

MECH-iB-G07

Air Sourced Chiller

Mitsubishi Electric's **MECH-iB-G07** chiller provides compact and convenient solution to your small-scale cooling needs.

Designed to meet the highest of quality standards, the range uses variable speed scroll compressors optimised for using the low GWP refrigerant R32.

The **MECH-iB-G07** can provide efficient cooling, with inverter driven compressors and EC fans as standard, enhancing energy saving at part load conditions.

With an EC hydronic pump, hydronic flow switch, expansion vessel and advance controls all integrated, the **MECH-iB-G07** is a 'plug-&-play' solution, made simpler with options available such as BMS interface cards, anti-vibration mounts and buffer tanks that fit within the unit's footprint.



Key Features & Benefits:

- Extended cooling envelope
- Compact design
- Providing fluid leaving temperatures as low as -12°C
- Operates down to -20°C ambient temperatures
- Low GWP R32 Refrigerant
- High seasonal efficiency (EER, SEER, SEPR)
- Plug & Play with Integrated hydronic pump, flow switch and expansion vessel



MECH-iB-G07			15Y	18Y	23Y	27Y	35Y	40Y
Performance - Cooling Only								
Gross Value¹								
Total Cooling Capacity	kW		14.93	17.79	21.03	27.73	32.51	38.19
Total Power Input	kW		4.83	5.23	6.50	8.42	9.90	11.88
EER	kW/kW		3.09	3.40	3.23	3.29	3.28	3.21
EN14511 Values^{1 2}								
Total Cooling Capacity	kW		15.00	17.90	21.10	27.80	32.70	38.40
EER	kW/kW		3.10	3.40	3.25	3.31	3.30	3.23
Seasonal Performance³								
Prated, c	kW		15.0	17.9	21.1	27.8	32.7	38.4
SEER			5.23	5.4	5.66	5.39	5.46	5.24
Performance ηs	%		206.0	213.0	223.0	212.0	215.0	207.0
Electrical Data								
Power Supply	Total	V/ph/Hz	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50	400/3+N/50
F.L.A. ⁴		A	11	12	15	20	24	28
Exchangers								
Minimum Water Flow	Heat Exchanger	l/s	0.389	0.464	0.581	0.728	0.856	0.986
Minimum Water Content	System	l	75	90	115	140	165	193
Heat Exchanger User Side in Cooling^{1 2}								
Water Flow		l/s	0.714	0.851	1.005	1.326	1.554	1.827
Pressure Drop		kPa	15.2	21.6	15.1	20.5	25.1	23.8
Refrigerant Circuit								
Compressors		l/s	1	1	1	1	1	1
Circuits		kPa	1	1	1	1	1	1
Regulation			Stepless	Stepless	Stepless	Stepless	Stepless	Stepless
Minimum Capacity Step		%	32	34	29	30	26	26
Refrigerant			R32	R32	R32	R32	R32	R32
Refrigerant Charge ⁵		kg	2.10	2.83	3.60	4.74	5.67	6.00
Oil Charge			1.00	1.00	1.00	2.30	2.30	2.30
RC (ASHRAE) ⁶		kg/kW	0.14	0.16	0.17	0.17	0.18	0.16
Fans								
Quantity		No.	2	2	1	2	2	2
Airflow		m³/s	1.84	1.95	2.34	4.52	4.35	4.75
Power Input		kW	0.22	0.22	0.39	0.78	0.78	0.78
Noise Levels								
Total Sound Pressure ⁷		dB(A)	39	40	45	46	47	48
Total Sound Power Level in Cooling ^{8 9}		dB(A)	70	71	76	78	79	80
Size and Weight¹⁰								
Width (A)		mm	900	900	1450	1450	1450	1700
Depth (B)		mm	420	420	550	550	550	650
Height (H)		mm	1390	1390	1200	1700	1700	1700
Operation Weight		kg	144	155	207	256	272	306

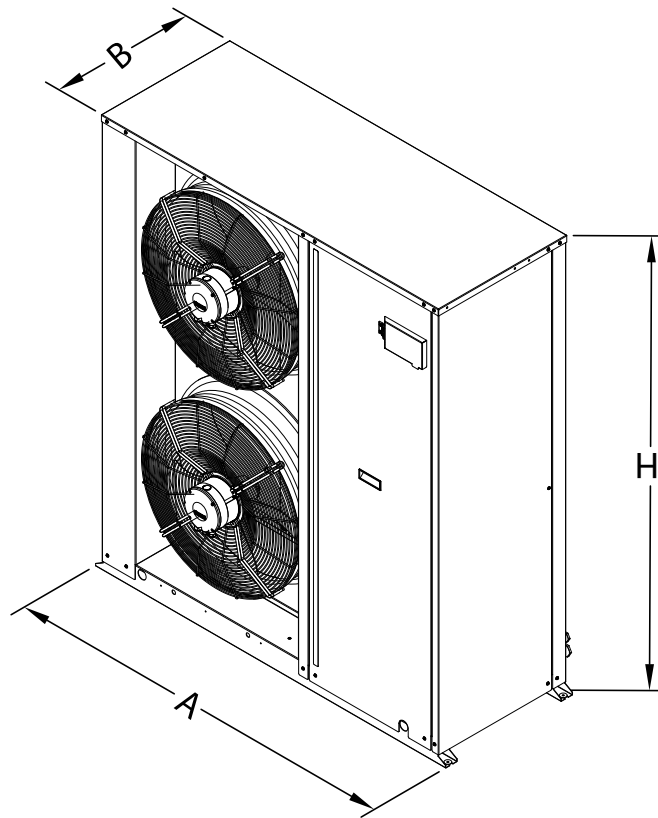
■ Eurovent Certified Data

Notes:

1. Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C
2. Values in compliance with EN14511
3. Parameter calculated according to [Regulation (EU) N. 2016/2281]
4. Values calculated referring to the version with the maximum number of fans working at the max absorbed current. Safety values to be considered when cabling the unit for power supply and line-protection. Data valid for standard units without any additional options and only indicative. Refer to databook.
5. Theoretical - refer to serial plate for actual charge volumes
6. Rate in accordance with AHRI standard 550/590
7. Average sound pressure level at 1m 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 measurement taken in compliance with ISO 9614.
9. Sound power level in cooling, outdoors.
10. Unit in standard configuration, without option accessories.

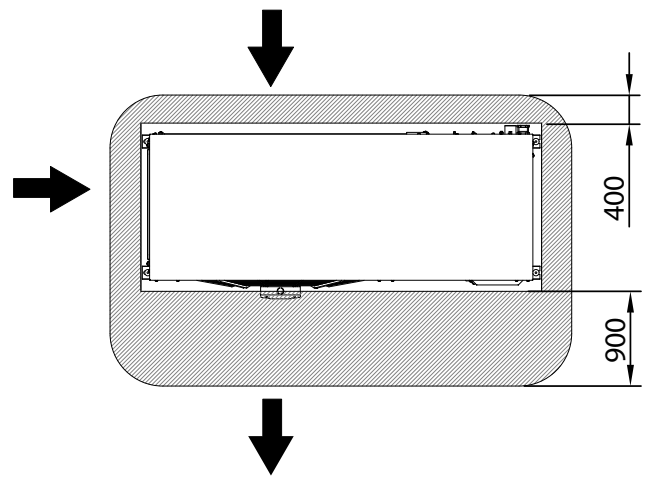
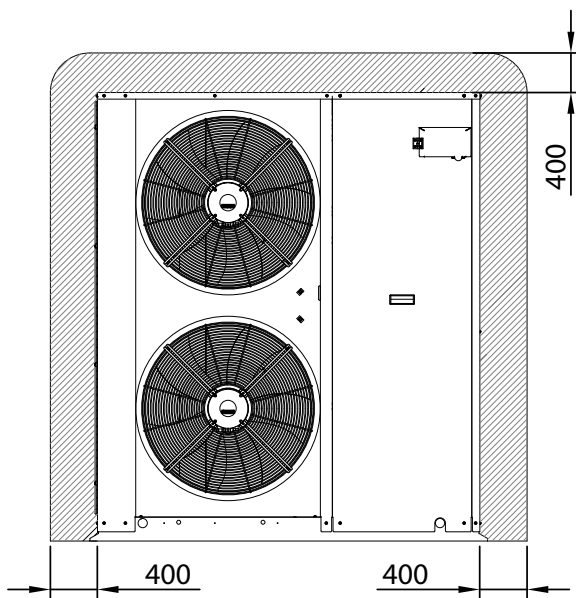
MECH-iB-G07 DIMENSIONS AND CLEARANCES

All dimensions are in millimetres.

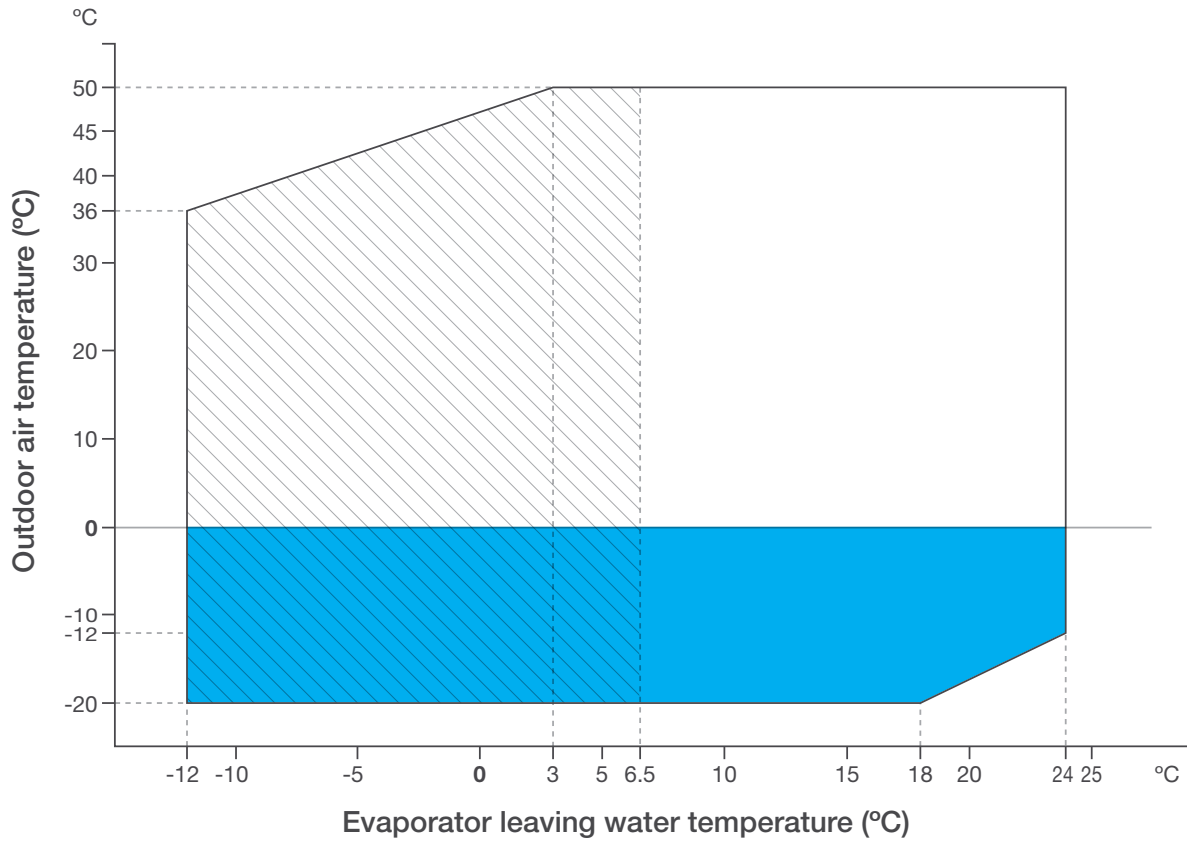


FRONT VIEW

TOP VIEW



MECH-iB-G07 OPERATING ENVELOPES

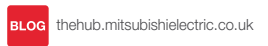
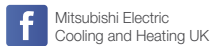


 Antifreeze option(s) required  Glycol required for low evaporator leaving water temperature

Note: For specific limits of each model, please contact your local sales representative.



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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), R290 (GWP:3), R32 (GWP:675), R407C (GWP:1774), R134a (GWP:1430), R513A (GWP:631), R454B (GWP:466), 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. In case of Regulation (EU) No.626/2011 from IP CC 3rd edition, these are as follows. R410A (GWP:1975), R32 (GWP:550), R407C (GWP:1650) or R134a (GWP:1300).

Effective as of August 2024

