

SPINCHILLER3 FC

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



Cooling only



Air cooled



Outdoor installation



R-410A



Hermetic Scroll



Electronic expansion valve



AxiTop



FREE-COOLING



Hydropack



INTELLIPLANT



ErP compliant

- ✓ 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)

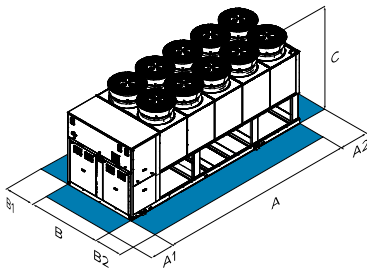
CREFP Variable speed outdoor section fans consumption reduction device (phase cutting) (Standard in SC acoustic configuration)

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