

Water chiller

WSAT-XSC3: cooling only
 WSAN-XSC3: reversible heat pump
 Air cooled
 Outdoor installation
Capacity from 270 to 1350 kW

SPINchiller³

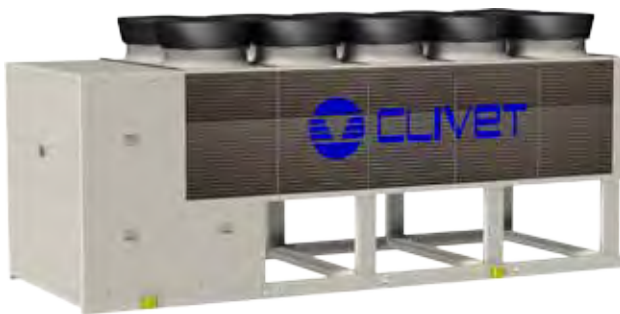
The SPINchiller³ heat pumps and liquid chillers ensure maximum energy efficiency over the entire operation cycle.

► **MODULAR SCROLL TECHNOLOGY** - Designed for outdoor installation, SPINchiller³ employs modular Scroll technology with several compressors on the same refrigeration circuit, electronic expansion valves and plate evaporators with highly efficient heat exchange. It stands out for the very high ESEER efficiency during the seasonal operation cycle.

► **DUAL ENERGY VERSION** - The standard EXCELLENCE version with a class A Eurovent rating offers the highest energy efficiency both during the seasonal cycle and under full load conditions. The PREMIUM version also provides excellent performance under partial load conditions, but has a compact design which gives it an additional competitive edge.

► **SILENT** - The low sound emissions are the result of the optimal size of the exchange surfaces, the use of high efficiency fans fitted with wing profiles with "winglets" and the innovative AxiTop diffusers with kinetic energy recovery.

► **INDUSTRIALISED SYSTEM** - The units can be installed easily and quickly thanks to the quick connections towards the user circuit, to the fact that they are already set up for electrical connections and thanks to the full operating test before shipping. They can also be provided with pumping units already installed, thereby integrating all the main components of the system in a single solution.

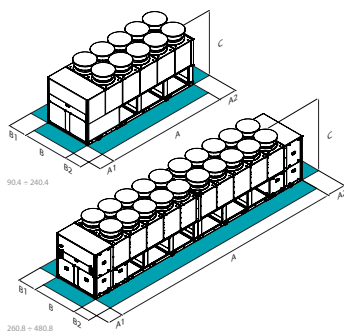


Unit listed on
www.eurovent-certification.com

functions and features



dimensions and clearances



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

Size – WSAT-XSC3	90.4	100.4	110.4	120.4	140.4	160.4	180.4	200.4	220.4	240.4	260.8	280.8	320.8	360.8	400.8	440.8	480.8
SC-EXC A - Length	mm 4060	4060	4060	4060	5035	5035	5035	6010	6010	6010	9095	10070	10070	10070	12020	12020	12020
SC-EXC B - Width	mm 2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246
SC-EXC C - Height	mm 2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673
SC-EXC A1	mm 1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690
SC-EXC A2	mm 750	750	750	750	750	750	750	750	750	750	1690	1690	1690	1690	1690	1690	1690
SC-EXC B1	mm 1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
SC-EXC B2	mm 1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
SC-PRM A - Length	mm -	-	-	4060	4060	4060	5035	5035	6010	6010	8120	8120	8120	10070	10070	12020	12020
SC-PRM B - Width	mm -	-	-	2227	2227	2227	2227	2227	2227	2227	2227	2227	2227	2227	2227	2227	2227
SC-PRM C - Height	mm -	-	-	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673
SC-PRM A1	mm -	-	-	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690
SC-PRM A2	mm -	-	-	750	750	750	750	750	750	750	1690	1690	1690	1690	1690	1690	1690
SC-PRM B1	mm -	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
SC-PRM B2	mm -	-	-	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100

Size – WSAN-XSC3	90.4	100.4	110.4	120.4	140.4	160.4	180.4	200.4	220.4	240.4	260.8	280.8	320.8	360.8	400.8	440.8	480.8
A - Length	mm 4060	4060	4060	4060	5035	5035	6010	6010	6010	6010	9095	10070	10070	10070	12020	12020	12020
B - Width	mm 2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246	2246
C - Height	mm 2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673	2673
A1	mm 1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690	1690
A2	mm 750	750	750	750	750	750	750	750	750	750	1690	1690	1690	1690	1690	1690	1690
B1	mm 1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100
B2	mm 1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100	1100

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

versions and configurations

LOW TEMPERATURE:

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

VERSION:

- ▶ EXC Excellence (Standard)
- ▶ PRM Premium

ACOUSTIC CONFIGURATION:

- ▶ SC Acoustic configuration with compressor soundproofing (Standard)
- ▶ EN Extremely low noise acoustic configuration

DOUBLE SET POINT:

- ▶ - Double set point: not required (Standard)
- ▶ DSP Double set point
- ▶ DSPB Double set point for water low temperature

ENERGY RECOVERY (WSAT-XSC3 ONLY):

- ▶ - Energy recovery: not required (Standard)
- ▶ D Partial energy recovery
- ▶ R Total energy recovery

technical data

Size – WSAT-XSC3			90.4	100.4	110.4	120.4	140.4	160.4	180.4	200.4	220.4	240.4	
Eurovent													
SC-EXC	▶ Cooling capacity (EN14511:2013)	(1)	kW	267	290	316	353	405	459	513	572	621	675
SC-EXC	Total power input (EN14511:2013)	(1)	kW	85,8	92,9	102	114	130	145	165	181	200	218
SC-EXC	EER (EN 14511:2013)	(1)	-	3,11	3,12	3,10	3,10	3,11	3,16	3,10	3,16	3,10	3,10
SC-EXC	ESEER	(1)	-	4,31	4,37	4,35	4,35	4,40	4,54	4,51	4,40	4,38	4,44
SC-EXC	Refrigeration circuits		Nr	2	2	2	2	2	2	2	2	2	2
SC-EXC	No. of compressors		Nr	4	4	4	4	4	4	4	4	4	4
SC-EXC	Type of compressors		-	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
SC-EXC	Standard power supply		V	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50
SC-PRM	▶ Cooling capacity (EN14511:2013)	(1)	kW	-	-	-	333	379	421	490	529	594	645
SC-PRM	Total power input (EN14511:2013)	(1)	kW	-	-	-	120	136	151	174	189	211	229
SC-PRM	EER (EN 14511:2013)	(1)	-	-	-	2,77	2,80	2,78	2,82	2,80	2,81	2,82	2,82
SC-PRM	ESEER	(1)	-	-	-	4,11	4,15	4,12	4,12	4,06	4,12	4,10	4,10
SC-PRM	Refrigeration circuits		Nr	-	-	-	2	2	2	2	2	2	2
SC-PRM	No. of compressors		Nr	-	-	-	4	4	4	4	4	4	4
SC-PRM	Type of compressors		-	-	-	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
SC-PRM	Standard power supply		V	-	-	-	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50

Size – WSAN-XSC3			90.4	100.4	110.4	120.4	140.4	160.4	180.4	200.4	220.4	240.4	
Eurovent													
SC-EXC	▶ Cooling capacity (EN14511:2013)	(1)	kW	243	262	290	322	369	416	473	518	557	593
SC-EXC	Total power input (EN14511:2013)	(1)	kW	88,7	96,1	105	119	137	151	175	189	206	226
SC-EXC	EER (EN 14511:2013)	(1)	-	2,74	2,73	2,75	2,70	2,70	2,75	2,70	2,74	2,70	2,62
SC-EXC	ESEER	(1)	-	3,94	3,99	4,00	3,99	3,97	4,09	4,07	4,12	4,11	4,02
SC-EXC	▶ Heating capacity (EN14511:2013)	(2)	kW	284	312	339	375	425	470	540	600	648	696
SC-EXC	Total power input (EN14511:2013)	(2)	kW	88,6	97,0	105	115	131	144	169	185	203	217
SC-EXC	COP (EN 14511:2013)	(2)	-	3,21	3,21	3,22	3,25	3,25	3,26	3,20	3,25	3,20	3,20
SC-EXC	Refrigeration circuits		Nr	2	2	2	2	2	2	2	2	2	2
SC-EXC	No. of compressors		Nr	4	4	4	4	4	4	4	4	4	4
SC-EXC	Type of compressors		-	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
SC-EXC	Standard power supply		V	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50

Size – WSAT-XSC3			260.8	280.8	320.8	360.8	400.8	440.8	480.8	
SC-EXC	▶ Cooling capacity (EN14511:2013)	(1)	kW	758	811	917	1027	1143	1242	1350
SC-EXC	Total power input (EN14511:2013)	(1)	kW	244	261	290	331	362	401	435
SC-EXC	EER (EN 14511:2013)	(1)	-	3,11	3,11	3,16	3,10	3,16	3,10	3,10
SC-EXC	ESEER	(1)	-	4,47	4,50	4,73	4,62	4,51	4,49	4,55
SC-EXC	Refrigeration circuits		Nr	4	4	4	4	4	4	4
SC-EXC	No. of compressors		Nr	8	8	8	8	8	8	8
SC-EXC	Type of compressors		-	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
SC-EXC	Standard power supply		V	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50
SC-PRM	▶ Cooling capacity (EN14511:2013)	(1)	kW	712	759	843	981	1058	1187	1291
SC-PRM	Total power input (EN14511:2013)	(1)	kW	256	271	303	348	378	423	457
SC-PRM	EER (EN 14511:2013)	(1)	-	2,78	2,80	2,78	2,82	2,80	2,81	2,82
SC-PRM	ESEER	(1)	-	4,22	4,25	4,21	4,22	4,16	4,22	4,20
SC-PRM	Refrigeration circuits		Nr	4	4	4	4	4	4	4
SC-PRM	No. of compressors		Nr	8	8	8	8	8	8	8
SC-PRM	Type of compressors		-	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
SC-PRM	Standard power supply		V	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50

Size – WSAN-XSC3			260.8	280.8	320.8	360.8	400.8	440.8	480.8	
SC-EXC	▶ Cooling capacity (EN14511:2013)	(1)	kW	692	739	831	945	1037	1115	1186
SC-EXC	Total power input (EN14511:2013)	(1)	kW	256	273	303	350	378	412	453
SC-EXC	EER (EN 14511:2013)	(1)	-	2,70	2,70	2,75	2,70	2,74	2,70	2,62
SC-EXC	ESEER	(1)	-	4,05	4,07	4,18	4,14	4,19	4,18	4,09
SC-EXC	▶ Heating capacity (EN14511:2013)	(2)	kW	801	851	941	1081	1200	1296	1391
SC-EXC	Total power input (EN14511:2013)	(2)	kW	246	262	289	337	369	405	435
SC-EXC	COP (EN 14511:2013)	(2)	-	3,25	3,25	3,26	3,20	3,25	3,20	3,20
SC-EXC	Refrigeration circuits		Nr	4	4	4	4	4	4	4
SC-EXC	No. of compressors		Nr	8	8	8	8	8	8	8
SC-EXC	Type of compressors		-	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll	Scroll
SC-EXC	Standard power supply		V	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50	400/3~/50

Notes

- (*) The programme applies to air-cooled water chillers up to 600 kW and water-cooled water chillers up to 1500 kW.
- (1) Data calculated in compliance with Standard EN 14511:2013 referred to the following conditions: Internal exchanger water temperature = 12/7°C; Entering external exchanger water temperature = 35°C

- (2) Data calculated in compliance with Standard EN 14511:2013 referred to the following conditions: Internal exchanger water temperature = 40/45°C. Entering external exchanger water temperature = 7°C D.B./6°C W.B.

SC-EXC Compressors soundproofing (SC)-Excellence
 SC-PRM Compressors soundproofing (SC)-Premium

PRELIMINARY DATA



accessories

- ▶ **1PUS** Standard pump
 - ▶ **1PU1SB** Standard pump with emergency pump
 - ▶ **2PM** Hydropack with 2 pumps
 - ▶ **3PM** Hydropack with 3 pumps
 - ▶ **IFWX** Steel mesh strainer on the water side
 - ▶ **CSVX** Couple of manual shut-off valves
 - ▶ **A400** 400 l. storage tank
 - ▶ **A500** 500 l. storage tank
 - ▶ **CCCA** Copper / aluminium condenser coil with acrylic lining
 - ▶ **CCCA1** Condenser coil with Energy Guard DCC Aluminium
 - ▶ **AMMX** Spring antivibration mounts
 - ▶ **PGFC** Finned coil protection grill
 - ▶ **PGCT** Coil and technical compartment guards
 - ▶ **MF2** Multi-function phase monitor
 - ▶ **CONTA2** Energy meter
 - ▶ **RCMRX** Remote control via microprocessor control
 - ▶ **CMSC8** Serial communication module to BACnet supervisor
 - ▶ **CMSC10** Serial communication module to LonWorks supervisor
 - ▶ **CMSC9** Serial communication module to Modbus supervisor
 - ▶ **SCP4** Set-point compensation with signal 0-10 V
 - ▶ **SPC2** Set-point compensation with outdoor air temperature probe
 - ▶ **DML** Demand limit
 - ▶ **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
 - ▶ **FANQE** Electrical panel ventilation
 - ▶ **MHP** High and low pressure gauges
 - ▶ **SDV** Cutoff valve on compressor supply and return
- WSAN-XSC3 only:**
- ▶ **OHE** Limit extension kit in heating up to -10°C (W.B.)

Key to symbols and notes

- Accessories separately supplied

For compatibility between the various accessories, please refer to the dedicated Technical Bulletin or our website in the Systems and Products section.