

SCREWLINE4-I

Water-cooled liquid chiller for indoor installation
Capacity from 340 to 1440 kW

Screw INVERTER



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



Cooling only



Heating only



Water cooled



Indoor installation



R-513A



Semi-hermetic Twin-screw



Full Inverter



Reversible water circuit



Electronic expansion valve



Intelliplant



ErP compliant

- ✓ 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

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

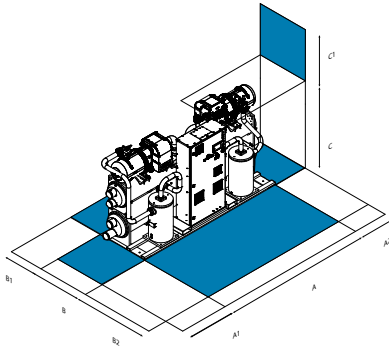
CONFIGURAZIONE ACUSTICA:

ST Standard acoustic configuration (Standard)
EN Supersilenced acoustic configuration

VERSIONE ALTA TEMPERATURA ACQUA:

HWT High water temperature

Dimensions and connections



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 blue areas.

Technical data

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
Cooling capacity (EN 14511:2022)	(1)	kW	340	416	520	611	689	759	830	704	800	899	1065	1280	1355	1440
Total power input (EN 14511:2022)	(1)	kW	66,8	81,0	102	119	138	150	166	138	156	177	209	249	270	289
EER (EN 14511:2022)	(1)	-	5.08	5.13	5.11	5.13	5.00	5.06	5.00	5.10	5.12	5.08	5.11	5.13	5.02	4.98
SEER	(4)	-	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
$\eta_{s,c}$	(4)	%	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	385	463	582	683	775	854	934	795	894	1006	1191	1431	1508	1680
Total power input (EN 14511:2022)	(2)	kW	88,9	104	129	152	179	193	213	186	205	232	270	323	348	390
COP (EN 14511:2022)	(2)	-	4.33	4.45	4.52	4.49	4.33	4.43	4.39	4.26	4.35	4.34	4.41	4.43	4.33	4.30
Refrigeration circuits		Nr	1										2			
No. of compressors		Nr	1										2			
Type of compressors		-	SCREW INVERTER													
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	64,4	68,4
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	77,9	82,9
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) 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

AMRX	Rubber antivibration mounts	AAR	DX evaporator water connections
RCMRX	Remote control via microprocessor control	CDR	DX condenser water connections
PSX	Mains power supply	CDCT	Opposing condenser water connections
CONTA2	Energy meter	EV3P	3-step evaporator
CMSC9	Serial communication module for Modbus supervisor	ISS	Condenser insulation
CMSC10	Serial communication module for LonWorks supervisor	IM	20 mm thickness insulation for increased evaporator
CMSC11	Serial communication module for BACnet-IP supervisor	EHCS	Source side antifreeze electric heaters
SCP4	Set-point compensation with 0-10 V signal	EHWP	User side water piping antifreeze electric heaters
SPC1	Set point compensation with 4-20 mA signal	IFU2X	Steel mesh filter on cold side
SPC2	Set-point compensation with outdoor air temperature probe	IFS2X	Steel mesh filter on hot side
ECS	ECOSHARE function for the automatic management of a group of units	RPR	Refrigerant leak detector
IVMSX	Source side 2-way modulating valve	FC2	EMC filtering to reduce conducted compressor emissions
MHP	High and low pressure gauges	AMMSX	Spring anti-seismic antivibration mounts
SDV	Cutoff valve on compressor supply and return	AMMX	Spring antivibration mounts
CO3P	3-step condenser	IOTX	IoT industrial module for cloud based interoperability & services
AACT	Opposing evaporator water connections		

Accessories whose code ends with "X" are supplied separately