

NEW PRODUCT

SCREWLine⁴-i

Water chiller
 Air cooled
 Outdoor installation
Capacity from 281 to 1423 kW

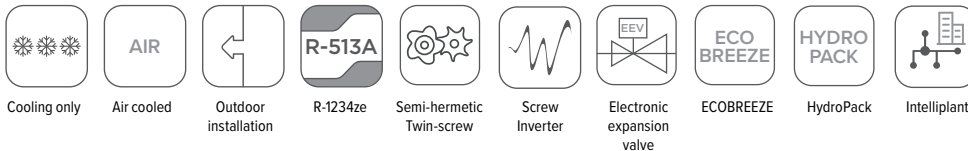


The SCREWLine⁴-i liquid chillers are equipped with variable-speed screw compressors driven by an **INVERTER** and filled with **R-513A** refrigerant.

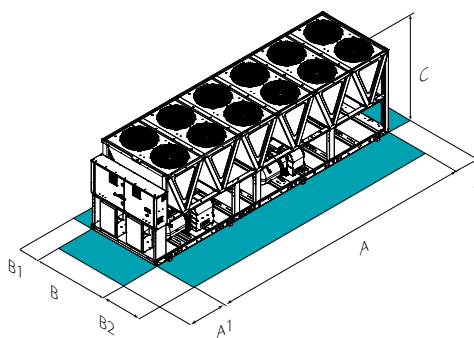
- **REFRIGERANT HFO WITH REDUCED ENVIRONMENTAL IMPACT:** Clivet's constant search for solutions for sustainable comfort and environmental well-being has led to the development of the WDAT-iK4 range of chillers with the R-513A refrigerant, which stands out for its low environmental impact (GWP = 631).
- **INVERTER SCREW TECHNOLOGY:** each refrigeration circuit adopts one compact screw compressor with integrated inverter, for maximum reliability and durability. The WDAT-iK4 stands out for its very high seasonal efficiency, SEER reaching values of 5,33 while guaranteeing considerable energy saving compared to both fixed-speed screw compressors and inverter-driven screw compressors. In addition, it is extremely silent at low loads.
- **ECODESIGN DIRECTIVE 2021 COMPLIANT:** the WDAT-iK4 series meets and exceeds the most stringent energy efficiency requirements imposed by the Ecodesign Directive from 2021, placing it at the top of the market, thanks to the technical solutions adopted: electronic expansion valves, shell and tube evaporator, high efficiency variable speed axial fans and aluminium microchannel condensing coils.



functions and features



dimensions and clearances



Size	WDAT-iK4	120.1	160.1	200.1	240.1	250.2	280.2	320.2	340.2	360.2	400.2	440.2	480.2	540.2	580.2
ST-EXC A - Length	mm	4175	4175	5425	6675	7925	7925	7925	9175	10425	10425	10425	12923	12923	12923
ST-EXC B - Width	mm	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228
ST-EXC C - Height	mm	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535
ST-EXC A1	mm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
ST-EXC A2	mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
ST-EXC B1	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
ST-EXC B2	mm	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
ST-EXC Operating weight	kg	3004	3159	4162	4595	5454	5896	5912	6683	7766	7785	7793	9335	9350	9350
SC/EN-PRM Operating weight	kg	3209	3364	4417	4850	5864	6306	6322	7143	8226	8245	8253	9845	9860	9860

Size	WDAT-iK4	120.1	160.1	200.1	240.1	250.2	280.2	320.2	340.2	360.2	400.2	440.2	480.2	540.2	580.2
ST-PRM A - Length	mm	2925	2925	4175	5425	5424	5424	5424	6675	7924	7924	7924	10425	10425	10425
ST-PRM B - Width	mm	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228
ST-PRM C - Height	mm	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535
ST-PRM A1	mm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
ST-PRM A2	mm	700	700	700	700	700	700	700	700	700	700	700	700	700	700
ST-PRM B1	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
ST-PRM B2	mm	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
ST-PRM Operating weight	kg	2637	2757	3872	4164	4738	4744	5196	6107	6447	6456	7189	8287	8300	8314
SC/EN-PRM Operating weight	kg	2842	2962	4077	4419	5149	5154	5605	6562	6906	6915	7649	8797	8810	8824

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

The above mentioned data are referred to standard units for the constructive configurations indicated.

versions and configurations

LOW TEMPERATURE:

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

VERSION:

- EXC** Excellence (Standard)
- PRM** Premium

EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

- CREFB** Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)

ENERGY RECOVERY:

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

ACOUSTIC CONFIGURATION:

- ST** Standard acoustic configuration (Standard)
- SC** Acoustic configuration with compressor soundproofing
- EN** Supersilenced acoustic configuration

technical data

Size		WDAT-iK4	120.1	160.1	200.1	240.1	250.2	280.2	320.2	340.2	360.2	400.2	440.2	480.2	540.2	580.2
ST/SC-EXC Cooling capacity (EN14511:2018)	(1)	kW	294	374	506	602	593	670	741	811	900	992	1089	1204	1325	1423
ST/SC-EXC Total power input (EN14511:2018)	(1)	kW	93,9	120	163	194	181	210	238	253	284	318	364	387	441	485
ST/SC-EXC EER (EN14511:2018)	(1)	-	3,13	3,11	3,10	3,10	3,27	3,19	3,12	3,21	3,17	3,11	2,99	3,11	3,01	2,93
ST/SC-EXC SEER	(4)	-	5,13	5,12	5,11	5,12	5,36	5,38	5,37	5,39	5,34	5,31	5,35	5,34	5,30	5,31
ST/SC-EXC η_{sc}	(4)	%	202,3	202,0	201,3	201,7	211,3	212,2	211,9	212,6	210,5	209,6	211,0	210,6	209,0	209,5
ST/SC-EXC Refrigeration circuits		Nr		1								2				
ST/SC-EXC No. of compressors		Nr		1								2				
ST/SC-EXC Type of compressors	(2)	-														
ST/SC-EXC Standard power supply		V								ISW						
										400/3/50						
ST-EXC Sound pressure level	(3)	dB(A)	77	77	77	77	79	80	80	80	80	80	81	80	81	81
SC-EXC Sound pressure level	(3)	dB(A)	73	74	73	74	76	77	77	76	78	78	78	78	78	78
EN-EXC Sound pressure level	(3)	dB(A)	69	70	69	70	72	73	73	72	74	74	74	74	74	74

Size		WDAT-iK4	120.1	160.1	200.1	240.1	250.2	280.2	320.2	340.2	360.2	400.2	440.2	480.2	540.2	580.2
ST/SC-PRM Cooling capacity (EN14511:2018)	(1)	kW	281	340	473	577	550	615	681	754	837	911	1007	1120	1240	1338
ST/SC-PRM Total power input (EN14511:2018)	(1)	kW	97,1	131	173	201	194	225	261	271	297	328	378	400	447	496
ST/SC-PRM EER (EN14511:2018)	(1)	-	2,89	2,61	2,73	2,87	2,83	2,74	2,61	2,78	2,82	2,78	2,66	2,80	2,78	2,70
ST/SC-PRM SEER	(4)	-	4,96	4,84	4,80	4,89	4,95	4,92	4,87	4,99	4,88	4,91	4,90	4,97	4,97	4,97
ST/SC-PRM η_{sc}	(4)	%	195,4	190,7	189,1	192,5	194,9	193,8	191,7	196,4	192,1	193,5	192,8	195,8	195,8	195,8
ST/SC-PRM Refrigeration circuits		Nr		1								2				
ST/SC-PRM No. of compressors		Nr		1								2				
ST/SC-PRM Type of compressors	(2)	-														
ST/SC-PRM Standard power supply		V								ISW						
										400/3/50						
ST-PRM Sound pressure level	(3)	dB(A)	78	78	77	77	79	81	80	81	81	81	81	81	82	82
SC-PRM Sound pressure level	(3)	dB(A)	74	75	74	74	76	76	77	77	76	78	78	78	78	79
EN-PRM Sound pressure level	(3)	dB(A)	70	71	70	70	72	72	73	73	72	74	74	74	74	75

- (1) Data calculated in compliance with Standard EN 14511:2018 referred to the following conditions: Internal exchanger water = 12/7°C; External exchanger entering air = 35°C
- (2) ISW = screw compressor with integrated inverter
- (3) Sound levels refer to full load units, in test nominal conditions. The sound pressure level refers to 1 m. from the standard unit outer surface operating in open field. Measurements are carried out according to the UNI EN ISO 9614-2 standard, in compliance with the EUROVENT 8/1 certification. Data referred to the following conditions: Internal exchanger water = 12/7°C; Entering external exchanger air temperature = 35°C
- (4) Data calculated according to the EN 14825:2018 Regulation

- ST-EXC Acoustic standard configuration (ST)-Excellence
- SC-EXC Compressors soundproofing (SC)-Excellence
- EN-EXC Supersilenced acoustic configuration (EN) - Excellence
- ST-PRM Acoustic standard configuration (ST)-Premium
- SC-PRM Compressors soundproofing (SC)-Premium
- EN-PRM Supersilenced acoustic configuration (EN) - Premium

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

- 1PM** Hydropack with 1 pump
- 1PMV** Hydropack user side with nr.1 inverter pump
- 1PMH** Hydropack with nr.1 high static pressure pump
- 1PMVH** Hydropack user side with nr.1 high static pressure inverter pump
- 2PM** Hydropack user side with 2 pumps
- 2PMV** Hydropack user side with no.2 of inverter pumps
- 2PMH** Hydropack user side with nr.2 high static pressure pump
- 2PMVH** Hydropack user side with nr.2 high static pressure inverter pump
- IVFDT** Inverter driven variable flow-rate user side control depending on the temperature differential
- IFWX** Steel mesh strainer on the water side
- CSVX** Couple of manually operated shut-off valves
- AMMX** Spring antivibration mounts
- AMMSX** Spring anti-seismic antivibration mounts
- CONTA2** Energy meter
- RCMRX** Remote control via microprocessor control
- PSX** Mains power supply
- CMSC9** Serial communication module for Modbus supervisor
- CMSC10** Serial communication module for LonWorks supervisor
- CMSC11** Serial communication module for BACnet-IP supervisor
- RPRI** Refrigerant leak detector in the casing
- SCP4** Set-point compensation with 0-10 V signal
- SPC2** Set-point compensation with outdoor air temperature probe
- PPBM** Microchannel coils protection panels
- CCME** E-coated microchannel coil
- MHP** High and low pressure gauges
- RE-25** Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
- ECS** ECOSHARE function for the automatic management of a group of units
- FC2** EMC filtering for residential-industrial environment EN 61800-3 cat C2)
- PGCC** Finned coil protection grilles and compressor compartment
- RDVS** Switching valve with double safety valves
- REGBT** Device for the partialisation of condensing coils

Accessories whose code ends with "X" are supplied separately

Data contained in this document are not binding and may be changed by the Manufacturer without notice