

# ELFOENERGY GROUND MEDIUM2 HW

Water-cooled non-reversible heat pump for indoor installation  
Capacity from 33,8 to 134 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)



Heating only



Water cooled



Indoor installation



R-134a



Hermetic Scroll



Electronic expansion valve



Vary Flow



INTELLIPLANT



ErP compliant

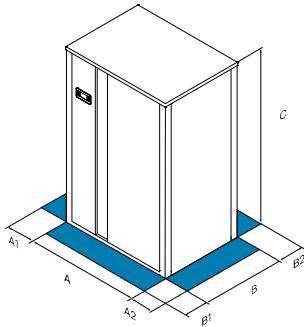
- ✓ Scroll compressors and plate heat exchangers
- ✓ High water temperature solution for residential centralized systems
- ✓ Refrigerant R134a - GWP = 1430
- ✓ Heating-only operation
- ✓ Hot water up to 78°C
- ✓ Modular operation management, up to 8 units in cascade
- ✓ Integrated source and user side hydronic assemblies

## Versions and configurations

OPERATION:

OHO Heating-only operation

## Dimensions and connections



Size	WSHH-LEE1	19.2	22.2	27.2	35.2	40.2	45.2	60.2	80.2
A - Length	mm	854	854	854	854	854	1110	1110	1110
B - Width	mm	652	652	672	672	672	930	930	930
C - Height	mm	1483	1483	1483	1483	1483	1910	1910	1910
A1	mm	300	300	300	300	300	500	500	500
A2	mm	300	300	300	300	300	500	500	500
B1	mm	500	500	500	500	500	500	500	500
B2	mm	300	300	300	300	300	350	350	350
Operating weight	kg	347	367	398	417	420	702	754	831

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	WSHH-LEE1	19.2	22.2	27.2	35.2	40.2	45.2	60.2	80.2
Heating capacity (EN 14511:2022)	(1) kW	33,8	40,2	46,1	57,1	69,3	87,5	109	134
Total power input (EN 14511:2022)	(1) kW	8,13	9,07	10,2	13,0	16,2	21,1	26,4	31,8
COP (EN 14511:2022)	(1) -	4,16	4,43	4,52	4,40	4,28	4,16	4,13	4,23
Heating capacity (EN 14511:2022)	(2) kW	73,4	83,0	96,8	122	144	184	224	278
Total power input (EN 14511:2022)	(2) kW	16,9	18,1	20,8	28,0	34,3	44,6	54,7	66,8
COP (EN 14511:2022)	(2) -	4,33	4,60	4,64	4,37	4,21	4,13	4,10	4,16
Refrigeration circuits	Nr	1							
No. of compressors	Nr	2							
Type of compressors	-	SCROLL							
Refrigerant	-	R-134a							
Water flow-rate (User side)	l/s	1,63	1,94	2,22	2,76	3,35	4,23	5,27	6,48
Water flow (Source side)	l/s	2,06	2,48	2,86	3,51	4,24	5,30	6,62	8,19
Standard power supply	-	400/3~/50							
Sound power level	(3) dB(A)	70	70	71	74	76	78	78	80
<b>Directive ErP (Energy Related Products)</b>									
ErP Energy Class - AVERAGE Climate - W35	(4) -	A+++	A+++	A+++	A+++	-	-	-	-
SCOP - AVERAGE Climate - W55	(4) -	4,48	4,65	4,65	4,61	4,57	4,45	4,45	4,52
$\eta_{s,h}$	(4) %	171,0	178,0	178,0	176,0	175,0	170,0	170,0	173,0

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 10/7°C; Entering external exchanger air temperature = 40/45°C

(2) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 45/40°C; Entering external exchanger air temperature = 70/78°C

The data are not Eurovent certified.

(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

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

SDV	Cutoff valve on compressor supply and return	SFSTR	Disposal for inrush current reduction
RCTX	Remote control	PFCC	Power factor correction capacitors (cosfi > 0.95)
CMSC10	Serial communication module for LonWorks supervisor	AVIBX	Anti-vibration mount support
CMSC8	Serial communication module for BACnet supervisor	MOBMAG	Larger units
CMSC9	Serial communication module for Modbus supervisor	VARYS	VARYFLOW + (source side 2 inverter pumps)
CMMBX	Serial communication module for supervisor (Modbus)	VARYU	VARYFLOW + (user side 2 inverter pumps)
CMSLWX	LonWorks serial communication module	V3MOL	User side three-way modulating valve for operating limits
BACX	Serial communication module for BACnet supervisor	V3MOLX	User side three-way modulating valve for operating limits
SPCX	Set-point compensation with outdoor air temperature probe	IOTX	IoT industrial module for cloud based interoperability & services
IFWX	Steel mesh filter on the water side		

Accessories whose code ends with "X" are supplied separately