

# **EW-HT**

# High Temperature Water-to-Water Heat Pump

The Climaveneta **EW-HT** is perfect for applications requiring high temperature water of up to 78°C, a key feature for your decarbonisation project by complimenting your air sourced heat pumps to create a cascade system, replacing fossil fuel heating systems.

Designed with a compact footprint for indoor placement, installation is straightforward with non-flammable refrigerant R134a, which has an ASHRAE A1 safety class. With its 2 independent circuits, it can operate in part load to improve efficiency during low-demand periods and comes available with several options such as touch screen display, refrigerant leak detection and Master-Client group controls.

With a wide operating envelope, the **EW-HT** can support a range of commercial applications by interfacing between your low temperature hot water (LTHW) circuit and your Hot Water (HW) circuit. It can also be harmonised with our INTEGRA range of Simultaneous Heating & Cooling equipment (4-pipe) for commercial buildings, industrial process heat recovery (including IT Cooling) and district heating systems.





# Key Features & Benefits:

- High temperature water (78°C) for replacing fossil fuel heating systems
- Compact footprint of only 1m<sup>2</sup>
- High temperature supply water of up to 78°C
- Advanced controls with W3000+ microprocessor
- Reliable and efficient with 2 independent refrigerant circuits
- Compatible with Master-Client controls, Keyboard In Pocket (KIP) interface and Building Energy Management System (BEMS) via interface cards
- Factory fitted options such as refrigerant leak detection, touch screen display, energy meter and additional soundproofing available



EW-HT			0152	0182	0202	0262	0302	0412	0512	0612
Performance - Heating O	nly									
Gross Value										
Total Heating Capacity		kW	70.2	79.3	92.5	113	139	181	225	279
Total Power Input kW		kW	17.0	18.9	22.0	27.9	34.2	43.7	55.1	67.6
COP kW/k		kW/kW	4.13	4.20	4.20	4.05	4.08	4.14	4.08	4.13
EN14511 Values*1*2										
Total Heat Capacity kW		kW	70.4	79.5	92.7	113	140	181	225	280
COP kW/kV		kW/kW	4.01	4.07	4.08	3.94	3.98	4.04	4.01	4.06
Seasonal Performance -	Medium Tempera	ature <sup>*3*9</sup>								
Rated heat output at Tdesignh kW		kW	38.6	43.6	50.0	61.6	78.1	104	128	157
SCOP			3.27	3.39	3.45	3.30	3.30	3.25	3.27	3.3
Performance ns <sup>*8</sup>		%	123	128	130	124	124	122	123	124
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.*7	Total	А	35	38	43	49	64	79	99	125
Exchangers										
Minimum Water Content	User Side	I	250	290	330	410	530	680	850	1050
Minimum Water Flow	Source Side	l/s	0.94	1.06	1.22	1.50	2.03	2.69	3.31	4.08
Heat Exchanger in Heatir	ng*1									
Water Flow	User Side	l/s	2.15	2.42	2.83	3.45	4.26	5.52	6.87	8.54
Pressure Drop*2	User Side	kPa	23.9	25	24.2	24.2	19.7	19.8	19.8	20.1
Water Flow	Source Side	l/s	2.62	2.97	3.47	4.19	5.18	6.74	8.35	10.41
Pressure Drop*2	Source Side	kPa	45.4	46.7	51.8	53.8	49.7	50.1	37.6	37.7
Refrigerant Circuit										
Compressors		No.	2	2	2	2	2	2	2	2
No. of Capacity Steps		No.	2	2	2	2	2	2	2	2
Circuits		No.	2	2	2	2	2	2	2	2
Regulation			STEPS							
Minimum Capacity Step %		%	50	50	50	50	50	50	50	50
Refrigerant			R134a							
Refrigerant Charge		kg	6.00	7.00	8.10	9.10	9.90	11.0	13.2	14.3
Oil Charge	0		5.30	6.80	6.80	6.80	6.80	9.40	13.6	12.6
Noise Levels										
Total Sound Pressure <sup>*4</sup> dB(A)		dB(A)	58	58	58	60	60	62	62	64
Total Sound Power Level in Heating <sup>*5*6</sup> dB		dB(A)	74	74	74	76	76	78	78	80
Size and Weight'7										
Width (A) mm		mm	1223	1223	1223	1223	1223	1223	1223	1223
Depth (B)		mm	877	877	877	877	877	877	877	877
Height (H)		mm	1496	1496	1496	1496	1496	1496	1496	1496
Operation Weight		kg	365	380	390	415	430	610	675	740

 Notes:

 1. Plant (side) heat exchanger water (in/out) 70°C/78°C; Source (side) heat exchanger water (in/out) 45°C/40°C.

 2. Values in compliance with EN14511.

 3. Seasonal space heating energy efficiency class MEDIUM TEMPERATURE in AVERAGE climate conditions. [REGULATION (EU) N. 813/2013],

 4. Average sound pressure level at 1m dista nce, unit in a free field on a reflective surface; non-binding value calculated from the sound power level.

 5. Sound power on the basis of measurements made in compliance with ISO 9614.

 6. Sound power level in heating, indoors.

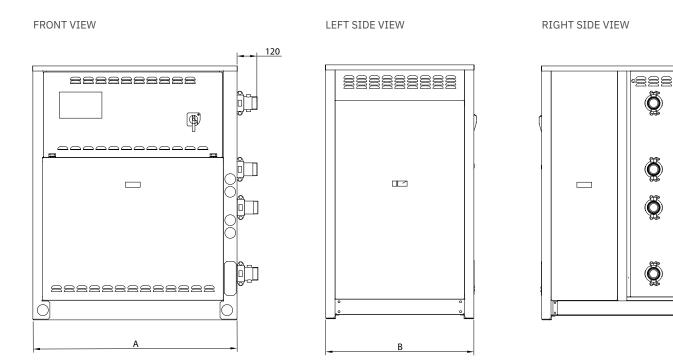
 7. Unit in standard configuration/execution, without optional accessories.

 8. Seasonal snace heating energy efficiency

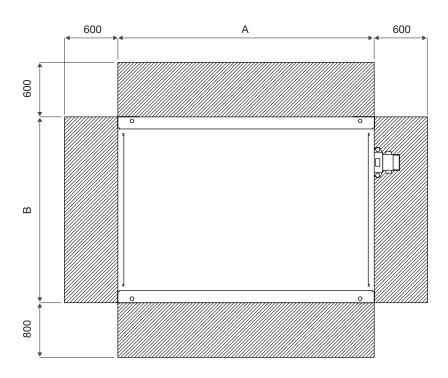
Seasonal space heating energy efficiency.
 Fixed flow rate and variable temperature calculation.

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## **EW-HT** DIMENSIONS

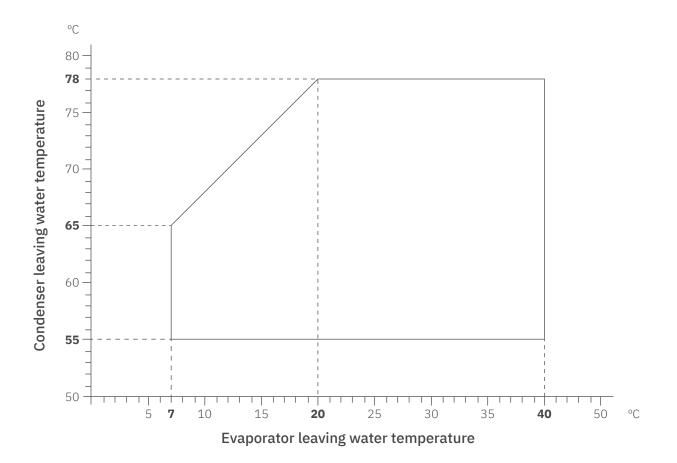








### OPERATING ENVELOPES













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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 electricial relectrical 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), R134 (GWP:1403), R5134 (GWP:460, R454G (GWP:466), R454G (GWP:446), R454B (GWP:446), R454B (GWP:446), R454B (GWP:446), R454B (GWP:446), R454B (GWP:440), R51342 (GWP:140), R1344 (GWP:4104), R154B (GWP:466), R454C (GWP:416), R51342 (GWP:710), R1344 (GWP:4104), R5134 (

Effective as of June 2024



