

SPINCHILLER4

Air-cooled liquid chiller for outdoor installation
Capacity from 222 to 675 kW



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



Cooling only



Air cooled



Outdoor installation



R-32



Hermetic Scroll



Electronic expansion valve



ECOBREEZE



Hydropack



INTELLIPLANT



ErP compliant

- ✓ Scroll compressors, EC axial fans and two independent circuits for high reliability
- ✓ Excellence version for high full-load and seasonal efficiency, Premium version for compact dimensions and reduced initial investment
- ✓ Refrigerant R32 - GWP = 675
- ✓ Operation up to 50°C outdoor air temperature, chilled water down to -12°C
- ✓ Plate heat exchanger or shell & tube exchanger
- ✓ Three acoustic configurations
- ✓ Modular operation management, up to 8 units in cascade
- ✓ Integrated hydronic assembly, system tank, partial recovery and total recovery

Versions and configurations

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
R Total energy recovery

EVAPORATOR

EVPH Plate heat exchanger (Standard)
EVFTP Shell and tube evaporator PED test

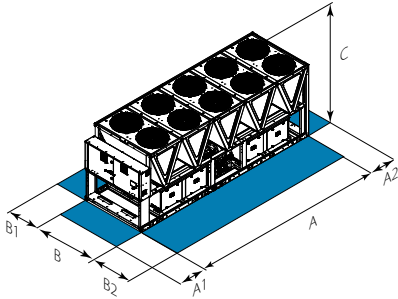
ACOUSTIC CONFIGURATION:

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

LOW TEMPERATURE:

- Energy recovery: not required (Standard)
B Water low temperature

Dimensions and connections



CAUTION!
For trouble-free operation of the unit it is essential to maintain the safety distances indicated by the blue areas.
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.
SC-EXC Compressors soundproofing (SC) -Excellence
SC-PRM Compressors soundproofing (SC) -Premium

Size		WSAT-YSC4	80.3	100.4	115.4	130.4	155.5	170.5	185.5	210.6	225.6	240.6
SC-EXC	A - Length	mm	2925	2925	4175	4175	5417	5417	5417	6680	6680	6680
SC-EXC	B - Width	mm	2228	2228	2228	2228	2228	2228	2228	2228	2228	2228
SC-EXC	C - Height	mm	2535	2535	2535	2535	2535	2535	2535	2535	2535	2535
SC-EXC	A1	mm	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
SC-EXC	A2	mm	700	700	700	700	700	700	700	700	700	700
SC-EXC	B1	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-EXC	B2	mm	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
SC-EXC	Operating weight	kg	1879	1898	2345	2494	2979	3152	3314	3810	3943	4100

Size		WSAT-YSC4	90.3	110.4	130.4	145.4	170.5	185.5	210.6	225.6	240.6
SC-PRM	A - Length	mm	2925	2925	2925	4175	4175	4175	5417	5417	5417
SC-PRM	B - Width	mm	2228	2228	2228	2228	2228	2228	2228	2228	2228
SC-PRM	C - Height	mm	2535	2535	2535	2535	2535	2535	2535	2535	2535
SC-PRM	A1	mm	1500	1500	1500	1500	1500	1500	1500	1500	1500
SC-PRM	A2	mm	700	700	700	700	700	700	700	700	700
SC-PRM	B1	mm	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-PRM	B2	mm	2250	2250	2250	2250	2250	2250	2250	2250	2250
SC-PRM	Operating weight	kg	1893	2000	2116	2576	2763	2938	3396	3563	3684

Technical data

Size			WSAT-YSC4	80.3	100.4	115.4	130.4	155.5	170.5	185.5	210.6	225.6	240.6
ST/SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW	222	267	314	364	423	472	520	573	624	675
ST/SC-EXC	Total power input (EN 14511:2022)	(1)	kW	69.4	85.5	99.8	115	135	149	167	184	200	218
ST/SC-EXC	EER (EN 14511:2022)	(1)	-	3.20	3.12	3.15	3.17	3.15	3.16	3.11	3.12	3.12	3.10
ST/SC-EXC	SEER	(3)	-	4.70	4.67	4.78	4.75	4.92	5.00	4.96	4.94	4.96	4.90
ST/SC-EXC	η_{sc}	(3)	%	185.2	183.8	188.3	187.1	193.6	197.0	195.5	194.6	195.4	193.1
ST/SC-EXC	Refrigeration circuits		Nr					2					
ST/SC-EXC	No. of compressors		Nr	3		4		5			6		
ST/SC-EXC	Type of compressors		-					SCROLL					
ST/SC-EXC	Refrigerant		-					R-32					
ST/SC-EXC	Standard power supply		V					400/3~/50					
ST-EXC	Sound power level	(2)	dB(A)	90	91	92	93	94	95	95	96	96	97
SC-EXC	Sound power level	(2)	dB(A)	87	88	89	90	90	91	91	92	92	93
EN-EXC	Sound power level	(2)	dB(A)	84	84	86	86	86	87	88	88	88	89

Size			WSAT-YSC4	90.3	110.4	130.4	145.4	170.5	185.5	210.6	225.6	240.6
ST/SC-PRM	Cooling capacity (EN 14511:2022)	(1)	kW	232	291	333	384	443	483	537	590	644
ST/SC-PRM	Total power input (EN 14511:2022)	(1)	kW	84.5	102	124	139	156	179	199	209	233
ST/SC-PRM	EER (EN 14511:2022)	(1)	-	2.74	2.85	2.69	2.77	2.84	2.70	2.70	2.82	2.76
ST/SC-PRM	SEER	(3)	-	4.38	4.48	4.46	4.47	4.65	4.64	4.61	4.69	4.62
ST/SC-PRM	η_{sc}	(3)	%	172.3	176.1	175.4	175.8	183.0	182.5	181.2	184.7	181.9
ST/SC-PRM	Refrigeration circuits		Nr					2				
ST/SC-PRM	No. of compressors		Nr	3		4		5			6	
ST/SC-PRM	Type of compressors		-					SCROLL				
ST/SC-PRM	Refrigerant		-					R-32				
ST/SC-PRM	Standard power supply		V					400/3~/50				
ST-PRM	Sound power level	(2)	dB(A)	90	91	92	93	94	95	95	96	96
SC-PRM	Sound power level	(2)	dB(A)	87	88	89	89	90	90	91	92	92
EN-PRM	Sound power level	(2)	dB(A)	84	86	86	87	87	88	89	89	89

(1) Data calculated in compliance with Standard EN 14511:2022 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Outdoor heat exchanger inlet air temperature = 35°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

(3) 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

1PM	Hydropack on user side with 1 pump	SCP4	Set-point compensation with 0-10 V signal
1PMV	Hydropack user side with nr.1 inverter pump	SPC1	Set point compensation with 4-20 mA signal
1PMH	Hydropack on user side with 1 high head pump	ECS	ECOSHARE function for the automatic management of a group of units
1PMVH	Hydropack user side with nr.1 high static pressure inverter pump	PFCP	Power factor correction capacitors (cosφ > 0.9)
2PM	Hydropack user side with 2 pumps	SFSTR	Disposal for inrush current reduction
2PMV	Hydropack user side with no.2 of inverter pumps	RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
2PMH	Hydropack user side with nr.2 high static pressure pump	RE-39	Electrical panel antifreeze protection for min. outdoor temperature down to -39°C
2PMVH	Hydropack user side with nr.2 high static pressure inverter pump	MHP	High and low pressure gauges
IVFDT	Inverter driven variable flow-rate user side control depending on the temperature differential	SDV	Cutoff valve on compressor supply and return
IVFEDT	Variable flow-rate control of the inverter pump external to the unit depending on the temperature differential	RPRI	Refrigerant leak detector in the casing
IFWX	Steel mesh filter on the water side	DML4-20	Demand limit with 4-20 mA signal
CSVX	Couple of manually operated shut-off valves	DML0-10	Demand limit with 0-10 V signal
ACC	Storage tank	PFGP	Soundproofing paneling of the pumping unit
AMMX	Spring antivibration mounts	PSWSA	Differential pressure switch water side with antifreeze protection
AMMSX	Spring anti-seismic antivibration mounts	IOTX	IoT industrial module for cloud based interoperability & services
CONTA2	Energy meter	PPBM	Microchannel coils protection panels
RCMRX	Remote control via microprocessor control	PGCC	Finned coil protection grilles and compressor compartment
PSX	Mains power supply	CCME	Microchannel e-coated coil
CMSC10	Serial communication module for LonWorks supervisor		
CMSC9	Serial communication module for Modbus supervisor		
CMSC11	Serial communication module for BACnet-IP supervisor		

Accessories whose code ends with "X" are supplied separately