

SPINCHILLER3 FC

Air-cooled liquid chiller with FREE-COOLING for outdoor installation
Capacity from 260 to 445 kW



- ✓ Double independent circuits for high reliability with scroll compressors
- ✓ Solution for cold climates and industrial application
- ✓ Refrigerant R410A - GWP = 2088
- ✓ Operation down to -39°C outdoor air temperature, low water temperature down to -8°C
- ✓ Direct Free-cooling and No-glycol Free-cooling
- ✓ Two acoustic configurations: standard and super-silenced
- ✓ Modular operation management, up to 8 units in cascade
- ✓ Integrated hydronic unit

Versions and configurations

VERSION:

EXC Excellence (Standard)

LOW TEMPERATURE:

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

ACOUSTIC CONFIGURATION:

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

FREE-COOLING:

FCD Direct FREE-COOLING (Standard)
FCI No-glycol FREE-COOLING

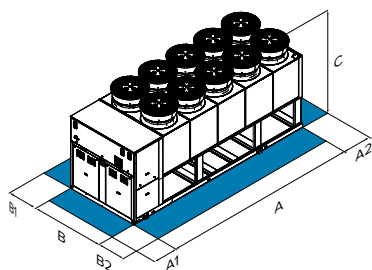
EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

CREFB ECOBREEZE outdoor section fans consumption reduction device (Standard in EN acoustic configuration)
CREFP Variable speed outdoor section fans consumption reduction device (phase cutting) (Standard in SC acoustic configuration)

TYPE FAN EXTERNAL SECTION:

AXIX High efficiency diffuser for axial fan - AxiTop (Standard)
NAXI High efficiency diffuser for axial fan - AxiTop: not required

Dimensions and connections



Size	WSAT-XSC3 FC	90.4	100.4	110.4	120.4	140.4	160.4
A - Length	mm	4543	4543	4543	4543	5518	5518
B - Width	mm	2243	2243	2243	2243	2243	2243
C - Height	mm	2668	2668	2668	2668	2668	2668
A1	mm	1500	1500	1500	1500	1500	1500
A2	mm	700	700	700	700	700	700
B1	mm	1200	1200	1200	1200	1200	1200
B2	mm	1200	1200	1200	1200	1200	1200
Operating weight	kg	3940	3994	4037	4105	4593	4645

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			WSAT-XSC3 FC	90.4	100.4	110.4	120.4	140.4	160.4
Free-Cooling Off									
SC-EXC	Cooling capacity	(1)	kW	299	325	361	397	452	509
SC-EXC	Total power input	(1)	kW	79,5	86,8	96,6	110	123	139
SC-EXC	EER at full load	(1)	-	3,76	3,75	3,74	3,62	3,68	3,65
SC-EXC	SEER	(4)	-	4,64	4,65	4,62	4,56	4,66	4,65
SC-EXC	$\eta_{s,c}$	(4)	%	182,6	183,0	181,8	179,4	183,4	183,0
Direct Free-cooling on									
SC-EXC	Cooling capacity	(2)	kW	278	284	294	304	425	439
SC-EXC	Total power input	(2)	kW	9,8	9,9	9,9	10,1	13	13,3
SC-EXC	EER at full load	(2)	-	28,43	28,83	29,85	30,16	32,77	33,08
SC-EXC	Refrigeration circuits		Nr	2					
SC-EXC	No. of compressors		Nr	4					
SC-EXC	Type of compressors		-	SCROLL					
SC-EXC	Refrigerant		-	R-410A					
SC-EXC	Standard power supply		V	400/3~/50					
SC-EXC	Sound power level	(3)	dB(A)	92	92	92	92	92	93
EN-EXC	Sound power level	(3)	dB(A)	87	87	87	87	88	89

(1) Data referred to the following conditions: internal exchanger water temperature = 15/10 °C; glycol 30%; entering external exchanger air temperature 30°C

(2) Free-Cooling only data (compressors OFF) referred to the following conditions: internal exchanger water temperature = 15/10°C; entering external exchanger air temperature = 2°C D.B./1°C W.B.; glycol 30%

(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.

(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

2PM	Hydropack user side with 2 pumps	ECS	ECOSHARE function for the automatic management of a group of units
3PM	Hydropack load side with 3 pumps	PFCP	Power factor correction capacitors (cosfi > 0.9)
2PMV	Hydropack user side with no.2 of inverter pumps	SFSTR	Disposal for inrush current reduction
3PMV	Hydropack user side with no.3 of inverter pumps	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
IFWX	Steel mesh filter on the water side	WOGLY	Unit supplied without glycol solution (FCI only)
CSVX	Couple of manually operated shut-off valves	A550	550 l. storage tank (FCD only)
CCCA	Copper / aluminium condenser coil with acrylic lining	A700	700 l. storage tank (FCD only)
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment	A900	900 l. storage tank (FCD only)
AMMX	Spring antivibration mounts	PSPS	Set up for single power supply (260.6+360.6)
PGFC	Finned coil protection grilles	RE-20	Electrical panel antifreeze protection for min. outdoor temperature down to -20°C
PGCCH	Anti-hail protection grilles	RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
CONTA2	Energy meter	RE-30	Electrical panel antifreeze protection for min. outdoor temperature down to -30°C
RPRPDI	Refrigerant leak detector with pump down function in the casing	RE-35	Electrical panel antifreeze protection for min. outdoor temperature down to -35°C
RCMRX	Remote control via microprocessor control	RE-39	Electrical panel antifreeze protection for min. outdoor temperature down to -39°C
PSX	Mains power supply	IOTX	IoT industrial module for cloud based interoperability & services
CMSC10	Serial communication module for LonWorks supervisor		
CMSC9	Serial communication module for Modbus supervisor		
CMSC11	Serial communication module for BACnet-IP supervisor		
SCP4	Set-point compensation with 0-10 V signal		
SPC2	Set-point compensation with outdoor air temperature probe		

Accessories whose code ends with "X" are supplied separately