

# ELFOENERGY MAGNUM HW

Air-cooled reversible heat pump for outdoor installation  
**Capacity from 86,0 to 150 kW**



Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".  
 Check ongoing validity of certificate on [www.eurovent-certification.com](http://www.eurovent-certification.com)



Heat pump



AIR cooled



Outdoor installation



R-410A



Hermetic Scroll



AxiTop



Vary Flow



Electronic expansion valve



INTELLIPLANT



ErP compliant

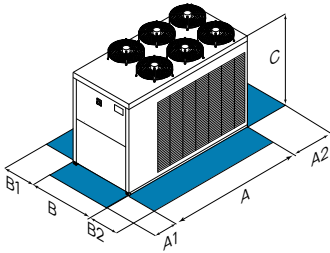
- ✓ Double independent circuits for high reliability with scroll compressors
- ✓ High water temperature solution for residential centralized systems
- ✓ Refrigerant R410A - GWP = 2088
- ✓ High full load and seasonal efficiency
- ✓ Domestic hot water up to 65°C
- ✓ Hot water up to 55°C and wide operating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

## Versions and configurations

### ENERGY RECOVERY:

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

## Dimensions and connections



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

**CAUTION!**  
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.

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.

## Technical data

Size	WSAN-XEM HW	35.4	40.4	45.4	50.4	55.4	60.4
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
$\eta_{s,c}$	(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
$\eta_{s,H}$	(4) %	140	155	153	152	140	143
SCOP - AVERAGE Climate - W55	(4) -	3,03	3,19	3,15	3,22	3,12	3,04
$\eta_{s,H}$	(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 14825:2022 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

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

Accessories whose code ends with "X" are supplied separately

Data contained in this document are not binding and may be changed by the Manufacturer without notice