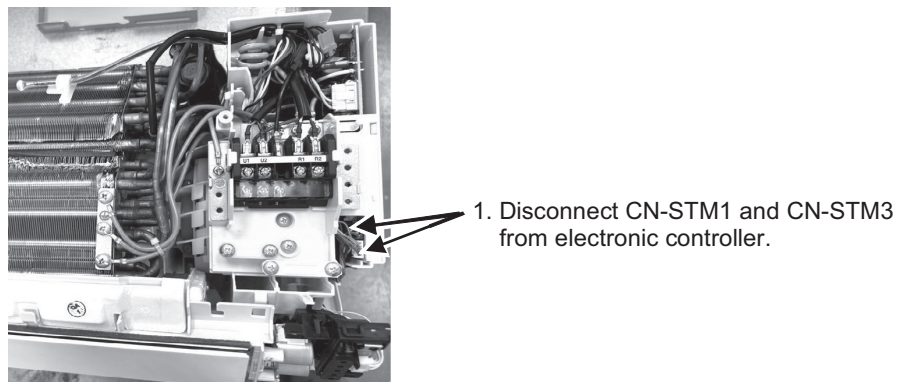


Figure 8

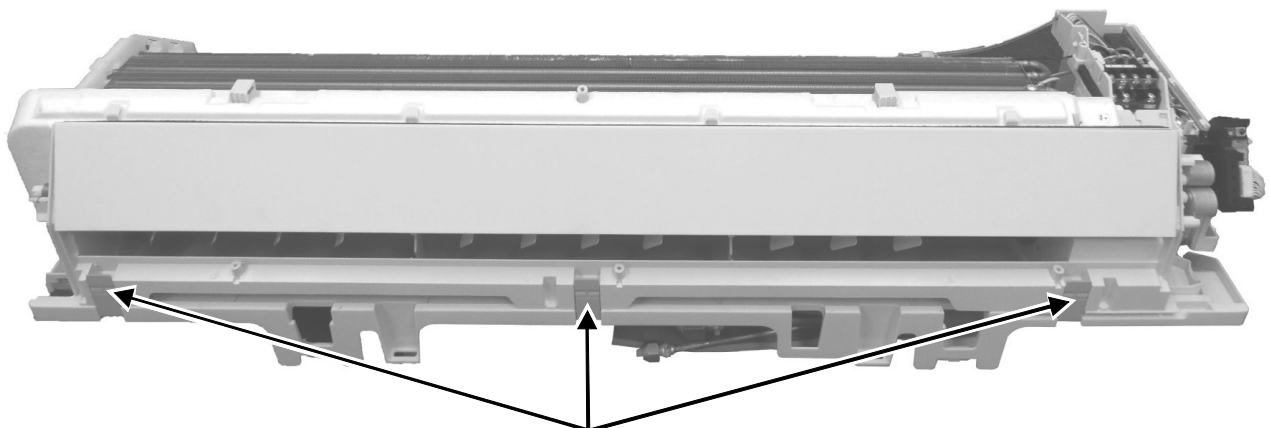


Figure 9

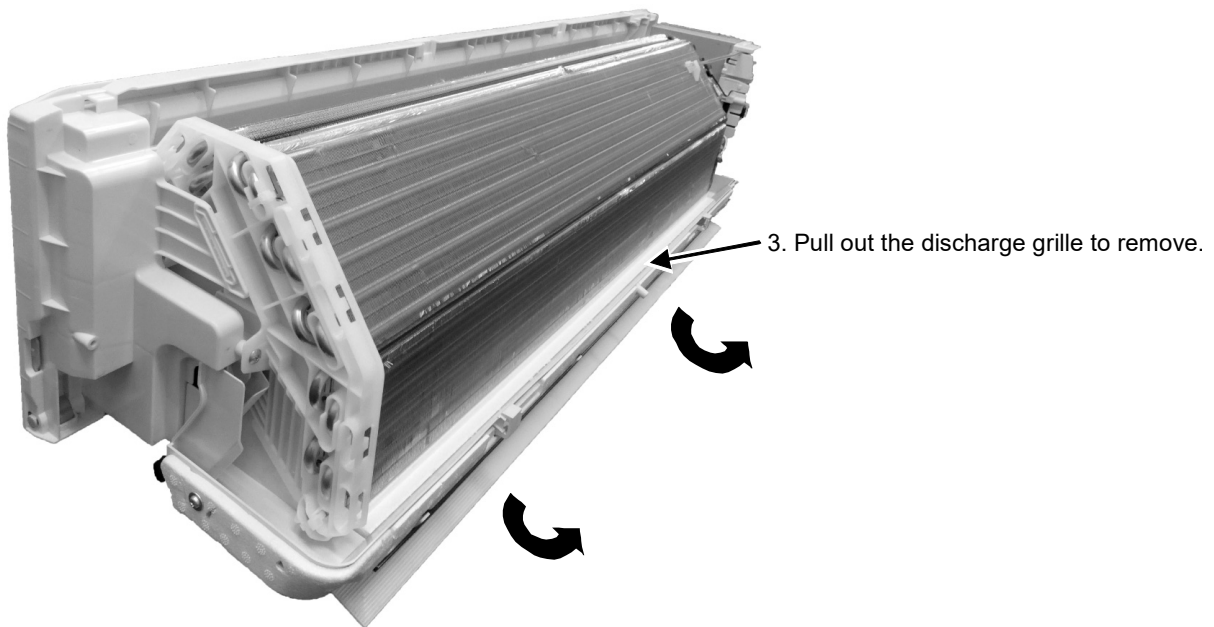


Figure 10

6.3.4 To Remove Cross Flow Fan

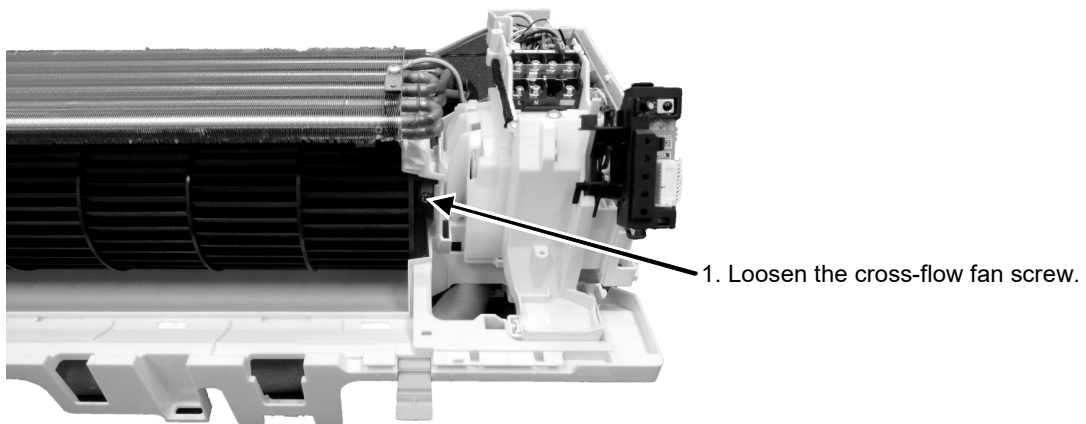


Figure 11

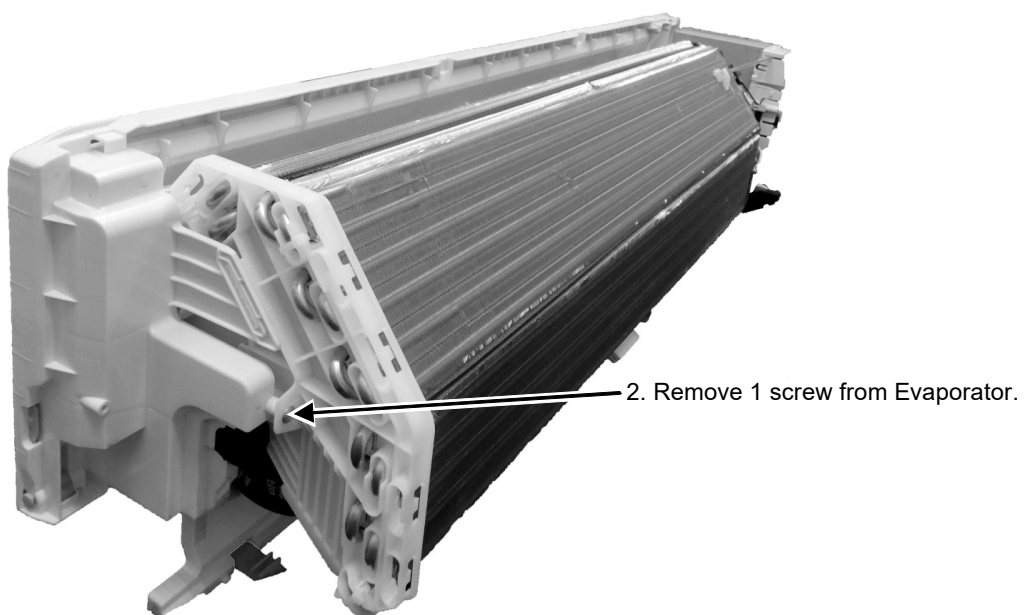


Figure 12

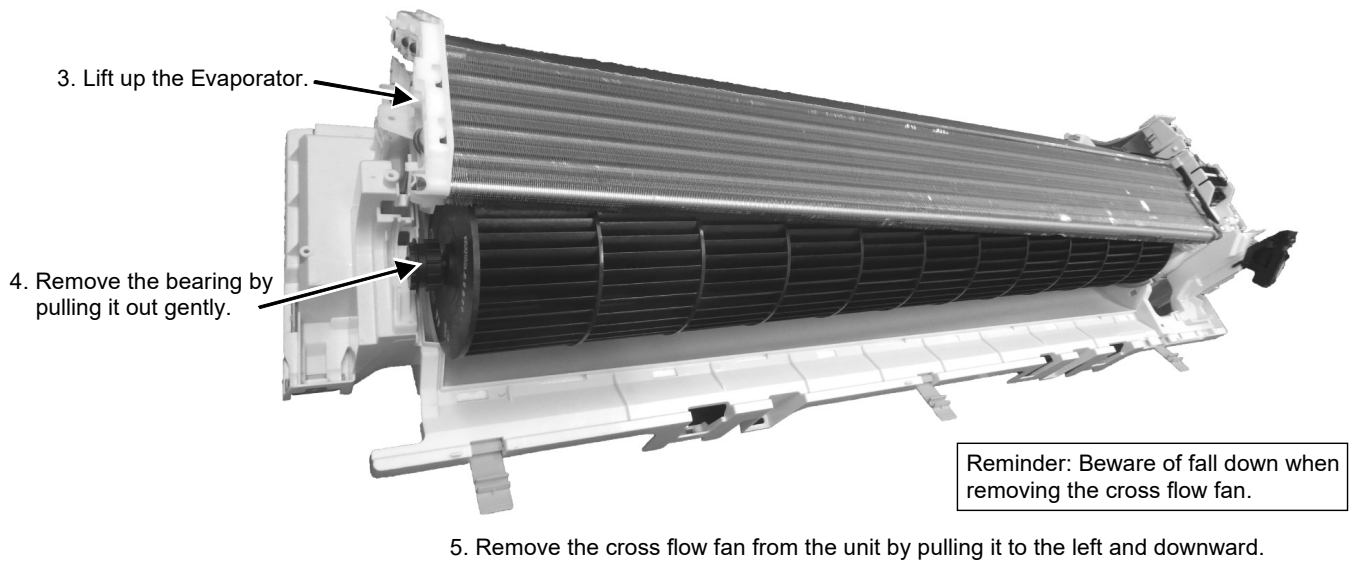


Figure 13

6.3.5 To Remove Fan Motor

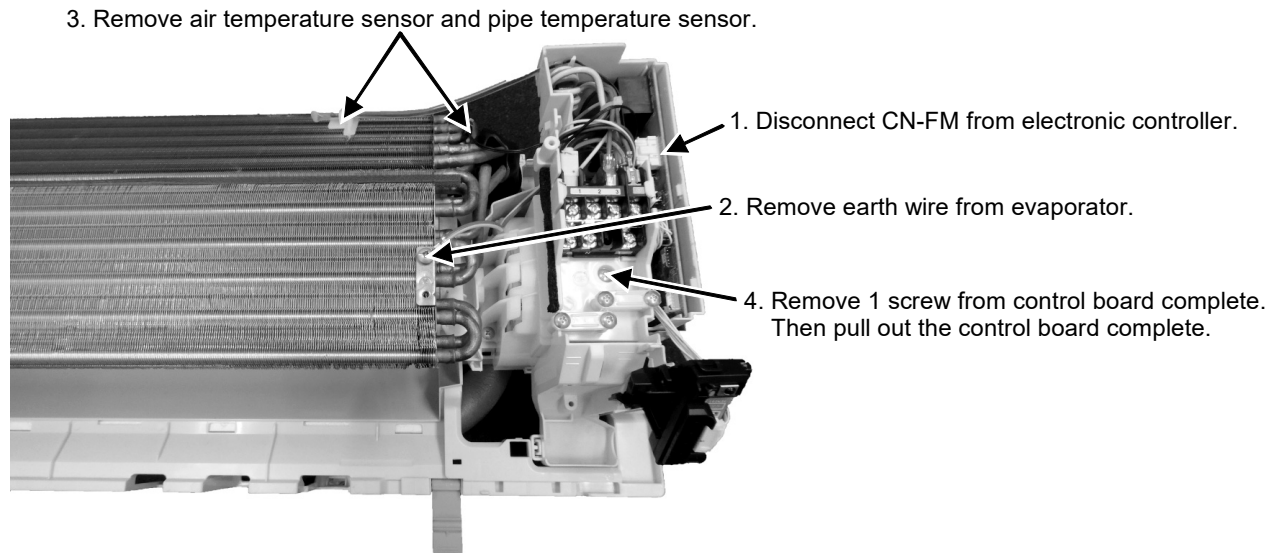


Figure 14

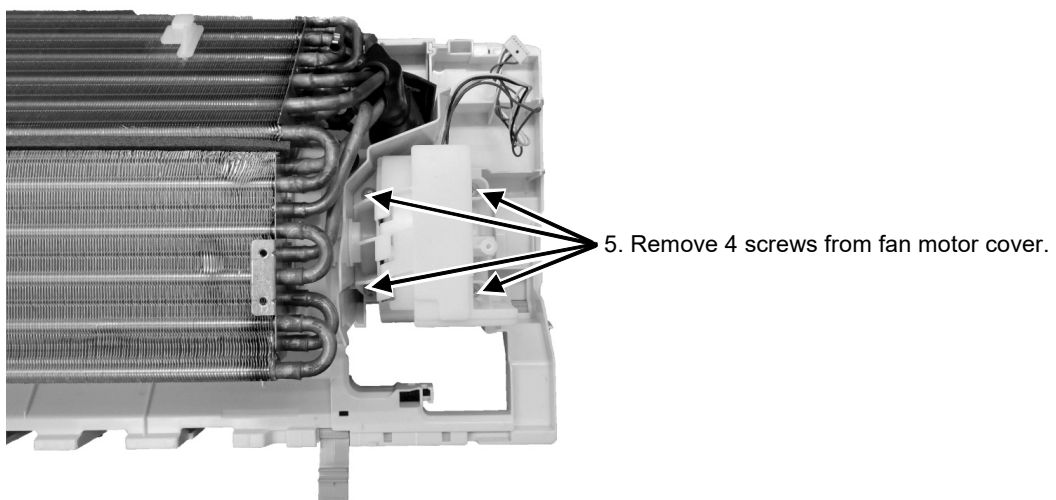
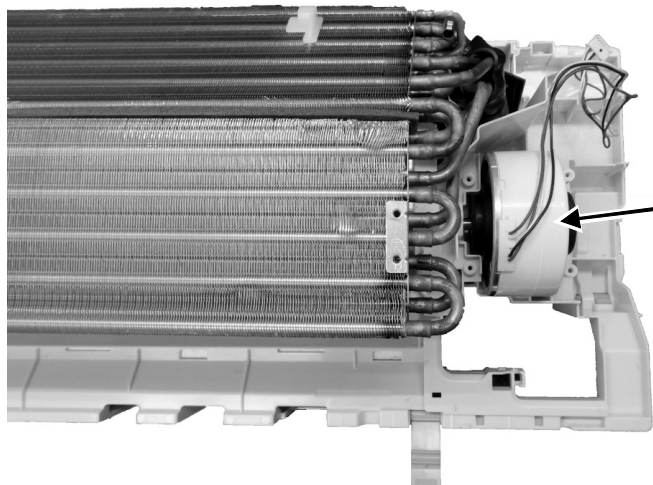


Figure 15



6. Remove Fan Motor.

Reminder: To reinstall the fan motor, adjust the fan motor connector to 60° towards you before fixing control board.

Reminder: Beware of fall down when removing the cross flow fan.

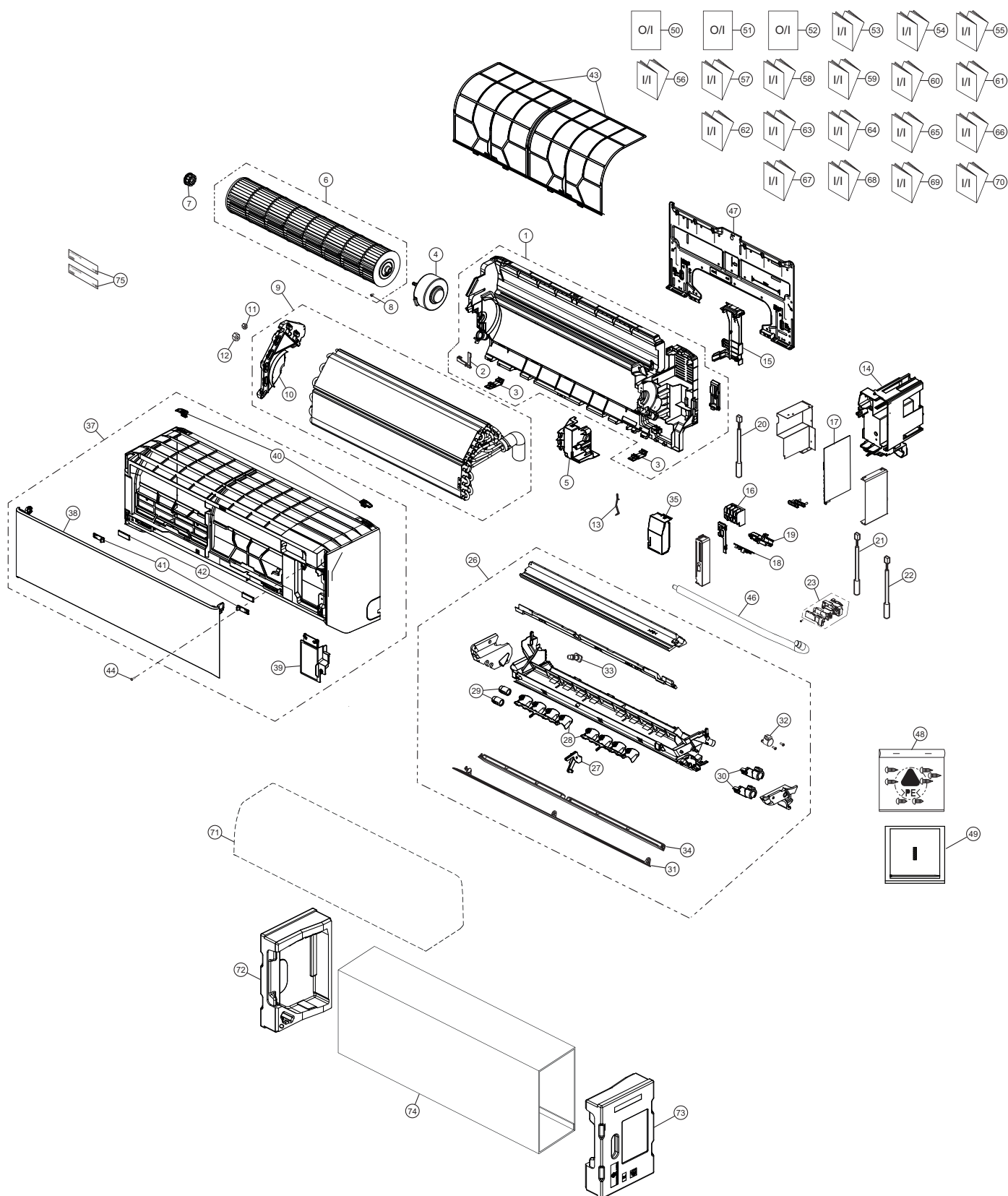
Figure 16



"Precaution of Maintenance"
Removed all electrical parts before doing wet servicing

7. Exploded View and Replacement Parts List

7.1 S-2545PK4E



Note

The above exploded view is for the purpose of parts disassembly and replacement.
The non-numbered parts are not kept as standard service parts.

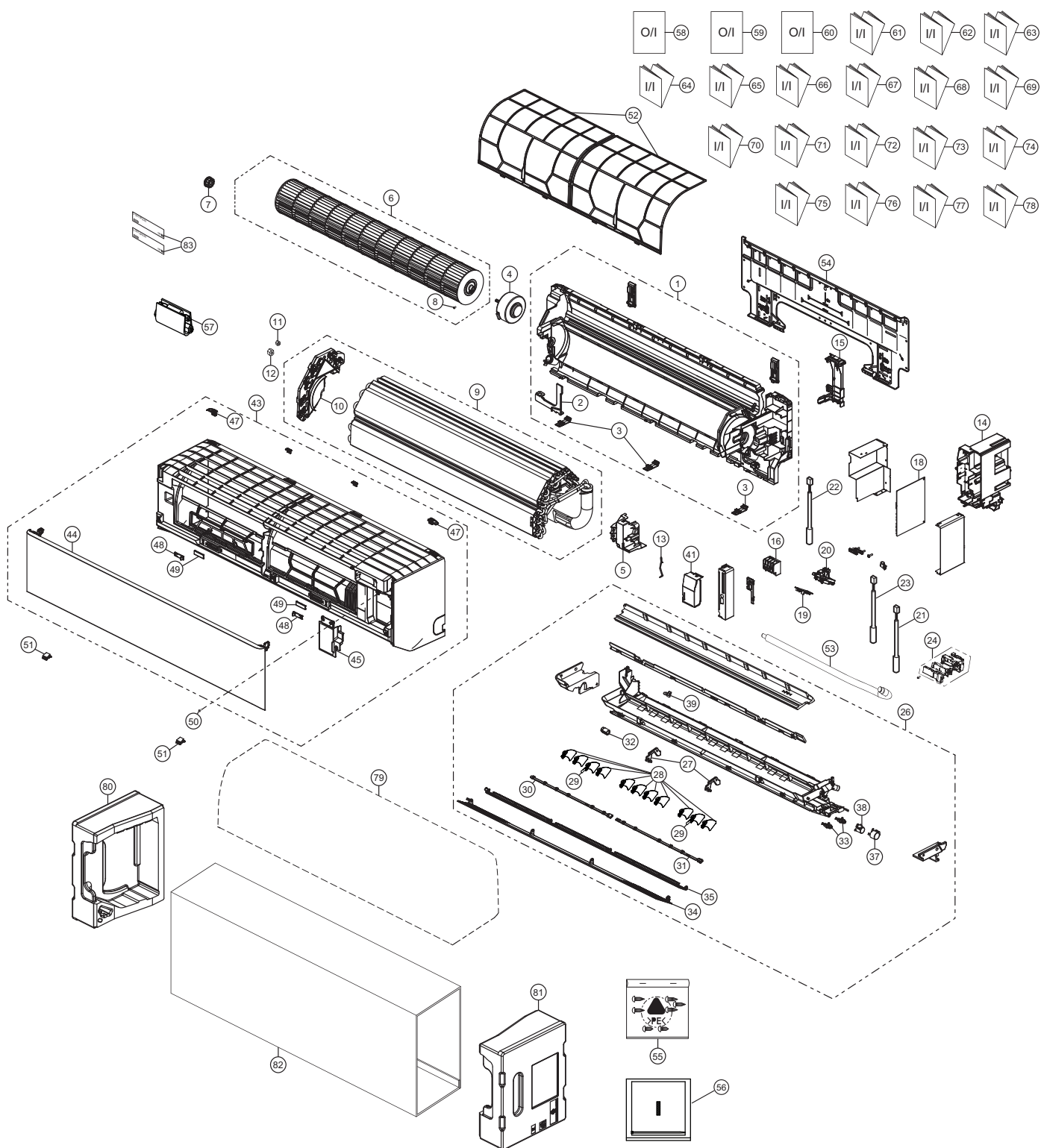
SAFETY	REF. NO.	PART NAME & DESCRIPTION	QTY.	S-2545PK4E	REMARK
	1	CHASSIS COMPLETE	1	ACXD50C05550	
	2	PARTICULAR PIECE	1	ACXD93-25540	
	3	PARTICULAR PIECE - LOCK	2	ACXD93-25560	
⚠	4	FAN MOTOR	1	L6CBYYYL0454	O
	5	FAN MOTOR BRACKET	1	ACXD54-05600	
	6	CROSS-FLOW FAN ASSY	1	ACXH02K01360	
	7	BEARING ASSY	1	CWH64K1006	
	8	SCREW - CROSS-FLOW FAN	1	CWH551146	
	9	EVAPORATOR	1	ACXB30C42300	O
	10	BOX SHAPED PLATE	1	ACXD66-04070	
	11	FLARE NUT (LIQUID)	1	CWT251063	
	12	FLARE NUT (GAS)	1	CWT251032	
	13	CLIP FOR SENSOR	1	CWH711019	
	14	CONTROL BOARD CASING	1	ACXH10-11070	
	15	BACK COVER CHASSIS	1	ACXD93-25650	
⚠	16	TERMINAL BOARD COMPLETE	1	ACXA28C06890	O
⚠	17	ELECTRONIC CONTROLLER - MAIN	1	ACXA74C14470	O
⚠	18	ELECTRONIC CONTROLLER - INDICATOR	1	ACXA73-49200	O
	19	INDICATOR HOLDER	1	ACXD93-25570	
⚠	20	SENSOR COMPLETE [AIR TEMP.SENSOR]	1	ACXA50C21590	O
	21	SENSOR COMPLETE [HEAT EXCHANGER TEMP SENSOR E1]	1	ACXA50C21600	
	22	SENSOR COMPLETE [HEAT EXCHANGER TEMP.SENSOR E2]	1	ACXA50C21610	
⚠	23	GENERATOR COMPLETE	1	ACXH94C02040	O
	26	DISCHARGE GRILLE COMPLETE	1	ACXE20C09580	
	27	FULCRUM	1	ACXH62-00900	
	28	VERTICAL VANE	2	ACXE24-04540	
	29	SHAFT [HORIZONTAL VANE]	2	ACXH63-01930	
	30	SHAFT [AIR SWING MOTOR]	2	ACXH63-01570	
	31	HORIZONTAL VANE [OUTER VANE]	1	ACXE24-04560	
	32	AIR SWING MOTOR ASSY	1	ACXA98K00250	
	33	CAP - DRAIN TRAY	1	CWH521259	
	34	HORIZONTAL VANE [INNER VANE]	1	ACXE24-04550	
	35	CONTROL BOARD TOP COVER	1	ACXH13-10000	
	37	FRONT GRILLE COMPLETE	1	ACXE10C20430	O
	38	INTAKE GRILLE COMPLETE	1	ACXE22C05970	
	39	GRILLE DOOR COMPLETE	1	ACXE14C01980	
	40	PARTICULAR PIECE -LOCK	2	ACXD93-25610	
	41	PARTICULAR PIECE -LOCK	2	ACXD93-25620	
	42	PARTICULAR PIECE -LOCK	2	ACXD93-25630	
	43	AIR FILTER	2	ACXD00-03390	O
	44	SCREW - FRONT GRILLE	1	XTT4+16CFJ	
	46	DRAIN HOSE	1	ACXH85-03520	
	47	INSTALLATION PLATE	1	ACXH36-00970	
	48	ACCESSORY-COMPLETE [SCREWS]	1	ACXH82C24291	
	49	ACCESSORY-COMPLETE	1	ACXH82C03062	
	50	OPERATING INSTRUCTION	1	ACXF55-39850	
	51	OPERATING INSTRUCTION	1	ACXF55-39860	
	52	OPERATING INSTRUCTION	1	ACXF55-39870	
	53	INSTALLATION INSTRUCTION	1	ACXF60-55580	

SAFETY	REF. NO.	PART NAME & DESCRIPTION	QTY.	S-2545PK4E	REMARK
	54	INSTALLATION INSTRUCTION	1	ACXF60-55590	
	55	INSTALLATION INSTRUCTION	1	ACXF60-55600	
	56	INSTALLATION INSTRUCTION	1	ACXF60-55610	
	57	INSTALLATION INSTRUCTION	1	ACXF60-55620	
	58	INSTALLATION INSTRUCTION	1	ACXF60-55630	
	59	INSTALLATION INSTRUCTION	1	ACXF60-55640	
	60	INSTALLATION INSTRUCTION	1	ACXF60-55650	
	61	INSTALLATION INSTRUCTION	1	ACXF60-55660	
	62	INSTALLATION INSTRUCTION	1	ACXF60-55670	
	63	INSTALLATION INSTRUCTION	1	ACXF60-55680	
	64	INSTALLATION INSTRUCTION	1	ACXF60-55690	
	65	INSTALLATION INSTRUCTION	1	ACXF60-55700	
	66	INSTALLATION INSTRUCTION	1	ACXF60-55710	
	67	INSTALLATION INSTRUCTION	1	ACXF60-55720	
	68	INSTALLATION INSTRUCTION	1	ACXF60-55730	
	69	INSTALLATION INSTRUCTION	1	ACXF60-56920	
	70	INSTALLATION INSTRUCTION	1	ACXF60-56930	
	71	BAG	1	ACXG86-00191	
	72	SHOCK ABSORBER [L]	1	ACXG70-15491	
	73	SHOCK ABSORBER [R]	1	ACXG70-15501	
	74	C.C.CASE	1	ACXG50-66900	
	75	MODEL LABEL	2	ACXF87-32450	

(NOTE)

- All parts are supplied from PAPAMY, Malaysia (Vendor Code: 00029488).
- “O” marked parts are recommended to be kept in stock.

7.2 S-5010PK4E



Note

The above exploded view is for the purpose of parts disassembly and replacement.
The non-numbered parts are not kept as standard service parts.

SAFETY	REF. NO.	PART NAME & DESCRIPTION	QTY.	S-5010PK4E	REMARK
	1	CHASSIS COMPLETE	1	ACXD50C05560	
	2	PARTICULAR PIECE	1	ACXD93-25540	
	3	PARTICULAR PIECE	3	ACXD93-25560	
⚠	4	FAN MOTOR	1	L6CBYYL0465	O
	5	FAN MOTOR BRACKET	1	ACXD54-05600	
	6	CROSS-FLOW FAN ASSY	1	ACXH02K01370	
	7	BEARING ASSY	1	CWH64K1006	
	8	SCREW - CROSS-FLOW FAN	1	CWH551146	
	9	EVAPORATOR	1	ACXB30C42310	O
	10	BOX SHAPED PLATE	1	ACXD66-04090	
	11	FLARE NUT (LIQUID)	1	CWT251031	
	12	FLARE NUT (GAS)	1	CWT251033	
	13	CLIP FOR SENSOR	1	CWH711019	
	14	CONTROL BOARD CASING	1	ACXH10-11070	
	15	BACK COVER CHASSIS	1	ACXD93-25650	
⚠	16	TERMINAL BOARD COMPLETE	1	ACXA28C06890	O
⚠	18	ELECTRONIC CONTROLLER - MAIN	1	ACXA74C14480	O
⚠	19	ELECTRONIC CONTROLLER - INDICATOR	1	ACXA73-49200	O
	20	INDICATOR HOLDER	1	ACXD93-25710	
⚠	21	SENSOR COMPLETE	1	ACXA50C21590	O
	22	SENSOR COMPLETE	1	ACXA50C21600	
	23	SENSOR COMPLETE	1	ACXA50C21610	
⚠	24	GENERATOR COMPLETE	1	ACXH94C02040	O
	26	DISCHARGE GRILLE COMPLETE	1	ACXE20C09020	
	27	FULCRUM	2	ACXH62-00920	
	28	VERTICAL VANE	9	ACXE24-04600	
	29	VERTICAL VANE	2	ACXE24-04670	
	30	CONNECTING BAR	1	ACXE26-02920	
	31	CONNECTING BAR	1	ACXE26-03060	
	32	SHAFT [HORIZONTAL VANE]	1	ACXH63-01930	
	33	SHAFT [AIR SWING MOTOR]	2	ACXH63-01570	
	34	HORIZONTAL VANE [OUTER VANE]	1	ACXE24-04580	
	35	HORIZONTAL VANE [INNER VANE]	1	ACXE24-04590	
⚠	37	AIR SWING MOTOR [OUTER VANE]	1	ACXA98-03560	O
⚠	38	AIR SWING MOTOR [INNER VANE]	1	ACXA98-02950	O
	39	CAP - DRAIN TRAY	1	CWH521259	
	41	CONTROL BOARD TOP COVER	1	ACXH13-10000	
	43	FRONT GRILLE COMPLETE	1	ACXE10C20440	O
	44	INTAKE GRILLE COMPLETE	1	ACXE22C05980	
	45	GRILLE DOOR COMPLETE	1	ACXE14C01980	
	47	PARTICULAR PIECE -LOCK	2	ACXD93-25610	
	48	PARTICULAR PIECE -LOCK	2	ACXD93-25620	
	49	PARTICULAR PIECE -LOCK	2	ACXD93-25630	
	50	SCREW - FRONT GRILLE	1	XTT4+16CFJ	
	51	CAP - FRONT GRILLE	2	ACXH52-04240	
	52	AIR FILTER	2	ACXD00-03400	O
	53	DRAIN HOSE	1	ACXH85-03520	
	54	INSTALLATION PLATE	1	ACXH36-00880	
	55	ACCESSORY-COMPLETE	1	ACXH82C24291	

SAFETY	REF. NO.	PART NAME & DESCRIPTION	QTY.	S-5010PK4E	REMARK
	56	ACCESSORY-COMPLETE	1	ACXH82C03062	
	57	ACCESSORY-COMPLETE	1	ACXH82C17422	
	58	OPERATING INSTRUCTION	1	ACXF55-39850	
	59	OPERATING INSTRUCTION	1	ACXF55-39860	
	60	OPERATING INSTRUCTION	1	ACXF55-39870	
	61	INSTALLATION INSTRUCTION	1	ACXF60-55580	
	62	INSTALLATION INSTRUCTION	1	ACXF60-55590	
	63	INSTALLATION INSTRUCTION	1	ACXF60-55600	
	64	INSTALLATION INSTRUCTION	1	ACXF60-55610	
	65	INSTALLATION INSTRUCTION	1	ACXF60-55620	
	66	INSTALLATION INSTRUCTION	1	ACXF60-55630	
	67	INSTALLATION INSTRUCTION	1	ACXF60-55640	
	68	INSTALLATION INSTRUCTION	1	ACXF60-55650	
	69	INSTALLATION INSTRUCTION	1	ACXF60-55660	
	70	INSTALLATION INSTRUCTION	1	ACXF60-55670	
	71	INSTALLATION INSTRUCTION	1	ACXF60-55680	
	72	INSTALLATION INSTRUCTION	1	ACXF60-55690	
	73	INSTALLATION INSTRUCTION	1	ACXF60-55700	
	74	INSTALLATION INSTRUCTION	1	ACXF60-55710	
	75	INSTALLATION INSTRUCTION	1	ACXF60-55720	
	76	INSTALLATION INSTRUCTION	1	ACXF60-55730	
	77	INSTALLATION INSTRUCTION	1	ACXF60-56920	
	78	INSTALLATION INSTRUCTION	1	ACXF60-56930	
	79	BAG	1	ACXG86-00131	
	80	SHOCK ABSORBER [L]	1	ACXG70-15541	
	81	SHOCK ABSORBER [R]	1	ACXG70-15551	
	82	C.C.CASE	1	ACXG50-66910	
	83	MODEL LABEL	2	ACXF87-32460	

(NOTE)

- All parts are supplied from PAPAMY, Malaysia (Vendor Code: 00029488).
- “O” marked parts are recommended to be kept in stock.