

WSAN-YSC4 PL

90.4÷265.6

NEW PRODUCT

SPINchiller⁴ PL

Multi-purpose reversible heat pump

Air cooled

Outdoor installation

Capacity from 225 to 664 kW



- ✓ Scroll compressors, EC axial fans and two independent circuits for high reliability
- ✓ Polyvalent technology configurable for 4-pipe
- ✓ Refrigerant R32 - GWP = 675
- ✓ Domestic hot water up to 55°C
- ✓ Plate heat exchanger or shell & tube exchanger
- ✓ Two acoustic configurations: standard and super-silenced
- ✓ Modular operation management, up to 7 units in cascade
- ✓ Integrated hot side and cold side hydronic units



compliant
ErP

functions and features



Heat pump



Air cooled



Outdoor installation



R-32



Hermetic Scroll



Electronic expansion valve



ECOBREEZE

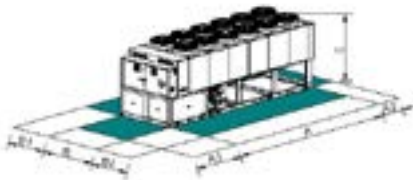


HydroPack



Intelligent

dimensions and clearances



Size			90.4	100.4	110.4	120.4	130.4	145.4	160.4	175.4	215.6	230.6	250.6	265.6
SC-EXC A - Length	mm		4114	4114	4114	4114	4114	5091	5091	5091	6066	6066	7033	7045
SC-EXC B - Width	mm		2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
SC-EXC C - Height	mm		2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530
SC-EXC A1	mm		1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
SC-EXC A2	mm		700	700	700	700	700	700	700	700	700	700	700	700
SC-EXC B1	mm		1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-EXC B2	mm		1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200	1200
SC-EXC Operating weight	kg		2604	2805	2911	3027	3151	3698	3903	4042	4480	4677	5590	5875

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

PRELIMINARY DATA

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)

EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

CREFB Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)

ENERGY RECOVERY:

R Total energy recovery (Standard)

STRUCTURAL CONFIGURATION:

4T Configuration for 4-pipe system

EVAPORATOR

EVPH Plate heat exchanger (Standard)

EVFTP Shell and tube evaporator PED test

ACOUSTIC CONFIGURATION:

SC Acoustic configuration with compressor soundproofing (Standard)

EN Super-silenced acoustic configuration

technical data

Size				▶▶	WSAN-YSC4 PL	90.4	100.4	110.4	120.4	130.4	145.4	160.4	175.4	215.6	230.6	250.6	265.6
Cooling 100% - Heating 0%																	
SC-EXC	Cooling capacity (EN 14511:2022)	(1)	kW	225	250	276	307	336	366	409	449	532	573	627	664		
SC-EXC	Total power input (EN 14511:2022)	(1)	kW	72,4	84,9	96,5	108	119	126	141	156	195	210	217	237		
SC-EXC	EER (EN 14511:2022)	(1)	-	3,11	2,95	2,87	2,85	2,83	2,90	2,90	2,87	2,73	2,73	2,89	2,81		
SC-EXC	SEER	(4)	-	4,82	4,70	4,61	4,74	4,80	4,82	4,68	4,65	4,88	4,91	4,94	4,94		
SC-EXC	η_{sc}	(4)	%	190,0	185,0	182,0	187,0	189,0	190,0	184,0	183,0	192,0	193,0	195,0	195,0		
Cooling 0% - Heating 100%																	
SC-EXC	Heating capacity (EN 14511:2022)	(2)	kW	231	258	285	317	349	376	419	463	554	599	648	694		
SC-EXC	Total power input (EN 14511:2022)	(2)	kW	71,8	80,1	89,3	97,5	106	115	128	140	172	182	199	213		
SC-EXC	COP (EN 14511:2022)	(2)	-	3,22	3,23	3,19	3,25	3,31	3,27	3,27	3,31	3,23	3,29	3,26	3,25		
Cooling 100% - Heating 100%																	
SC-EXC	Cooling capacity (EN 14511:2022)	(3)	kW	221	250	280	315	346	374	418	465	555	601	642	687		
SC-EXC	Heating capacity (EN 14511:2022)	(3)	kW	287	326	365	409	448	483	542	598	720	777	832	890		
SC-EXC	Total power input (EN 14511:2022)	(3)	kW	67,0	76,6	86,0	95,1	103	111	125	135	168	179	192	207		
SC-EXC	TER (EN 14511:2022)	(4)	-	7,58	7,53	7,50	7,61	7,69	7,70	7,67	7,86	7,60	7,69	7,66	7,63		
SC-EXC	Refrigeration circuits		Nr							2							
SC-EXC	No. of compressors		Nr					4						6			
SC-EXC	Type of compressors		-														
SC-EXC	Refrigerant		-														
SC-EXC	Standard power supply		V														
SC-EXC	Sound power level	(5)	dB(A)	90	90	90	91	91	92	92	93	93	93	94	94		
EN-EXC	Sound power level	(5)	dB(A)	85	85	85	86	87	88	88	89	89	90	90	91		
Directive ErP (Energy Related Products)																	
SCOP - AVERAGE Climate - W35		(6)	-	3,88	3,91	3,86	3,93	4,01	3,89	3,94	3,93	-	-	-	-		
η_{SH}		(6)	%	152,0	153,0	151,0	154,0	157,0	153,0	155,0	154,0	-	-	-	-		

(1) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = 12/7°C; Entering external exchanger air temperature = 35°C
 (2) Data compliant to Standard EN 14511:2022 referred to the following conditions: Hot side water temperature = 40/45°C; Entering external exchanger air temperature = 7°C D.B./6°C W.B.
 (3) Data compliant to Standard EN 14511:2022 referred to the following conditions: Cold side water temperature = 7/7°C; Hot side water temperature = 7/45°C
 (4) TER = (Cooling capacity + Heating capacity) / (Total power input)
 (5) 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

(6) 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 811/2013 (rated heat output ≤70 kW at specified reference conditions), the Commission delegated Regulation (EU) No 813/2013 (rated heat output ≤400 kW at specified reference conditions) and the Commission delegated Regulation (EU) No 2016/2281, also known as Ecodesign Lot21.

PRELIMINARY DATA

accessories

CCCA Copper / aluminium condenser coil with acrylic lining
CCCA1 Condenser coil with Aluminium Energy Guard DCC treatment
IVFCDT Inverter driven variable flow-rate user side control depending on the temperature differential
IVFHDT Variable flow rate control heating side by inverter according to the temperature differential
IVFCDTS Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor
IVFHDT S Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor
IVFCDTF Variable flow rate control cooling side by inverter according to the temperature differential with a flow meter
IVFHDT F Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor
PFGP Soundproofing paneling of the pumping unit
IVFDT Inverter driven variable flow-rate user side control depending on the temperature differential
CSVX Couple of manually operated shut-off valves
IFWX Steel mesh strainer on the water side
CMSC10 Serial communication module for LonWorks supervisor
CMSC9 Serial communication module for Modbus supervisor
CMSC11 Serial communication module for BACnet-IP supervisor
RCMRX Remote control via microprocessor control
CONTA3 M-bus total electricity meter
CONTA4 Total electricity meters and m-bus pump group
RE-25 Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
DML4-20 Demand limit with 4-20 mA
DML0-10 Demand limit with 0-10 V

ECS ECOSHARE function for the automatic management of a group of units
RPRI Refrigerant leak detector in the casing
SFSTR Disposal for inrush current reduction
PFCC Power factor correction capacitors (cosφ > 0.95)
SPC1 Set-point compensation with 4-20 mA
SCP4 Set-point compensation with 0-10 V
PSX Mains power supply
AMMX Rubber antivibration mounts
AMMSX Anti-seismic spring antivibration mounts
PGFC Finned coil protection grill
PGCCH Anti-hail protection grilles
PSWSA Differential pressure switch water side with antifreeze protection
2PMCS Hydropack cooling side with 2 on-off pumps
2PMCS2V Hydropack on cold user side with 2 pumps and 2 inverters
1+1PMCS Hydropack cooling side with 1 + 1 on-off pump
1+1PMCSV Hydropack cooling side with 1 + 1 inverter pump
2PMMS Hydropack heating side with 2 on-off pumps
2PMMS2V Hydropack on hot user side with 2 pumps and 2 inverters
1+1PMMS Hydropack heating side with 1 + 1 on-off pump
1+1PMMSV Hydropack heating side with 1 + 1 inverter pump
FMCHX Cooling and heating side flow meters
RDVS Switching valve with dual safety valves
MISTER1 Indirect energy meter through pressure drops and unit probes temperature differential
MISTER2 Direct energy meter by flow rate and temperature differential with unit probes (available only with options: FMCHX)

Accessories whose code ends with "X" are supplied separately

Data contained in this document are not binding and may be changed by the Manufacturer without notice