

# ELFOENERGY GROUND MEDIUM2

Water-cooled reversible heat pump for indoor installation  
Capacity from 34,5 to 241 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



Water cooled



Indoor installation



R-410A



Hermetic Scroll



Electronic expansion valve



Vary Flow



Intelliplant



ErP compliant

- ✓ Scroll compressors and plate heat exchangers
- ✓ Solution for multi-family and commercial buildings
- ✓ Refrigerant R410A - GWP = 2088
- ✓ Hot water up to 60°C
- ✓ Modular operation management, up to 8 units in cascade
- ✓ Integrated source and user side hydronic assemblies and partial recovery

## Versions and configurations

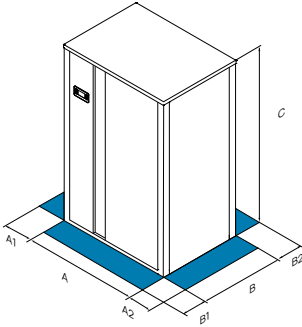
### VERSION:

- OTH4 Operating conditions above 4°C (standard)  
OTL4 Operating conditions below 4°C

### ENERGY RECOVERY:

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

## Dimensions and connections



Size	WSHN-XEE2	12.2	16.2	19.2	22.2	27.2	35.2	40.2	45.2	55.2	60.2	70.2	80.2
A - Length	mm	837	837	837	837	1110	1110	1110	1110	1110	1110	1110	1110
B - Width	mm	607	607	607	607	885	885	885	885	885	885	1035	1035
C - Height	mm	1483	1483	1483	1483	1910	1910	1910	1910	1910	1910	1910	1910
A1	mm	100	100	100	100	150	150	150	150	150	150	150	150
A2	mm	100	100	100	100	150	150	150	150	150	150	150	150
B1	mm	500	500	500	500	500	500	500	500	500	500	500	500
B2	mm	300	300	300	300	350	350	350	350	350	350	350	350
Operating weight	kg	223	290	309	322	441	519	580	581	728	743	808	820

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 blue areas.

## Technical data

Size	WSHN-XEE2	12.2	16.2	19.2	22.2	27.2	35.2	40.2	45.2	55.2	60.2	70.2	80.2
Cooling capacity (EN 14511:2022)	(1) kW	34,5	48,6	58,0	68,1	82,3	102	120	139	168	187	218	241
Total power input (EN 14511:2022)	(1) kW	7,42	10,5	12,4	15,4	17,5	23,8	26,9	32,0	38,1	43,0	48,7	55,1
EER (EN 14511:2022)	(1) -	4,65	4,61	4,67	4,41	4,69	4,29	4,45	4,34	4,42	4,34	4,47	4,37
SEER	(4) -	5,38	4,78	5,01	4,97	5,30	5,18	5,36	5,37	5,16	5,05	5,25	4,97
n <sub>s,c</sub>	(4) %	207,1	183,0	192,6	191,0	204,2	199,3	206,5	206,9	198,3	194,0	201,9	190,9
Heating capacity (EN 14511:2022)	(2) kW	40,3	56,6	66,8	79,2	93,6	119	139	162	195	217	251	278
Total power input (EN 14511:2022)	(2) kW	9,47	13,2	15,8	19,1	21,3	28,4	32,3	38,4	45,8	52,0	58,1	65,6
COP (EN 14511:2022)	(2) -	4,25	4,28	4,24	4,15	4,40	4,18	4,29	4,22	4,25	4,18	4,32	4,25
Refrigeration circuits	Nr	1											
No. of compressors	Nr	2											
Type of compressors	-	SCROLL											
Refrigerant	-	R-410A											
Standard power supply	V	400/3~/50											
Sound power level	(3) dB(A)	60	64	65	64	64	74	74	74	77	77	79	80
<b>Directive ErP (Energy Related Products)</b>													
ErP Energy Class - AVERAGE Climate - W35	-	A+++	A+++	-									
ErP Energy Class - AVERAGE Climate - W35	-	A+++	A+++	A+++									
SCOP - AVERAGE Climate - W35	(4) -	5,69	5,45	5,47	4,85	5,97	5,67	5,84	5,68	5,68	5,55	5,63	5,45
n <sub>s,H</sub>	(4) %	225	215	216	191	231	219	226	219	219	214	217	210
SCOP - AVERAGE Climate - W55	(4) -	4,51	4,35	4,36	4,40	4,83	4,60	4,69	4,67	4,64	4,61	4,69	4,65
n <sub>s,H</sub>	(4) %	172	166	166	168	185	176	180	179	178	176	180	178

(1) Data calculated according to EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; External exchanger water temperature = 30/35°C  
 (2) Data calculated according to EN 14511:2022 referred to the following conditions Water to internal exchanger = 40/45°C; Water temperature to external exchanger = 10/7°C  
 (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.  
 Sound power level are not Eurovent certified.

(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) and the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

## Accessories

SDV	Cutoff valve on compressor supply and return	SFSTR	Disposal for inrush current reduction
MOBMAG	Larger units	PFCP	Power factor correction capacitors (cosfi > 0.9)
RCTX	Remote control	AVIBX	Anti-vibration mount support
CMSC10	Serial communication module for LonWorks supervisor	IOTX	IoT industrial module for cloud based interoperability & services
CMSC8	Serial communication module for BACnet supervisor	VACSUX	User side DHW switching valve
CMSC9	Serial communication module for Modbus supervisor	VARYU	VARYFLOW + (user side 2 inverter pumps)
CMMBX	Serial communication module for supervisor (Modbus)	VS2M	Source side 2-way modulating valve
CMSLWX	LonWorks serial communication module	VS2MX	Source side 2-way modulating valve
BACX	Serial communication module for BACnet supervisor	VS3M	Source side 3-way modulating valve
SPCX	Set-point compensation with outdoor air temperature probe	VS3MX	Source side 3-way modulating valve
IFWX	Steel mesh filter on the water side	VARYS	VARYFLOW + (source side 2 inverter pumps)

Accessories whose code ends with "X" are supplied separately