

## SPINCHILLER4 PL NA

### Polyvalent heat pump

Air cooled

Outdoor installation

Capacity from 67.7 to 126 TON

HYDRONIC



- ✓ 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. R-32 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 7.1 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



Outdoor  
installation



R-32



Hermetic  
Scroll



Electronic  
expansion  
valve



ECOBREEZE

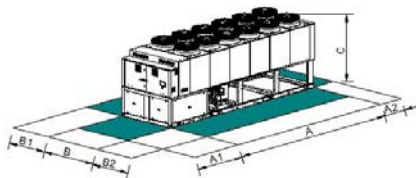


HYDRO  
PACK



Intelliplant

### 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             | ▶▶ WSAN-YSC4 PL NA | 90.4  | 100.4 | 110.4 | 120.4 | 130.4 | 145.4 | 160.4 | 175.4 |
|------------------|--------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| A - Length       | in                 | 161.9 | 161.9 | 161.9 | 161.9 | 161.9 | 200.4 | 200.4 | 200.4 |
| B - Width        | in                 | 87.7  | 87.7  | 87.7  | 87.7  | 87.7  | 87.7  | 87.7  | 87.7  |
| C - Height       | in                 | 99.5  | 99.5  | 99.5  | 99.5  | 99.5  | 99.5  | 99.5  | 99.5  |
| 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                | 6,592 | 6,834 | 6,834 | 7,278 | 7,560 | 8,489 | 8,816 | 9,221 |

The above mentioned data refer to standard units. For all other configurations, please refer to the dedicated technical bulletin.

versions and configurations

|   |   |                           |   |
|---|---|---------------------------|---|
| SUPPLY VOLTAGE:                             |   | STRUCTURAL CONFIGURATION: |   |
| 4606H                                       | 460/3/60 Supply voltage (Standard)  | 4T                        | Configuration for 4-pipe system                                 |
| 5756H                                       | 573/3/60 Supply voltage   | ACOUSTIC CONFIGURATION:   |   |
| EXTERNAL SECTION FAN CONSUMPTION REDUCTION: |   | SC                        | Acoustic configuration with compressor soundproofing (Standard) |
| CREFB                                       | Device for fan consumption reduction of the external section, ECOBREEZE type (Standard) | EN                        | Super-silenced acoustic configuration                           |

technical data

| SIZE                           |     | WSAN-YSC4 PL NA | 90.4  | 100.4 | 110.4 | 120.4    | 130.4 | 145.4 | 160.4 | 175.4 |
|--------------------------------|-----|-----------------|-------|-------|-------|----------|-------|-------|-------|-------|
| Cooling 100% - Heating 0%      |     |                 |       |       |       |          |       |       |       |       |
| Cooling Capacity               | (1) | ton             | 67.7  | 73.4  | 79.1  | 84.1     | 92.1  | 103   | 115   | 126   |
| Total power input              | (1) | kW              | 77.3  | 87.1  | 95.8  | 104      | 114   | 125   | 139   | 157   |
| EER                            | (1) | BTU / (Wh)      | 10.5  | 10.1  | 9.91  | 9.69     | 9.72  | 9.89  | 9.92  | 9.64  |
| IPLV                           | (1) | BTU / (Wh)      | 17.4  | 17.2  | 16.9  | 16.6     | 16.7  | 17.1  | 17.0  | 16.6  |
| Cooling 0% - Heating 100%      |     |                 |       |       |       |          |       |       |       |       |
| Heating Capacity               | (2) | MBH             | 839   | 906   | 975   | 1,078    | 1,179 | 1,343 | 1,489 | 1,636 |
| Total power input              | (2) | kW              | 81.3  | 88.2  | 95.9  | 102      | 111   | 127   | 140   | 159   |
| COP                            | (2) | kW / kW         | 3.02  | 3.01  | 2.98  | 3.08     | 3.12  | 3.11  | 3.11  | 3.02  |
| Cooling 100% - Heating 100%    |     |                 |       |       |       |          |       |       |       |       |
| Cooling Capacity               | (3) | ton             | 65.9  | 71.5  | 77.1  | 82.0     | 90.1  | 101   | 112   | 123   |
| Heating Capacity               | (3) | MBH             | 1,025 | 1,116 | 1,209 | 1,292    | 1,415 | 1,593 | 1,766 | 1,935 |
| Total power input              | (3) | kW              | 75.1  | 82.4  | 90.5  | 98.0     | 106   | 120   | 134   | 146   |
| TER                            | (3) | kW / kW         | 7.08  | 7.02  | 6.91  | 6.80     | 6.88  | 6.85  | 6.83  | 6.84  |
| 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 cooling (SC) | (4) | dB(A)           | 90    | 91    | 91    | 91       | 91    | 92    | 93    | 93    |
| Sound power level cooling (EN) | (4) | dB(A)           | 87    | 87    | 87    | 87       | 88    | 89    | 89    | 90    |

(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 \*/44 °F

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

The above mentioned data refer to standard units. For all other configurations, please refer to the dedicated technical bulletin.

accessories

|         |   |           |   |
|---------|---|-----------|---|
| CCCA    | Copper / aluminium condenser coil with acrylic lining   | SCP4      | Set-point compensation with 0-10 V                                  |
| CCCA1   | Condenser coil with Aluminium Energy Guard DCC treatment                                      | PSX       | Mains power supply  |
| PFGP    | Soundproofing paneling of the pumping unit  | AMMX      | Spring antivibration mounts   |
| IVFCDT  | Variable flow rate control cooling side by inverter according to the temperature differential | PGFC      | Finned coil protection grill  |
| IVFHD   | Variable flow rate control heating side by inverter according to the temperature differential | PGCCH     | Anti-hail protection grilles  |
| CSVX    | Couple of manually operated shut-off valves   | 1PMHS     | Hydropack for hot side with 1 on/off pump                           |
| IFWX    | Steel mesh strainer on the water side   | 1PMHSH    | Hydropack for hot side with 1 high static pressure on/off pump      |
| CMSC9   | Serial communication module for Modbus supervisor   | 1PMHSV    | Hydropack for hot side with 1 inverter pump                         |
| CMSC11  | Serial communication module for BACnet-IP supervisor  | 1PMHSVH   | Hydropack for hot side with 1 high static pressure inverter pump    |
| CMSC12  | Serial communication module for BACnet-MSTP supervisor  | 1+1PMHS   | Hydropack for hot side with 1+1 on/off pump                         |
| RCMRX   | Remote control via microprocessor control   | 1+1PMHSH  | Hydropack for hot side with 1+1 high static pressure on/off pump    |
| RE-25   | Electrical panel antifreeze protection for min. outdoor temperature down to -25 °C            | 1+1PMHSV  | Hydropack for hot side with 1+1 inverter pump                       |
| RE-39   | Electrical panel antifreeze protection for min. outdoor temperature down to -39 °C            | 1+1PMHSVH | Hydropack for hot side with 1+1 high static pressure inverter pump  |
| DML4-20 | Demand limit with 4-20 mA   | 1PMCS     | Hydropack for cold side with 1 on/off pump                          |
| DML0-10 | Demand limit with 0-10 V  | 1PMCSH    | Hydropack for cold side with 1 high static pressure on/off pump     |
| CREFBH  | High static pressure ecobreeze system   | 1PMCSV    | Hydropack for cold side with 1 inverter pump                        |
| ECS     | ECOSHARE function for the automatic management of a group of units                            | 1PMCSVH   | Hydropack for cold side with 1 high static pressure inverter pump   |
| SPC1    | Set-point compensation with 4-20 mA   | 1+1PMCS   | Hydropack for cold side with 1+1 on/off pump                        |
|         |   | 1+1PMCSH  | Hydropack for cold side with 1+1 high static pressure on/off pump   |
|         |   | 1+1PMCSV  | Hydropack for cold side with 1+1 inverter pump                      |
|         |   | 1+1PMCSVH | Hydropack for cold side with 1+1 high static pressure inverter pump |

Accessories whose code ends with "X" are supplied separately