

# SPINCHILLER4 PL

Air-cooled multi-functional reversible heat pump for outdoor installation  
Capacity from 225 to 664 kW



Clivet participates in the EUROVENT "Liquid Chilling Packages and Hydronic Heat Pumps".  
Check ongoing validity of certificate on [www.eurovent-certification.com](http://www.eurovent-certification.com)



Heat pump



Air cooled



Outdoor installation



R-32



Hermetic Scroll



Electronic expansion valve



ECOBREEZE



Hydropack



INTELLIPLANT



ErP compliant

- ✓ Scroll compressors, EC axial fans and two independent circuits for high reliability
- ✓ Polyvalent technology configurable for 4-pipe
- ✓ Refrigerant R32 - GWP = 675
- ✓ Hot water up to 55°C, chilled water down to +5°C
- ✓ Plate exchanger
- ✓ Two acoustic configurations: standard and super-silenced
- ✓ Modular operation management, up to 7 units in cascade
- ✓ Integrated hot side and cold side hydronic assemblies

## 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

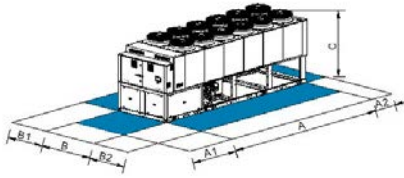
EVPHE Plate heat exchanger (Standard)

### ACOUSTIC CONFIGURATION:

SC Acoustic configuration with compressor soundproofing (Standard)

EN Supersilenced acoustic configuration

## Dimensions and connections



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
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

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

## 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	
<b>Cooling 100% - Heating 0%</b>															
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	84,8	96,5	108	118	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	(6)	-	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	$\eta_{s,c}$	(6)	%	190,0	185,0	182,0	187,0	189,0	190,0	184,0	183,0	192,0	193,0	195,0	195,0
<b>Cooling 0% - Heating 100%</b>															
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)	-	3,21	3,23	3,19	3,25	3,30	3,27	3,27	3,31	3,23	3,29	3,26	3,25
<b>Cooling 100% - Heating 100%</b>															
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	541	598	720	777	831	890
SC-EXC	Total power input (EN 14511:2022)	(3)	kW	66,7	76,2	85,6	94,5	103	111	124	134	167	178	191	205
SC-EXC	TER (EN 14511:2022)	(4)	-	7,61	7,56	7,54	7,65	7,73	7,75	7,72	7,92	7,66	7,74	7,71	7,69
SC-EXC	Refrigeration circuits		Nr	2											
SC-EXC	No. of compressors		Nr	4											
SC-EXC	Type of compressors		-	SCROLL											
SC-EXC	Refrigerant		-	R-32											
SC-EXC	Standard power supply		V	400/3~/50											
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	86	86	86	86	87	87	87	88	89	89	89
<b>Directive ErP (Energy Related Products)</b>															
SCOP - AVERAGE Climate - W35	(6)	-	3,88	3,91	3,86	3,93	4,01	3,89	3,94	3,93	3,96	3,95	3,97	3,99	
$\eta_{s,h}$	(6)	%	152,0	153,0	151,0	154,0	157,0	153,0	155,0	154,0	155,0	155,0	156,0	157,0	

(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 = \*17°C; Hot side water temperature = \*/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 14825:2022 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.

## Accessories

CCCA	Copper / aluminium condenser coil with acrylic lining	CONTA3	M-bus total electricity meter
CCCA1	Condenser coil with Aluminium Energy Guard DCC treatment	CONTA4	Total electricity meters and m-bus pump group
2PMCS	Hydropack cooling side with 2 on-off pumps	RE-25	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
2PMCS2V	Hydropack on cold user side with 2 pumps and 2 inverters	DML4-20	Demand limit with 4-20 mA signal
1+1PMCS	Hydropack cooling side with 1 + 1 on-off pump	DML0-10	Demand limit with 0-10 V signal
1+1PMCSV	Hydropack cooling side with 1 + 1 inverter pump	ECS	ECOSHARE function for the automatic management of a group of units
2PMHS	Hydropack heating side with 2 on-off pumps	RPRI	Refrigerant leak detector in the casing
2PMHS2V	Hydropack on hot user side with 2 pumps and 2 inverters	SFSTR	Disposal for inrush current reduction
1+1PMHS	Hydropack heating side with 1 + 1 on-off pump	PFCC	Power factor correction capacitors (cosfi > 0.95)
1+1PMHSV	Hydropack heating side with 1 + 1 inverter pump	SPC1	Set point compensation with 4-20 mA signal
IVFCDT	Variable flow rate control heating side by inverter according to the temperature differential	SCP4	Set-point compensation with 0-10 V signal
IVFHDT	Variable flow-rate control on hot use side by inverter based on the temperature difference	PSX	Mains power supply
IVFCDTS	Variable flow control cooling side by inverter according to the temperature differential with pressure drop sensor	AMMX	Spring antivibration mounts
IVFHDTs	Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor	AMMSX	Spring anti-seismic antivibration mounts
IVFCDTF	Variable flow rate control cooling side by inverter according to the temperature differential with a flow meter (available only with options: FMCHX)	PGFC	Finned coil protection grilles
IVFHDTF	Variable flow control heating side by inverter according to the temperature differential with pressure drop sensor	PGCCH	Anti-hail protection grilles
PFGP	Soundproofing paneling of the pumping unit	PSWSA	Differential pressure switch water side with antifreeze protection
CSVX	Couple of manually operated shut-off valves	FMCHX	Cooling and heating side flow meters
IFWX	Steel mesh filter on the water side	RDVS	Switching valve with double safety valves
CMSC10	Serial communication module for LonWorks supervisor	MISTER1	Indirect energy meter through pressure drops and unit probes temperature differential
CMSC9	Serial communication module for Modbus supervisor	MISTER2	Direct energy meter by flow rate and temperature differential with unit probes (available only with options: FMCHX)
CMSC11	Serial communication module for BACnet-IP supervisor	IOTX	IoT industrial module for cloud based interoperability & services
RCMRX	Remote control via microprocessor control		

Accessories whose code ends with "X" are supplied separately