MITSUBISHI ELECTRIC

i-FX-WQ-G05

Water Sourced Polyvalent Unit with Inverter Screw Compressors

INTEGRA

Mitsubishi Electric's **i-FX-WQ-G05** is our high performance water sourced simultaneous heating and cooling unit (Polyvalent / 6-pipe) that is fitted with Variable Speed Drive (VSD) screw compressors as standard.

Available in 8 sizes from 452kw to 954kw in heating, the **i-FX-WQ-G05** uses low GWP refrigerant R513A. It is available with a wide operating range from -8°C to +20°C evaporator leaving water temperatures (ELWT) and hot water leaving up to 65°C.

The **i-FX-WQ-G05** can also be supplied with a range of options including source side control valves, energy and thermal meters, BEMS cards and leak detection.

R513A

CLIMAVENETA

Key Features & Benefits:

- Compact and considered design
- Exceptional efficiency with inverter screw compressors across twin circuits
- High quality shell and tube heat exchangers
- Dual Pressure Relief Valves (PRV) and Electronic Expansion Valves (EEV) as standard
- Low GWP refrigerant R513A
- A wide range of options including; acoustic enclosure, thermal and energy meters, smart LAN functions and many more.

i-FX-WQ-G05			0402	0452	0532	0592	0632	0702	0792	0852
Cooling With Heat Recovery *5 *2										
Cooling Capacity		kW	353.9	401.5	471.2	520.7	558.6	626.9	700.7	750.4
Recovery Heat Exchanger Capacity		kW	451.9	512.9	597.0	662.0	712.0	800.2	888.8	953.9
Total Power Input		kW	106.1	120.7	136.1	153.3	166.3	187.8	203.4	220.5
TER		kW/kW	7.59	7.57	7.85	7.71	7.64	7.59	7.81	7.73
Performance - Heating Only *3 *2										
Total Heat Capacity		kW	451.9	512.9	597.0	662.0	712.0	800.2	888.8	953.9
COP		kW/kW	4.29	4.28	4.42	4.35	4.31	4.29	4.40	4.36
Performance - Cooling Only *1 *2										
Total Cooling Capacity		kW	407.6	462.3	544.5	602.9	648.0	725.8	813.3	871.5
EER		kW/kW	5.03	5.01	5.22	5.15	5.10	5.06	5.21	5.14
Seasonal Performance in Cooling - Ambient Refrigeration										
Prated,c		kW	394.4	447.3	526.2	582.2	624.8	700.1	784.4	840.7
SEER			6.48	6.49	6.51	6.57	6.53	6.52	6.54	6.54
Electrical Data										
Power Supply		V/ph/Hz	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50	400/3/50
F.L.A*6	Total	A	241	270	304	338	381	428	454	480
Exchangers										
Minimum Water Flow in Cooling	Evaporator	l/s	12.50	15.28	17.22	17.22	21.67	24.44	26.11	26.11
Minimum Water Flow to Heat Exchanger	Source	l/s	7.02	7.97	9.16	10.06	11.00	12.25	13.83	15.00
Minimum Water Flow in Heating	Condenser	l/s	12.50	15.28	17.22	17.22	21.67	24.44	26.11	26.11
Refrigerant Circuit										
Compressors		No.	2	2	2	2	2	2	2	2
Circuits		No.	2	2	2	2	2	2	2	2
Theoretical Refrigerant Charge		kg	80	80	102	102	126	152	152	137
Noise Levels										
Total Sound Pressure *7		dB(A)	65	65	66	67	67	67	67	67
Total Sound Power Level in Cooling *8 *9		dB(A)	97	97	98	99	99	99	99	99
Total Sound Power Level in Heating *8 *10		dB(A)	97	97	98	99	99	99	99	99
Size and Weight*11										
Width (A)		mm	5000	5000	5000	5000	5000	5550	5550	5550
Depth (B)		mm	1400	1400	1400	1400	1400	1400	1400	1400
Height (H)		mm	1950	1950	2050	2050	2050	2050	2050	2050
Operation Weight		kg	4010	4030	5520	5860	5984	6414	6884	7294

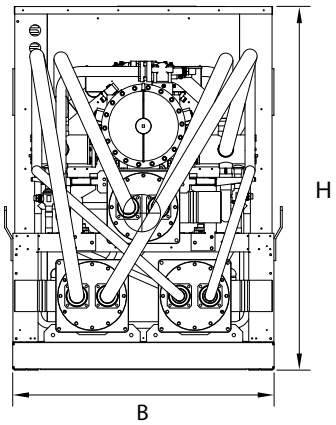
Eurovent Certified Data

Notes:
1. Plant (side) cooling exchanger water (in/out) 12.00°C/7.00°C; Source (side) heat exchanger water (in/out) 14.00°C/30.00°C.
2. Values in compliance with EN14511.
3. Plant (side) heat exchanger water (in/out) 40,00°C/45,00°C; Source (side) heat exchanger water (in/out) 14.00°C/7.00°C.
4. Plant (side) cooling exchanger water (in/out) 12.00°C/7.00°C; Plant (side) heat exchanger water (in/out) 40.00°C/45.00°C.
5. Plant (side) cooling exchanger water */7.00°C (same water flow rate found during the cooling mode); Plant (side) heat exchanger water */45.00°C (same water flow rate found during the heating mode).
6. Data valid for standard units without any additional options and only indicative. Safety values to be considered when cabling the unit for power supply and line-protection. Refer to databook.
7. Average sound pressure level at 10m distance, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.
8. Sound power on the basis of measurements taken in compliance with ISO 9614.
9. Sound power level in cooling.
10. Sound power level in heating.
11. Unit in standard configuration, without option accessories.

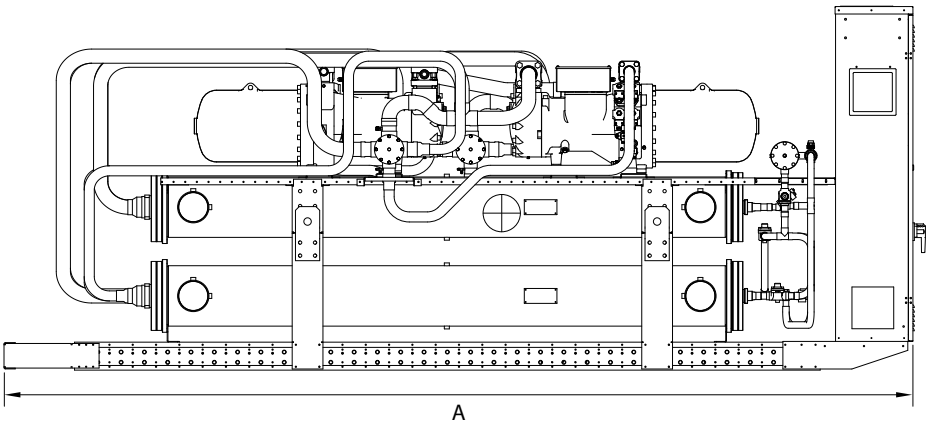
i-FX-WQ-G05 DIMENSIONS AND CLEARANCES

All dimensions are in millimetres.

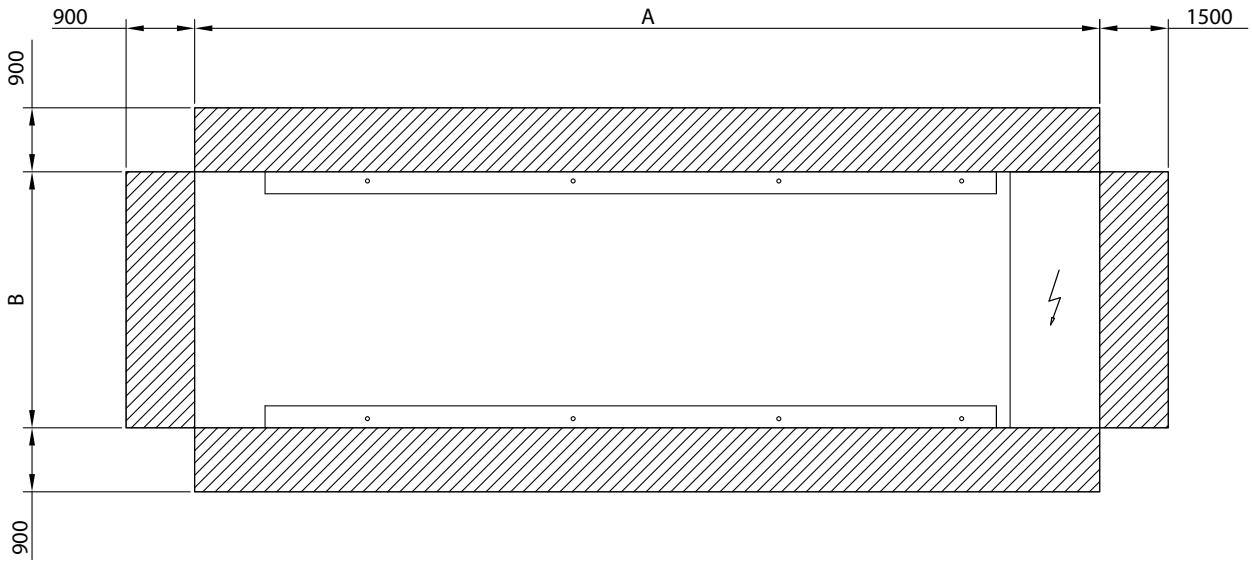
FRONT VIEW



SIDE VIEW

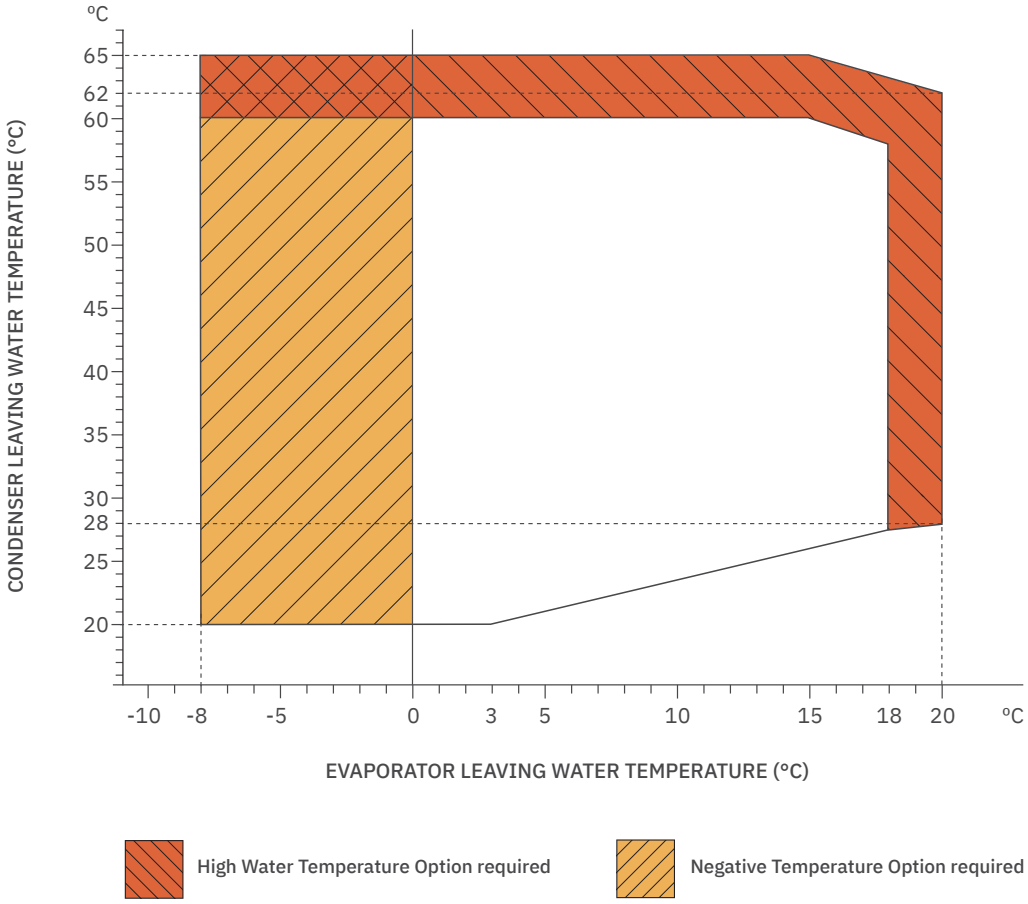


TOP VIEW



i-FX-WQ-G05
Water Sourced Polyvalent Unit with
Inverter Scroll Compressors

i-FX-WQ-G05 OPERATING ENVELOPES



Notes:
Operating envelopes shown are indicative and should not be used for design. Equipment operating with low or negative evaporating leaving water temperature should use suitable type and concentration of glycol or similar.

Additional installation considerations may be required at the limits of the operating envelope. For specific recommendations and limits of each model, please contact your local sales representative.

MITSUBISHI ELECTRIC
Changes for the Better

Telephone: **01707 282880**
email: **air.conditioning@meuk.mee.com**
les.mitsubishielectric.co.uk

@meuk_les
@green_gateway

Mitsubishi Electric Living Environmental Systems UK

Mitsubishi Electric Cooling and Heating UK

mitsubishielectricuk_les

Mitsubishi Electric Living Environmental Systems UK

BLOG thehub.mitsubishielectric.co.uk

UNITED KINGDOM Mitsubishi Electric Europe Living Environment Systems Division, Travellers Lane, Hatfield, Hertfordshire, AL10 8XB, England. Telephone: 01707 282880
IRELAND Mitsubishi Electric Europe, Plunkett House, Grange Castle Business Park, Nangor Road, Dublin 22, Ireland. Telephone: (00353) 1 4198800 Email: sales.info@meir.mee.com Web: les.mitsubishielectric.ie

Note: The fuse rating is for guidance only and please refer to the relevant databook for detailed specification. It is the responsibility of a qualified electrician/electrical engineer to select the correct cable size and fuse rating based on current regulation and site specific conditions. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a fluorinated greenhouse gas, R410A (GWP:2088), R32 (GWP:675), R407C (GWP:1774), R134a (GWP:1430), R513A (GWP:631), R454B (GWP:466), R515B (GWP:292), R454C (GWP:148), R1234ze (GWP:7) or R1234yf (GWP:4). *These GWP values are based on Regulation (EU) No 517/2014 from IPCC 4th edition. Mitsubishi Electric's air conditioning equipment and heat pump systems contain a hydrocarbon, R290 (GWP:0.02). *These GWP values are based on IPCC 6th edition.

Effective as of April 2025

Green Gateway greengateway.mitsubishielectric.co.uk