

ELFOEnergy Ground Medium² HW

No reversible heat pump
 Water cooled
 Indoor installation
Capacity from 73,3 to 278 kW



- ✓ 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



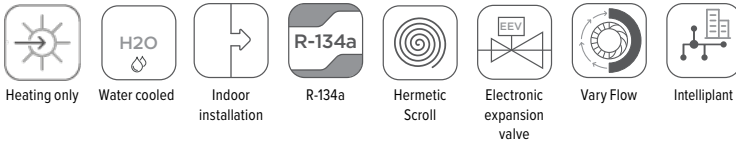
Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps". The products concerned feature on the website www.eurovent-certification.com



compliant
ErP

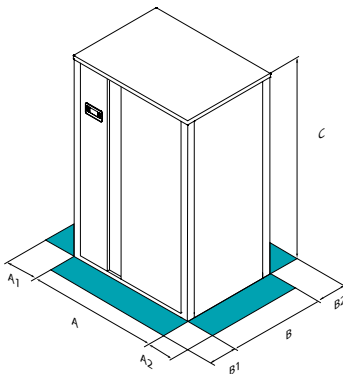
HYDRONIC

functions and features



Heating only Water cooled Indoor installation R-134a Hermetic Scroll Electronic expansion valve Vary Flow Intelliplant

dimensions and clearances



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	295	315	421	510	557	572	733	809

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

OPERATION:

OHO Heating-only operation

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	73,4	83,0	96,8	122	144	184	224	278
Total power input (EN 14511:2022)	(1)	kW	16,9	18,1	20,8	28,0	34,3	44,6	54,7	66,8
COP (EN 14511:2022)	(1)	-	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	2,24	2,53	2,95	3,72	4,40	5,62	6,84	8,49
Water flow (Source side)		l/s	2,75	3,16	3,69	4,57	5,34	6,78	8,25	10,3
Standard power supply		-				400/3~/50				
Sound power level	(2)	dB(A)	70	70	71	74	76	78	78	80
Directive ErP (Energy Related Products)										
ErP Energy Class - AVERAGE Climate - W35	(3)	-	A+++	A+++	A+++	A+++	-	-	-	-
SCOP - AVERAGE Climate - W35	(3)	-	4,48	4,65	4,65	4,61	4,57	4,45	4,45	4,52
η _{SH}	(3)	%	171,0	178,0	178,0	176,0	175,0	170,0	170,0	173,0

(1) Performance data calculated in accordance with EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 45/40°C. External exchanger water temperature = 70/78°C

(2) 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.

(3) 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

SDV	Cutoff valve on compressor supply and return
MF2	Multi-function phase monitor
RCTX	Remote control
CMSC10	Serial communication module for LonWorks supervisor
CMSC8	Serial communication module for BACnet supervisor
CMSC9	Serial communication module for Modbus supervisor
CMMBX	Serial communication module to supervisor (Modbus)
CMSLWX	LonWorks serial communication module
BACX	Serial communication module for BACnet supervisor

SPCX	Set-point compensation with outdoor air temperature probe
IFWX	Steel mesh strainer on the water side
SFSTR	Disposal for inrush current reduction
PFCC	Power factor correction capacitors (cosφi > 0.95)
AVIBX	Anti-vibration mount support
MOBMAG	Larger units
VARYS	VARYFLOW + (cooling side 2 inverter pumps)
VARYU	VARYFLOW + (heating side 2 inverter pumps)

Accessories whose code ends with "X" are supplied separately