

ECO G 3-PIPE

**3-Pipe Heat Recovery System with simultaneous Heating & Cooling**

The only 3-Pipe GHP system in Europe, the S Series ECO G 3-Pipe offers even more performance and outstanding features when you need simultaneous heating and cooling. Now with capacities available from 16 HP to 25 HP, Panasonic offers the greatest choice and flexibility to solve any power problem or site requirement.

Technical focus

- Simultaneous heating and cooling for total control
- Reduced gas consumption by Miller-cycle engine
- Reduced electrical power consumption by using DC Motors
- Capacity ratio 50–200%
- Quiet mode offers a further 2 dB(A) reduction

- Part load efficiencies increased
- Connectivity increased to up to 24 indoor units
- 10,000 run hours between engine service intervals (equivalent to one maintenance every 3.2 years*)
- 145 m maximum allowable piping length (L1)
- Extended pipe runs (total 780 m)
- Option of using LPG as a power supply (increases flexibility and avoids problems of potential site restrictions in the future. The purer fuel is also excellent for further reductions in CO₂ emissions)
- Full heating capacity down to -21°C
- No defrost cycle

* Assuming 3,120 running hours per year - 12 h x 5 days x 52 weeks

HP			16 HP	20 HP	25 HP
Model			U-16GF2E5	U-20GF2E5	U-25GF2E5
Cooling capacity		kW	45.00	56.00	71.00
Power input cooling		kW	0.71	1.02	1.33
EER (Calorific Value) ¹	High / Low	W/W	1.48 / 1.64	1.40 / 1.55	1.15 / 1.28
Cooling gas consumption		kW	29.7	39.1	60.4
Heating capacity	STD	kW	50.00	63.00	80.00
	Low temperature ²	kW	53.00	67.00	78.00
Power input heating		kW	0.60	0.64	0.83
COP (Calorific Value) ¹	High / Low	W/W	1.51 / 1.68	1.46 / 1.62	1.48 / 1.64
Gas consumption	STD	kW	32.5	42.5	53.2
	Low temperature ²	kW	41.5	56.4	62.3
COP		Average	1.50	1.43	1.32
Starter amperes		A		30	
Operation sound		dB(A)	57	58	62
Dimensions		H x W x D	2,273 x 1,650 x 1,000 (+80)		
Net weight		kg	775		805
Pipe Connections	Gas	inch	1 1/8		
	Liquid	inch	3/4		
	Discharge	inch	7/8		1
	Fuel gas		R3/4		
	Exhaust drain port	mm	25		
Indoor/outdoor capacity ratio			50-200% ³		
Number of connected indoor units			24		

Service kits model	KIT CZ-PSK560SP
Outdoor unit reference	U-16GF2E5 / U-20GF2E5 / U-25GF2E5
Material included on the kit	
Oil filter	1
Air Cleaner Element (Air Filter)	1
Spark plug	4
V Belt (for compressor)	1
V Belt (for generator)	-
Oil absorption mats	1
Drain filter packing	1

Solenoid valve kit		
KIT-P56HR3	KIT-P56HR3	3-Pipe control Solenoid valve kit (up to 5.6kW)
	CZ-P56HR3	Solenoid valve kit (up to 5.6kW)
KIT-P160HR3	CZ-CAPE2	3-Pipe control PCB
	KIT-P160HR3	3-Pipe control Solenoid valve kit (from 5.6kW to 16.0kW)
	CZ-P160HR3	Solenoid valve kit (up to 16.0kW)
CZ-CAPEK2	CZ-CAPE2	3-Pipe control PCB
		3-Pipe control PCB for wall mounted

3-Pipe control box kit	
CZ-P456HR3	4 ports 3 pipe box (up to 5.6kW)
CZ-P656HR3	6 ports 3 pipe box (up to 5.6kW)
CZ-P856HR3	8 ports 3 pipe box (up to 5.6kW)
CZ-P4160HR3	4 ports 3 pipe box (up to 16.0kW)

Rating Conditions: Cooling Indoor 27°C DB / 19°C WB. Cooling Outdoor 35°C DB. Heating (standard) Indoor 20°C DB. Heating (standard) Outdoor 7°C DB / 6°C WB. Heating (low temp.) Indoor 20°C DB / 15°C WB or less. Heating (low temp.) Outdoor 2°C DB / 1°C WB. DB: Dry Bulb; WB: Wet Bulb

1) Referred to Natural Gas (HCV 37.78 MJ/Nm³ or 55.56 MJ/kg; LCV 34.00 MJ/Nm³ or 50.00 MJ/kg). 2) Low temperature condition: outdoor temperature 2°C. 3) Indoor unit can be connected to up to 16kW model (model size 60)
Specifications subject to change without notice.

Cooling and heating capacities in the tables are determined under the test conditions of JIS B 8627.

Effective heating requires that the outdoor air intake temperature be at least -20°C DB or -21°C WB.

• Gas consumption is the total (high) calorific value standard. • Outdoor unit operating sound is measured 1 meter from the front and 1.5 meters above the floor (in an anechoic environment). Actual installations may have larger values due to ambient noise and reflections. • Specifications are subject to change without notice.

