

SCREWLine⁴-i

Liquid chiller

Water cooled

Indoor installation

Capacity from 340 to 1440 kW



- ✓ Screw compressors with inverter technology and spray shell & tube evaporator
- ✓ Low environmental impact solution, with one or two independent circuits for high reliability
- ✓ Refrigerant R513A - GWP = 631
- ✓ High seasonal efficiency with SEER values up to 8.60
- ✓ 3 operating modes: Cooling only, Heating only, Operation with water circuit change-over
- ✓ Two acoustic configurations: standard and super-silenced
- ✓ Modular operation management, up to 8 units in cascade
- ✓ Condenser water temperature up to 65°C with high water temperature version (HWT), evaporator water temperature down to -8°C



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



Cooling only



Water cooled



Indoor installation



R-513A



Semi-hermetic
Twin-screw



Full
Inverter



Reversible
water circuit

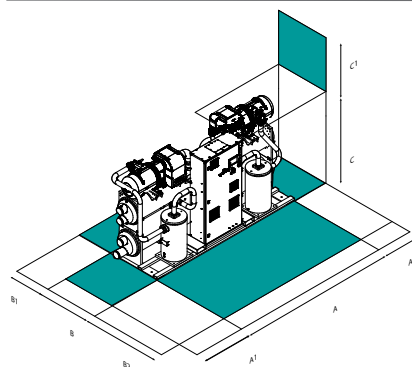


Electronic
expansion
valve



Intelliplant

dimensions and clearances



Size	▶▶ WDH-iK4	120.1	160.1	200.1	220.1	240.1	270.1	290.1	250.2	280.2	320.2	360.2	400.2	480.2	540.2
A - Length	mm	2639	2639	2902	2902	3527	3527	4187	4083	4083	4233	4384	4651	4651	4651
B - Width	mm	1195	1195	1400	1400	1400	1400	1450	1195	1195	1195	1450	1495	1495	1495
C - Height	mm	2103	2103	2293	2293	2293	2293	2375	2194	2194	2214	2375	2498	2498	2498
A1	mm	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
A2	mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
B1	mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
B2	mm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
C1	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
Operating weight	kg	3241	3328	4217	4207	4849	4884	5013	5484	5694	6475	7241	9225	9177	9225

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

VERSION:

EXC Excellence (Standard)

LOW TEMPERATURE:

- Low temperature: not required (Standard)
B Water low temperature

OPERATION:

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

ACOUSTIC CONFIGURATION:

ST Standard acoustic configuration (Standard)
EN Super-silenced acoustic configuration

HIGH WATER TEMPERATURE VERSION:

HWT High water temperature

technical data

Size		WHD-iK4	120.1	160.1	200.1	220.1	240.1	270.1	290.1	250.2	280.2	320.2	360.2	400.2	480.2	540.2
♦ Cooling capacity (EN 14511:2022)	(1)	kW	340	416	520	611	690	760	831	705	801	899	1065	1280	1355	1440
Total power input (EN 14511:2022)	(1)	kW	66,5	80,8	101	119	137	149	165	137	155	176	207	249	268	287
EER (EN 14511:2022)	(1)	-	5,10	5,14	5,12	5,15	5,02	5,09	5,02	5,14	5,16	5,10	5,14	5,15	5,06	5,02
SEER	(5)	-	8,41	8,46	8,53	8,57	8,55	8,60	8,57	8,59	8,38	8,47	8,56	8,38	8,44	8,53
η_{sc}	(5)	%	328,4	330,4	333,2	334,8	334,0	336	334,8	335,6	327,2	330,8	334,4	327,2	329,6	333,2
♦ Heating capacity (EN 14511:2022)	(2)	kW	381	467	581	683	780	862	943	788	888	1008	1195	1456	1510	1633
Total power input (EN 14511:2022)	(2)	kW	82,0	101	123	143	170	188	210	172	194	223	261	324	333	371
COP (EN 14511:2022)	(2)	-	4,65	4,60	4,72	4,79	4,58	4,58	4,48	4,58	4,57	4,52	4,58	4,49	4,54	4,41
Refrigeration circuits		Nr				1							2			
No. of compressors		Nr				1							2			
Type of compressors	(4)	-								ISW						
Refrigerant		-								R-513A						
Water flow-rate (User side)		l/s	16,1	19,8	24,7	29,0	32,8	36,1	39,5	33,5	38,0	42,7	50,6	60,8	65,8	72,2
Water flow (Source side)		l/s	19,5	23,8	29,8	35,0	39,6	43,5	47,7	40,3	45,8	51,6	61,0	73,2	79,4	87,3
Standard power supply		V								400/3~/50						
ST Sound power level	(3)	dB(A)	94	96	97	97	97	98	98	100	101	101	102	102	102	103
EN Sound power level	(3)	dB(A)	91	93	94	94	94	95	95	97	98	98	99	99	99	100

(1) Performance data calculated in accordance with EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; External exchanger water temperature = 30/35°C.

(2) HWT Version: Performance data calculated in accordance with EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 40/45°C; External exchanger water temperature = 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) SW = screw compressor with integrated inverter

(5) 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 2016/2281, also known as Ecodesign Lot21.

accessories

AMRX Rubber antivibration mounts
RCMRX Remote control via microprocessor control
PSX Mains power supply
CONTA2 Energy meter
CMSC9 Serial communication module for Modbus supervisor
CMSC10 Serial communication module for LonWorks supervisor
CMSC11 Serial communication module for BACnet-IP supervisor
SCP4 Set-point compensation with 0-10 V signal
SPC1 Set point compensation with 4-20 mA signal
SPC2 Set-point compensation with outdoor air temperature probe
ECS ECOSHARE function for the automatic management of a group of units
IVMSX Source side 2-way modulating valve
MHP High and low pressure gauges
SDV Cutoff valve on compressor supply and return
CO3P 3-step condenser
AACT Opposing evaporator water connections

AAR DX evaporator water connections
CDR DX condenser water connections
CDCT Opposing condenser water connections
EV3P 3-step evaporator
ISS Condenser insulation
IM 20 mm thickness insulation for increased evaporator
EHCS Source side antifreeze electric heaters
EHWP User side water piping antifreeze electric heaters
IFU2X Steel mesh filter on cold side
IFS2X Steel mesh filter on hot side
RPR Refrigerant drops detector
FC2 EMC filtering to reduce conducted compressor emissions
AMMSX Anti-seismic spring antivibration mounts
AMMX Rubber antivibration mounts

Accessories whose code ends with "X" are supplied separately