

ELFOENERGY GROUND MEDIUM2

Water-cooled liquid chiller for indoor installation
Capacity from 35,6 to 250 kW



Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".
Check ongoing validity of certificate on www.eurovent-certification.com



Solo freddo



Solo caldo



Water cooled



Indoor installation



R-410A



Hermetic Scroll



Reversible water circuit



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
- ✓ 3 operating modes: Cooling only, Heating only, Operation with water circuit change-over
- ✓ Condenser water temperature with heat only version (OHO) up to 60°C, evaporator water temperature down to -8°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

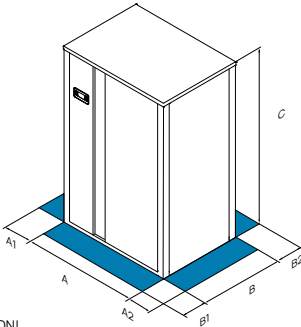
OPERATION

- OCO Cooling-only operation (Standard)
OHO Heating-only operation
OHI Operation with water circuit change-over

ENERGY RECOVERY:

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

Dimensions and connections



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

Size	WSH-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	212	276	295	308	421	510	557	572	700	733	771	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.

Technical data

Size	WSH-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	35,6	49,8	59,3	68,4	84,2	109	124	147	173	197	222	250
Total power input (EN 14511:2022)	(1) kW	7,50	10,6	12,5	15,7	17,5	23,7	26,8	31,8	38,1	43,2	48,6	55,3
EER (EN 14511:2022)	(1) -	4,75	4,68	4,74	4,36	4,82	4,59	4,61	4,62	4,54	4,56	4,57	4,52
SEER	(4) -	5,36	5,25	5,30	5,24	5,59	5,77	5,87	5,72	5,38	5,38	5,51	5,30
n _{sc}	(4) %	206,4	202,0	204,0	202,0	215,6	222,8	226,8	220,8	207,2	207,2	212,4	204,0
Heating capacity (EN 14511:2022)	(2) kW	41,3	57,6	68,3	80,7	96,5	125	143	169	200	229	256	289
Total power input (EN 14511:2022)	(2) kW	9,59	13,3	15,7	19,3	21,8	29,0	32,9	38,8	46,5	52,1	59,2	66,8
COP (EN 14511:2022)	(2) -	4,30	4,32	4,34	4,18	4,43	4,32	4,34	4,35	4,29	4,39	4,33	4,32
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

(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 2016/2281, also known as Ecodesign Lot21.

Accessories

SDV	Cutoff valve on compressor supply and return	AVIBX	Anti-vibration mount support
MOBMAG	Larger units	IOTX	Industrial module for cloud based interoperability & services
RCTX	Remote control	VS2MC	Cooling side 2-way modulating valve
CMSC10	Serial communication module for LonWorks supervisor	VS2MCX	Cooling side 2-way modulating valve
CMSC8	Serial communication module for BACnet supervisor	VS3MC	Cooling side 3-way modulating valve
CMSC9	Serial communication module for Modbus supervisor	VS3MCX	Cooling side 3-way modulating valve
CMMBX	Serial communication module for supervisor (Modbus)	VARYC	VARYFLOW + (cooling side 2 inverter pumps)
CMSLWX	LonWorks serial communication module	VS2MH	Heating side 2-way modulating valve
BACX	Serial communication module for BACnet supervisor	VS2MHX	Heating side 2-way modulating valve
SPCX	Set-point compensation with outdoor air temperature probe	VS3MH	Heating side 3-way modulating valve
IFWX	Steel mesh filter on the water side	VS3MHX	Heating side 3-way modulating valve
SFSTR	Disposal for inrush current reduction	VARYH	VARYFLOW + (heating side 2 inverter pumps)
PFPC	Power factor correction capacitors (cosfi > 0.9)	VACSHX	Heating side DHW switching valve

Accessories whose code ends with "X" are supplied separately