Hitachi Air Conditioning

Engineered for tomorrow.

Ventilation

KPI Energy Recovery, KPI-E3E and KPI Heat Recovery, KPI-H3E

Hitachi's heat recovery ventilation system adjusts the temperature and humidity of incoming fresh air to match the indoor environment.

Features and Benefits

- Airflows from 250 to 2,000m³/h
- ErP Lot 11-compliant motors for noise levels as low as 24dB(A)
- Highly efficient heat exchanger with automatic ventilation for maximum energy efficiency
- Energy exchange during summer months, reduces cooling load by up to 20%, minimising both capital and running costs
- Easy access hatches for simple in situ maintenance.

ErP active

ErP-compliant products

The Eco-Design of Energy-related products (ErP) Directive provides consistent EU-wide rules for improving the environmental performance of energy-related products (ErP) – ensuring reduced energy consumption to benefit both businesses and consumers.

Hitachi has always engineered the most environmentally-friendly heating and cooling products from its factories, and is delighted that its new product ranges already exceed the 2014 ErP Lot 10 standards.

Compatible with Hitachi's full range of commercial outdoor units.

Optional Remote Controllers

PC-ART
Standard wired remote controller
(inc. 7-day time clock)

PC-ART

PC-ARF
Advanced wired LED controller
(inc. 7-day time clock)

PC-ARF

	Energy Recovery	Heat Recovery
	KPI 252 ~ 2002E3E	KPI 502 ~ 2002H3E
Air Flow Rate (m³/h)	250 ~ 2000	500 ~ 2000
Capacity HP	-	-
Nominal Cooling Capacity (Utopia System)(1)	-	-
Nominal Heating Capacity (Utopia System)(1)	-	-
Nominal Cooling Capacity (Set Free System)(1)	-	-
Nominal Heating Capacity (Set Free System)(1)	-	-
Total Enthalpy Heat exchange	✓	-
Free Cooling	✓	✓
EC Fans - EuP Lot 11 2nd Tier Compliant	✓	✓
Hi Efficiency Filter (F7 based on EN779)	Option	Option
Automatic Ventilation via CO_2 Sensor input	✓	✓
Operating Range	-20°C ~ 46°C	-20°C ~ 46°C
Remote Controller Type (not included)	Infra Red or Wired	Infra Red or Wired

(1) The nominal cooling and heating capacity is the combined capacity of outdoor and indoor unit of the system and is based on Standard EN14511.

KPI-E3E & KPI-H3E

Ventilation

KPI Energy Recovery

Energy Recovery		KPI 252E3E	KPI 502E3E	KPI 802E3E	KPI 1002E3E	KPI 1502E3E	KPI 2002E3E
Air Flow Rate (H/M/L)	m³/h	250 / 208 / 180	500 / 420 / 360	800 / 700 / 597	1000 / 800 / 620	1500 / 1250 / 970	2000 / 1560 / 1240
External Static Pressure[1] (H/M/L)	Pa	60 / 40 / 30	77 / 50 / 47	100 / 75 / 55	120 / 80 / 50	132 / 90 / 60	135 / 84 / 60
Boost External Static Pressure	Pa	200 (250m³/h)	277 (500m³/h)	200 (800m³/h)	195 (1000m³/h)	246 (1500m³/h)	180 (2000m³/h)
Sound Pressure Level[2] (H/M/L)	dB(A)	27 / 26 / 24	30 / 28 / 27	32 / 31 / 30	35 / 32 / 30	37 / 35 / 33	39 / 38 / 35
Exchanger Material		Air to Air cross flow Celluloid material (Total Energy Exchange)					
Temp Efficiency	%	75	75	75	78	78	78
Enthalpy Efficiency Heating	%	66	65	65	68	68	66.5
Cooling	%	60	61	62	62	62.5	61.5
Dimensions (H x W x D)	mm	270x900x750	330x1130x920	385x1210x1015	385x1600x1295	525x1800x1130	525x1800x1430
Weight	Kg	34	46	51	79	97	106
Duct Sizes (dia)	mm	150	200	250	300	355	355
Supplied Air Filter Class (EN779)[3]		G3	G3	G3	G3	G3	G3
Nominal Power Input (H/M/L)	W	47 / 32 / 24	83 / 54 / 40	213 / 149 / 94	262 / 110 / 79	422 / 202 / 129	582 / 295 / 170
Specific Fan Power (H/M/L)	W/(m³/s)	677 / 554 / 480	598 / 463 / 400	959 / 766 / 567	943 / 495 / 459	1013 / 582 / 479	1048 / 681 / 494
Working Range[4]		-20°C ~ 46°C					
Power Supply		230V / 1Ph / 50Hz					
Running Current	A	0.4	0.7	1.7	1.9	1.9	2.5
Recommended Fuse Size	A	5	5	5	10	10	10

KPI Heat Recovery

Heat Recovery		KPI 502H3E	KPI 802H3E	KPI 1002H3E	KPI 1502H3E	KPI 2002H3E
Air Flow Rate (H/M/L)	m³/h	500 / 420 / 360	800 / 700 / 597	1000 / 800 / 620	1500 / 1250 / 970	2000 / 1560 / 1240
External Static Pressure[1] (H/M/L)	Pa	77 / 50 / 47	100 / 75 / 55	120 / 80 / 50	132 / 90 / 60	135 / 84 / 60
Boost External Static Pressure	Pa	277 (500m³/h)	200 (800m³/h)	195 (1000m³/h)	246 (1500m³/h)	180 (2000m³/h)
Sound Pressure Level[2] (H/M/L)	dB(A)	33 / 31 / 30	35 / 34 / 33	38 / 35 / 33	40 / 36 / 35	42 / 41 / 38
Exchanger Material		Air to Air cross flow Aluminium material (Heat Exchange)				
Temp Efficiency	%	53	50	50	49	48
Enthalpy Efficiency Heating	%	35	34	33	31	31
Cooling	%	30	28	28	27	28
Dimensions (H x W x D)	mm	330x1130x920	385x1210x1015	385x1600x1295	525x1800x1130	525x1800x1430
Weight	Kg	50	55	85	101	110
Duct Sizes (dia)	mm	200	250	300	355	355
Supplied Air Filter Class (EN779)[3]		G3	G3	G3	G3	G3
Nominal Power Input (H/M/L)	W	83 / 54 / 40	213 / 149 / 94	262 / 110 / 79	422 / 202 / 129	582 / 295 / 170
Specific Fan Power (H/M/L)	W/(m³/s)	598 / 463 / 400	959 / 766 / 567	943 / 495 / 459	1013 / 582 / 479	1048 / 681 / 494
Working Range[4]		-20°C ~ 46°C				
Power Supply		230V / 1Ph / 50Hz				
Running Current	A	0.7	1.7	1.9	1.9	2.5
Recommended Fuse Size	A	5	5	10	10	10

For details of interlocks with Utopia & Set Free systems contact your local sales office.

(1) Default fan pressure setting

(2) Sound pressure level has been measured in an anechoic chamber, with the measuring point 1.5m below the centre of the unit, with no ceiling under the unit and using a sound insulated duct. Reflected sound must be considered when installing the unit in the field.

(3) Hi Efficiency filter class F7 (EN779) is available as accessory.

(4) The installation of an electric heater is necessary when temperature becomes lower than -5°C(DB).