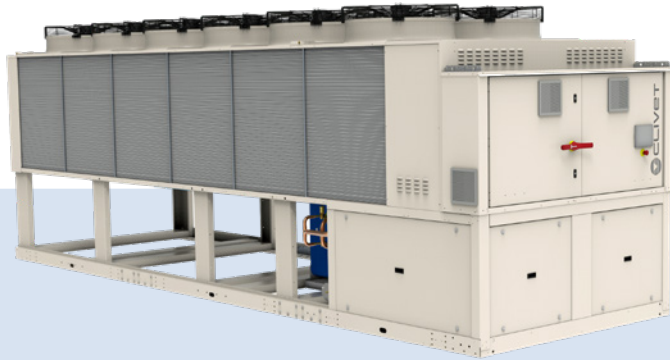


# SPINCHILLER<sup>4</sup> PL NA



## Polyvalent reversible heat pump

Air cooled

Outdoor installation

Capacity from 65.7 to 124 TON

**WSAN-YSC4 PL NA**

**90.4÷175.4**

- ✓ **Polyvalent Heat Pump Technology.** Capable of producing hot and cold water at the same time.
- ✓ **High Reliability Design.** Multiscroll technology optimizes performance with precise load adjustments, delivering consistent comfort and efficiency. EC axial fans offer superior airflow and energy efficiency. Two independent circuits provide redundancy and enhance reliability.
- ✓ **High Sustainability Ecological Refrigerant.** R32 with a Global Warming Potential of 675, reducing environmental impact.
- ✓ **Industry-Leading Efficiency.** High performance at full and partial load to adapt to the needs of the plant. Total Efficiency Ratio (TER) up to 7.6 for outstanding energy savings. IPLV (Integrated Part Load Value) up to 17.4, maximizing seasonal performance.
- ✓ **Ultra-Quiet Operation.** Our super-silenced version reduces noise levels, ensuring a quieter environment.
- ✓ **Smart Defrost Technology.** Our advanced defrost algorithm, reduces energy loss by 33% compared to traditional defrost. A special hydrophilic coil treatment shortens defrost cycles, ensuring performance and efficiency.
- ✓ **Optimized Modular Operation.** Cascade capability up to 7 units in a cascade setup.
- ✓ **Full Range of Accessories.** Comprehensive accessory options tailored for the North American market.

## Functions and Features



Heat pump



Air cooled



Outdoor installation



R-32



Hermetic scroll



Electronic expansion valve



ECOBREEZE

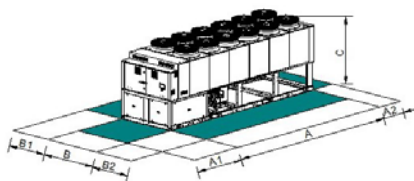


HydroPack



Chiller plant manager

## Dimensions and Clearances



Size	▶▶ WSAN-YSC4 PL NA	90.4	100.4	110.4	120.4	130.4	145.4	160.4	175.4
A - Length	in	164.4	164.4	164.4	164.4	164.4	202.8	202.8	202.8
B - Width	in	88.6	88.6	88.6	88.6	88.6	88.6	88.6	88.6
C - Height	in	99.6	99.6	99.6	99.6	99.6	99.6	99.6	99.6
A1	in	59.1	59.1	59.1	59.1	59.1	59.1	59.1	59.1
A2	in	27.6	27.6	27.6	27.6	27.6	27.6	27.6	27.6
B1	in	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
B2	in	47.2	47.2	47.2	47.2	47.2	47.2	47.2	47.2
Operating weight	lbs	6,631	6,830	6,920	7,410	7,919	8,217	8,488	8,933

The above mentioned data are referred to standard units for the constructive configurations indicated.

### CAUTION!

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

PRELIMINARY DATA

## Versions and Configurations

### SUPPLY VOLTAGE:

<b>4606H</b>	460/3/60 Supply voltage (Standard)
<b>5756H</b>	573/3/60 Supply voltage

### STRUCTURAL CONFIGURATION:

<b>4T</b>	Configuration for 4-pipe system
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### EXTERNAL SECTION FAN CONSUMPTION REDUCTION:

<b>CREFB</b>	Device for fan consumption reduction of the external section, ECOBREEZE type (Standard)
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### ACOUSTIC CONFIGURATION:

<b>SC</b>	Acoustic configuration with compressor soundproofing (Standard)
<b>EN</b>	Super-silenced acoustic configuration

## Technical Data

<b>SIZE</b>		<b>▶▶ WSAN-YSC4 PL NA</b>	<b>90.4</b>	<b>100.4</b>	<b>110.4</b>	<b>120.4</b>	<b>130.4</b>	<b>145.4</b>	<b>160.4</b>	<b>175.4</b>
<b>Cooling 100% - Heating 0%</b>										
Cooling Capacity	(1)	ton	65.7	71.2	76.8	82.4	90.4	103	113	124
Total power input	(1)	kW	77.9	87.6	96.4	106	116	128	142	160
EER	(1)	BTU / (Wh)	10.1	9.76	9.57	9.34	9.36	9.62	9.53	9.32
IPLV	(1)	BTU / (Wh)	17.4	16.8	16.4	16.0	16.1	16.5	16.3	16.0
<b>Cooling 0% - Heating 100%</b>										
Heating Capacity	(2)	MBH	813	880	946	1,047	1,147	1,312	1,450	1,594
Total power input	(2)	kW	80.8	87.3	95.0	103	110	127	141	159
COP	(2)	kW / kW	2.95	2.96	2.92	2.99	3.05	3.03	3.01	2.94
<b>Cooling 100% - Heating 100%</b>										
Cooling Capacity	(3)	ton	62.1	68.7	74.4	81.1	89.9	100	110	122
Heating Capacity	(3)	MBH	1,008	1,113	1,211	1,315	1,449	1,614	1,781	1,976
Total power input	(3)	kW	77.4	84.9	93.4	101	109	123	137	149
TER	(3)	kW / kW	6.63	6.69	6.60	6.66	6.81	6.70	6.62	6.76
Refrigeration circuits		Nr					2			
N° of compressors		Nr					4			
Type of compressors		-					SCROLL			
Refrigerant		-					R-32			
Standard power supply		V					460/3~/60			
Sound power level	(4)	dB(A)	90	91	91	91	91	92	93	93

(1) Data: User side heat exchanger water 54 °F / 44 °F; Outdoor Air 95 °F

(2) Data: User side heat exchanger water 110 °F / 120 °F; Outdoor air 47 °F d.b. / 43 °F w.b.

(3) Water hot side heat exchanger \*120°F; Water to cold side heat exchanger \*144 °F

(4) Sound power calculated on the basis of measurements made in accordance with UNI EN ISO 9614-2

PRELIMINARY DATA

## Accessories

<b>CCCA</b>	Copper / aluminium condenser coil with acrylic lining
<b>CCCA1</b>	Condenser coil with Aluminium Energy Guard DCC treatment
<b>PGFP</b>	Soundproofing paneling of the pumping unit
<b>IVFCDT</b>	Variable flow rate control cooling side by inverter according to the temperature differential
<b>IVFHDT</b>	Variable flow rate control heating side by inverter according to the temperature differential
<b>CSVX</b>	Couple of manually operated shut-off valves
<b>IFWX</b>	Steel mesh strainer on the water side
<b>CMSC9</b>	Serial communication module for Modbus supervisor
<b>CMSC11</b>	Serial communication module for BACnet-IP supervisor
<b>CMSC12</b>	Serial communication module for BACnet-MSTP supervisor
<b>RCMRX</b>	Remote control via microprocessor control
<b>RE-25</b>	Electrical panel antifreeze protection for min. outdoor temperature down to -25°C
<b>DML4-20</b>	Demand limit with 4-20 mA
<b>DML0-10</b>	Demand limit with 0-10 V
<b>ECS</b>	ECOSHARE function for the automatic management of a group of units
<b>SPC1</b>	Set-point compensation with 4-20 mA
<b>SCP4</b>	Set-point compensation with 0-10 V
<b>PSX</b>	Mains power supply

<b>AMMX</b>	Rubber antivibration mounts
<b>PGFC</b>	Finned coil protection grill
<b>PGCCH</b>	Anti-hail protection grilles
<b>1PMCS</b>	Hydropack cold side with 1 on-off pump
<b>1PMCSH</b>	Hydropack cold side with 1 high static pressure on-off pump
<b>1+1PMCS</b>	Hydropack cold side with 1 + 1 on-off pump
<b>1+1PMCSH</b>	Hydropack cold side with 1 + 1 high static pressure on-off pump
<b>1PMCSV</b>	Hydropack cold side with 1 inverter pump
<b>1PMCSVH</b>	Hydropack cold side with 1 high static pressure inverter pump
<b>1+1PMCSV</b>	Hydropack cold side with 1 + 1 inverter pump
<b>1+1PMCSVH</b>	Hydropack cold side with 1 + 1 high static pressure inverter pump
<b>1PMHS</b>	Hydropack hot side with 1 on-off pump
<b>1PMHSH</b>	Hydropack hot side with 1 high static pressure on-off pump
<b>1+1PMHS</b>	Hydropack hot side with 1 + 1 on-off pump
<b>1+1PMHSH</b>	Hydropack hot side with 1 + 1 high static pressure on-off pump
<b>1PMHSV</b>	Hydropack hot side with 1 inverter pump
<b>1PMHSVH</b>	Hydropack hot side with 1 high static pressure inverter pump
<b>1+1PMHSV</b>	Hydropack hot side with 1 + 1 inverter pump
<b>1+1PMHSVH</b>	Hydropack hot side with 1 + 1 high static pressure inverter pump

Accessories whose code ends with "X" are supplied separately