WSAT-XSC3 FC

90.4÷160.4

HYDRONIC

SPINCHILLER³ FC

Liquid chiller with FREE-COOLING
Air cooled
Outdoor installation
Capacity from 299 to 509 kW

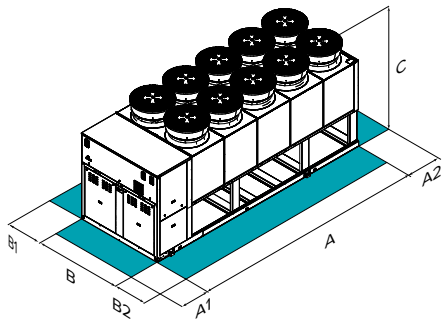
ErP compliant ErP

- ✓ 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
- ✓ Modular operation management, up to 8 units in cascade
- ✓ Integrated hydronic assembly and partial recovery

functions and features

Cooling only · Air cooled · Outdoor installation · R-410A · Hermetic Scroll · Electronic expansion valve · AxiTop · FREE-COOLING · HydroPack · Intelliplant

dimensions and clearances



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 green areas.

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 Super-silenced acoustic configuration

FREE-COOLING:

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

EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

CREFP Device for fan consumption reduction of the external section at variable speed (phase-cutting) (standard in the SC acoustic config.)
CREFB Device for fan consumption reduction of the external section, ECOBREEZE type (standard in the EN acoustic config.)

TYPE FAN EXTERNAL SECTION:

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

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 14825:2018 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

2PM Hydropack user side with 2 pumps
3PM Hydropack load side with 3 pumps
2PMV Hydropack user side with no.2 of inverter pumps
3PMV Hydropack user side with no.3 of inverter pumps
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
CCCA Copper / aluminium condenser coil with acrylic lining
CCCA1 Condenser coil with Aluminium Energy Guard DCC treatment
AMMX Spring antivibration mounts
PGFC Finned coil protection grill
PGCCH Anti-hail protection grilles
CONTA2 Energy meter
RPRPDI Refrigerant leak detector with pump down function in the casing
RCMRX Remote control via microprocessor control
PSX Mains power supply
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
SPC2 Set-point compensation with outdoor air temperature probe
ECS ECOSHARE function for the automatic management of a group of units

PFCP Power factor correction capacitors (cosfi > 0.9)
SFSTR Disposal for inrush current reduction
MHP High and low pressure gauges
SDV Cutoff valve on compressor supply and return
WOGLY Unit supplied without glycol solution (FCI only)
A550 550 l. storage tank (FCD only)
A700 700 l. storage tank (FCD only)
A900 900 l. storage tank (FCD only)
PSPS Set up for single power supply (260.6÷360.6)
RE-20 Electrical panel antifreeze protection for min. outdoor temperature down to -20°C
RE-25 Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
RE-30 Electrical panel antifreeze protection for min. outdoor temperature down to -30°C
RE-35 Electrical panel antifreeze protection for min. outdoor temperature down to -35°C
RE-39 Electrical panel antifreeze protection for min. outdoor temperature down to -39°C
CBS Overload circuit breakers (260.6÷360.6)
IOTX IoT industrial module for cloud based interoperability & services

Accessories whose code ends with "X" are supplied separately

Valid from: January 2025 - REF. DG25A901GB-00