WSHH-LEE1

ELFOENERGY GROUND MEDIUM² HW

No reversible heat pump
Water cooled
Indoor installation
Capacity from 73,4 to 278 kW

HYDRONIC

✓ 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

EUROVENT CERTIFIED PERFORMANCE
www.eurovent-certification.com

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

ErP
compliant ErP

functions and features

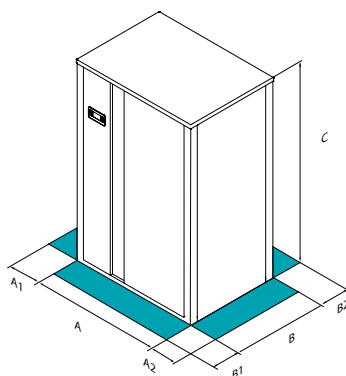| Heating only	Water cooled	Indoor installation	R-134a	Hermetic Scroll	Electronic expansion valve	Vary Flow	Intelliplant

dimensions and clearances

CAUTION!

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

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.

CLIVET

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 - W55	(3)	-	A+++	A+++	A+++	A+++	-	-	-	-
SCOP - AVERAGE Climate - W55	(3)	-	4,48	4,65	4,65	4,61	4,57	4,45	4,45	4,52
η$_{S,H}$	(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 (cosfi > 0.95)
AVIBX   Anti-vibration mount support
MOBMAG   Larger units
VARYS   VARYFLOW + (cooling side 2 inverter pumps)
VARYU   VARYFLOW + (heating side 2 inverter pumps)
IOTX   IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately