

### ELFOEnergy Magnum HW

**Reversible heat pump**  
 Air cooled  
 Outdoor installation  
**Capacity from 86,0 to 150 kW**



- ✓ Double independent circuits for high reliability with scroll compressors
- ✓ High water temperature solution for residential centralized systems
- ✓ Refrigerant R410A - GWP = 2088
- ✓ High full load and seasonal efficiency
- ✓ Domestic hot water up to 65°C
- ✓ Operation down to -20°C of outdoor air temperature with hot water at 55°C
- ✓ Partial energy recovery and user side DHW switching valve
- ✓ Integrated hydronic assembly and system tank



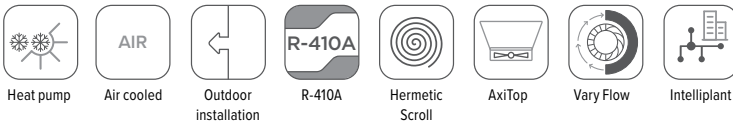
Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps". The products concerned feature on the website [www.eurovent-certification.com](http://www.eurovent-certification.com)



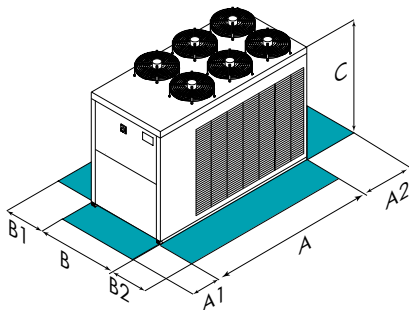
compliant  
ErP

HYDRONIC

### functions and features



### dimensions and clearances



Size	▶▶WSAN-XEM HW	35.4	40.4	45.4	50.4	55.4	60.4
A - Length	mm	3400	3400	3400	3400	4400	4400
B - Width	mm	1812	1812	1812	1812	1812	1812
C - Height	mm	1800	1800	1800	1800	1800	1800
A1	mm	1300	1300	1300	1300	1300	1300
A2	mm	750	750	750	750	750	750
B1	mm	1100	1100	1100	1100	1100	1100
B2	mm	1100	1100	1100	1100	1100	1100
Operating weight	kg	1285	1418	1441	1444	1735	1739

The above mentioned data are referred to standard units for the constructive configurations indicated. For all the other configurations, refer to the relative Technical Bulletin.

#### CAUTION!

For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the green areas.

## versions and configurations

### ENERGY RECOVERY:

- Energy recovery: not required (Standard)
- D** Partial energy recovery

## technical data

Size	▶▶ <b>WSAN-XEM HW</b>		<b>35.4</b>	<b>40.4</b>	<b>45.4</b>	<b>50.4</b>	<b>55.4</b>	<b>60.4</b>
♦ Cooling capacity (EN 14511:2022)	(1)	kW	86,0	98,6	110	118	131	150
Total power input (EN 14511:2022)	(1)	kW	31,3	35,3	37,3	41,6	48,3	54,6
EER (EN 14511:2022)	(1)	-	2,74	2,80	2,95	2,84	2,72	2,74
SEER	(4)	-	2,93	3,35	3,50	3,31	3,28	3,09
$\eta_{sc}$	(4)	%	114,2	131,0	137,0	129,4	128,2	120,6
♦ Heating capacity (EN 14511:2022)	(2)	kW	109	123	133	143	165	184
Total power input (EN 14511:2022)	(2)	kW	31,7	34,8	37,8	41,6	48,1	54,5
COP (EN 14511:2022)	(2)	-	3,43	3,52	3,53	3,45	3,42	3,38
Refrigeration circuits		Nr				2		
No. of compressors		Nr				4		
Type of compressors		-				SCROLL		
Refrigerant		-				R-410A		
Standard airflow		l/s	16000	15567	15567	15567	20733	20733
Water flow-rate (User side)		l/s	5,25	5,91	6,43	6,92	7,95	8,89
Standard power supply		V				400/3N~/50		
Sound power level	(3)	dB(A)	86	86	86	86	88	88
<b>Directive ErP (Energy Related Products)</b>								
SCOP - AVERAGE Climate - W35	(4)	-	3,57	3,95	3,90	3,88	3,57	3,64
$\eta_{sh}$	(4)	%	140	155	153	152	140	143
SCOP - AVERAGE Climate - W35	(4)	-	3,03	3,19	3,15	3,22	3,12	3,04
$\eta_{sh}$	(4)	%	118	125	123	126	122	119

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°C  
 (2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; Outdoor heat exchanger inlet air temperature 7 D.B. /6 (°C) W.B.

(3) Sound pressure levels are referred to units operating at nominal load in nominal conditions. Measurements are carried out accordingly to UNI EN ISO 9614-1 at nominal standard conditions defined in respective regulations: EU 2016/2281, UE 813/2013, UE 811/2013.

(4) Data calculated according to the EN 14825:2018 Regulation

The Product is compliant with the Erp (Energy Related Products) European Directive. It includes the Commission delegated Regulation (EU) No 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions).

## accessories

<b>VARYP</b>	VARYFLOW + (2 inverter pumps)	<b>BACX</b>	BACnet serial communication module
<b>HYG1</b>	Hydronic assembly with 1 ON/OFF pump	<b>CMSC9</b>	Serial communication module for Modbus supervisor
<b>HYG2</b>	Hydronic assembly with 2 ON/OFF pumps	<b>CMMBX</b>	Serial communication module to supervisor (Modbus)
<b>VACSUX</b>	User side DHW switching valve	<b>PFCP</b>	Power factor correction capacitors (cosfi > 0.9)
<b>ACC</b>	Storage tank	<b>PGFC</b>	Finned coil protection grill
<b>CCCA</b>	Copper / aluminium condenser coil with acrylic lining	<b>PGFCX</b>	Finned coil protection grill
<b>CCCA1</b>	Condenser coil with Aluminium Energy Guard DCC treatment	<b>MHP</b>	High and low pressure gauges
<b>SFSTR</b>	Disposal for inrush current reduction	<b>MHPX</b>	High and low pressure gauges
<b>MF2</b>	Multi-function phase monitor	<b>IFWX</b>	Steel mesh strainer on the water side
<b>CMSC10</b>	Serial communication module for LonWorks supervisor	<b>RCTX</b>	Remote control
<b>CMSLWX</b>	LonWorks serial communication module	<b>AVIBX</b>	Anti-vibration mount support
<b>CMSC8</b>	Serial communication module for BACnet supervisor		

Accessories whose code ends with "X" are supplied separately