

# MECH-IS-G07

## Air Cooled Chiller with Inverter Scroll Compressors

Mitsubishi Electric's **MECH-IS-G07** is our flagship air cooled chiller using 1 or 2 Variable Speed Drive (VSD) scroll compressors for comfort cooling.

Manufactured to the highest quality, it can provide cold water down to -12°C has an industry leading Seasonal Energy Efficiency Ratio (SEER). With its use of axial-flow variable speed fans with Brushless DC motors, it allows for low noise levels whilst maintaining a compact form factor.

The **MECH-IS-G07** comes with an array of standard design features such as antivibration feet and electrical panel ventilation. With on-board advance LAN network controls, multiple units can work in a chiller group to cover your commercial cooling application. Smart management features allow for dynamic and efficient resource and load management.



### Key Features & Benefits:

- Industry leading seasonal performance (SEER)
- Extremely quiet unit in a compact design
- Wide operating envelope down to -20°C ambient\*
- Variable speed fans with Brushless DC motors (BLDC) and inverter compressors in an acoustic enclosure as standard
- Lower GWP Refrigerant R32
- Wide range of options available including: inbuilt hydronic pumps, buffer vessels, energy meters, Smart LAN functions and many more
- Aluminum micro-channel heat exchangers as standard with options for copper/aluminum coils with protection coating

\*Additional low temperature protections may be required.



MECH-iS-G07			0051	0061	0071	0082	0092	0102	0112
<b>Performance - Cooling Only</b>									
<b>EN 14511 Values<sup>1,2</sup></b>									
Total Cooling Capacity	kW		50.0	60.0	70.0	80.0	90.0	100.0	110.0
EER	kW/kW		3.28	3.11	2.58	3.02	2.74	3.15	2.87
<b>Seasonal Performance<sup>3</sup></b>									
Prated,c	kW		50.0	60.0	70.0	80.0	90.0	100.0	110.0
SEER			5.29	5.28	4.98	5.15	5.12	5.32	5.29
Performance ηs	%		209.0	208.0	196.0	203.0	202.0	210.0	209.0
<b>Electrical Data</b>									
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
F.L.A. <sup>4</sup>	Total	A	52	60	60	78	78	93	93
<b>Exchangers</b>									
Minimum Water Flow	Heat Exchanger	l/s	1.67	1.67	1.67	2.22	2.22	2.78	2.78
Minimum Water Content	System	l	200	200	280	360	360	440	440
<b>Refrigerant Circuit</b>									
Compressors	No.		1	1	1	2	2	2	2
Circuits	No.		1	1	1	1	1	1	1
Refrigerant			R32	R32	R32	R32	R32	R32	R32
Theoretical Refrigerant Charge	kg		8	8	8	11	11	13	13
<b>Fans</b>									
Quantity	No.		2	2	2	3	3	4	4
Airflow	m <sup>3</sup> /s		6.86	7.01	7.01	9.84	9.84	12.97	12.97
<b>Noise Levels</b>									
Total Sound Pressure <sup>5</sup>	dB(A)		45	46	48	48	49	50	50
Total Sound Power Level in Cooling <sup>6,7</sup>	dB(A)		77	78	80	80	81	82	82
<b>Size and Weight<sup>8</sup></b>									
Width (A)	mm		2085	2085	2085	2600	2600	3225	3225
Depth (B)	mm		1100	1100	1100	1100	1100	1100	1100
Height (H)	mm		2400	2400	2400	2400	2400	2400	2400
Operation Weight	kg		630	630	630	830	830	940	940

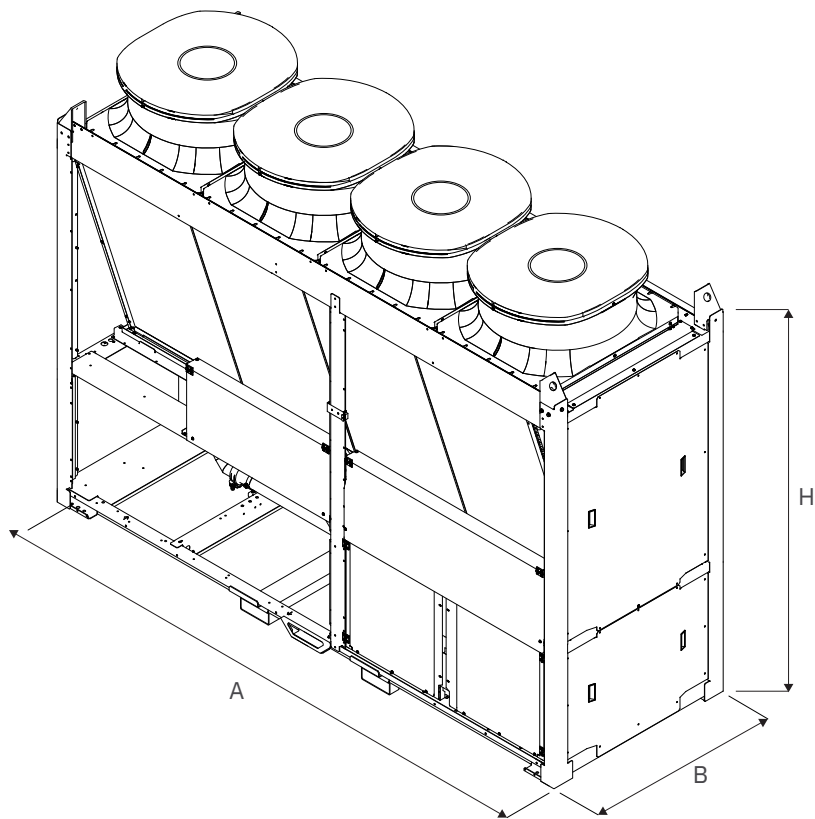
■ Eurovent Certified Data

- Plant (side) cooling exchanger water (in/out) 12°C/7°C; Source (side) heat exchanger air (in) 35°C.
- Values in compliance with EN14511
- Parameter calculated according to [Regulation (EU) N. 2016/2281]
- Data valid for standard units without any additional options and only indicative. Contact your local representative for support.
- 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.
- Sound power on the basis of measurement taken in compliance with ISO 9614.
- Sound power level in cooling, outdoors.
- Unit in standard configuration, without option accessories.

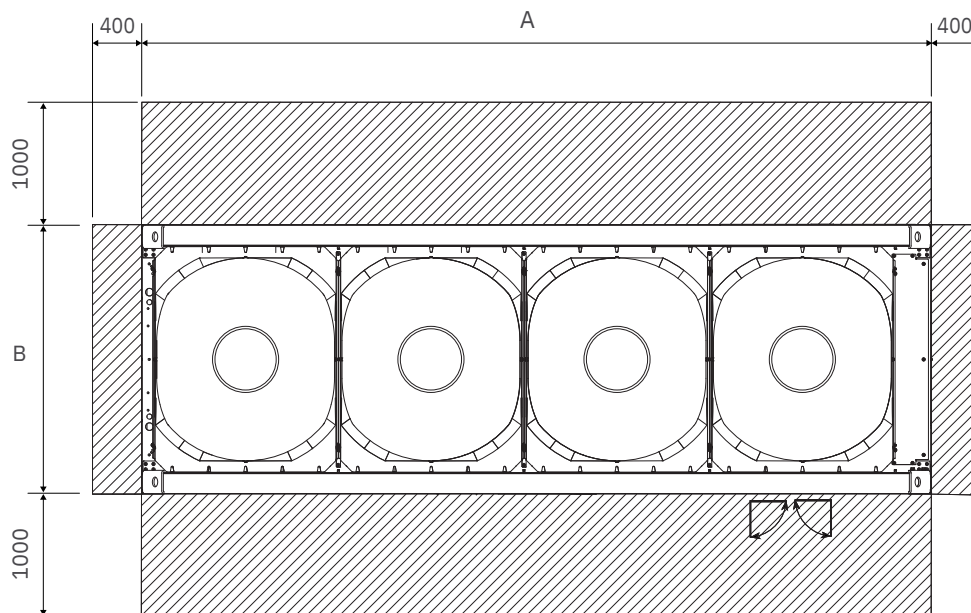
ELCA Engine ver.4.6.4.0

**MECH-iS-G07 DIMENSIONS AND CLEARANCES**

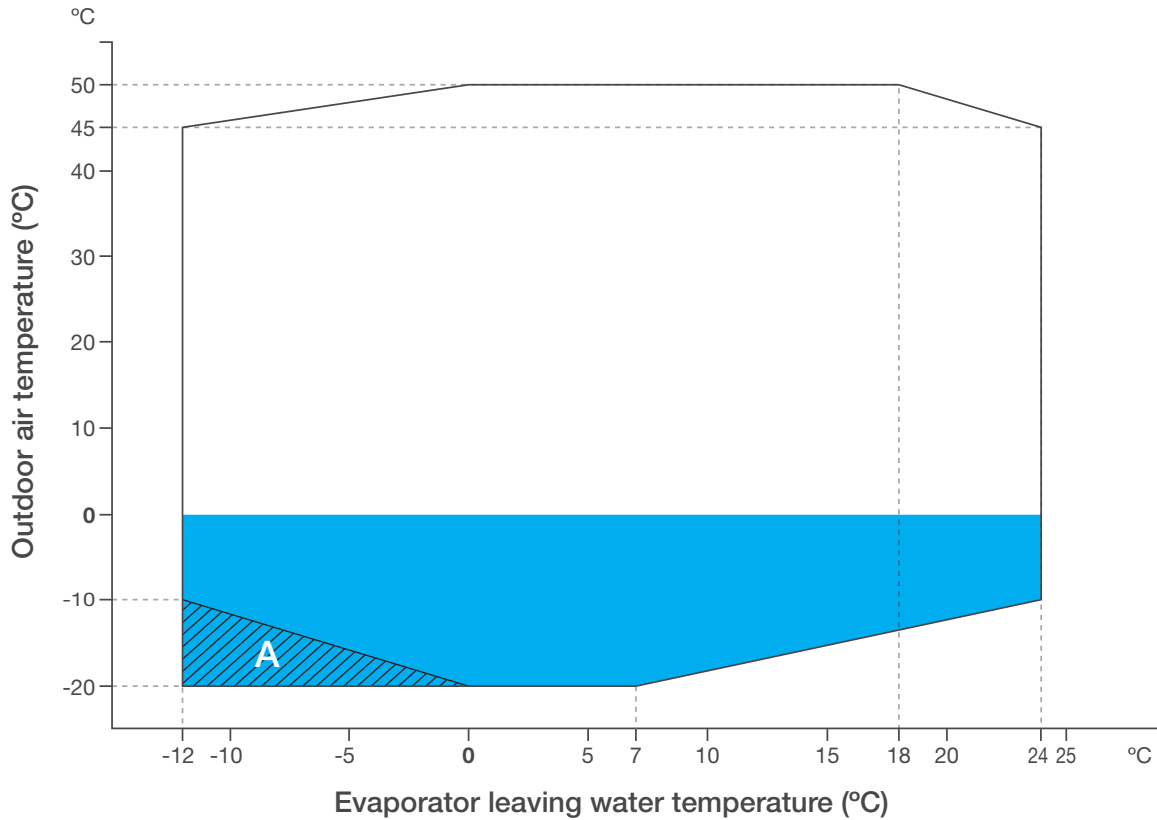
All dimensions are in millimetres.





TOP VIEW



**MECH-iS-G07 OPERATING ENVELOPES**



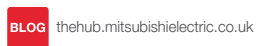
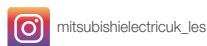
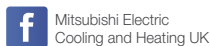
 Antifreeze option(s) required; additional wind protection may be required

 Unit may require a wind protected installation

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 September 2024

