

# SMARTSOURCE® Heat Pump



| Job Information  |                   | Technical Data Sheet |
|------------------|-------------------|----------------------|
| Job Name         | WSHP R32          |                      |
| Date             | 11/12/2024        |                      |
| Submitted By     | GENERAFRIO S.A.C. |                      |
| Software Version | 13.00             |                      |
| Unit Tag         | WSCH019           |                      |



| Unit Overview |                    |                                    |                |                         |                             |                               |                         |                             |                               |
|---------------|--------------------|------------------------------------|----------------|-------------------------|-----------------------------|-------------------------------|-------------------------|-----------------------------|-------------------------------|
| Model Number  | Voltage V/Hz/Phase | Airflow CFM                        | Fluid Flow gpm | Cooling Capacity Btu/hr | Cooling Efficiency EER@AHRI | Cooling Efficiency EER@Design | Heating Capacity Btu/hr | Heating Efficiency COP@AHRI | Heating Efficiency COP@Design |
| WSCH019       | 208-230/60/1       | 600                                | 4.50           | 19081                   | 16.3                        | 14.7                          | 24085                   | 5.2                         | 4.9                           |
| Unit          |                    |                                    |                |                         |                             |                               |                         |                             |                               |
| Model Number: |                    | WSCH019                            |                |                         |                             |                               |                         |                             |                               |
| Unit Type:    |                    | SmartSource Compact - Single Stage |                |                         |                             |                               |                         |                             |                               |
| Approval:     |                    | ETL, CETL, AHRI                    |                |                         |                             |                               |                         |                             |                               |
| Configuration |                    | Refrigerant Type                   |                | Refrigerant Weight      |                             | Loop Temperature Range        |                         |                             |                               |
| Horizontal    |                    | R-32                               |                | 26.0 oz                 |                             | Water Loop (Standard Range)   |                         |                             |                               |

| Unit Performance    |               |                                |                |                |                |                 |                              |                             |                                            |                                            |
|---------------------|---------------|--------------------------------|----------------|----------------|----------------|-----------------|------------------------------|-----------------------------|--------------------------------------------|--------------------------------------------|
| Air & Fluid Flow    |               |                                |                |                |                |                 |                              |                             |                                            |                                            |
| Airflow             |               | Total External Static Pressure |                | Fluid Flow     |                | Fluid Type      |                              | Altitude                    |                                            |                                            |
| 600 CFM             |               | 0.28 inH <sub>2</sub> O        |                | 4.50 gpm       |                | Water           |                              | 0 ft                        |                                            |                                            |
| Cooling Performance |               |                                |                |                |                |                 |                              |                             |                                            |                                            |
| Fluid Temperature   |               | Air Temperature                |                |                |                | Capacity        |                              | Heat of Rejection<br>Btu/hr | EER @ design                               | Fluid Pressure Drop<br>ft H <sub>2</sub> O |
| Entering<br>°F      | Leaving<br>°F | Entering                       |                | Leaving        |                | Total<br>Btu/hr | Sensible<br>Btu/hr           |                             |                                            |                                            |
|                     |               | Dry Bulb<br>°F                 | Wet Bulb<br>°F | Dry Bulb<br>°F | Wet Bulb<br>°F |                 |                              |                             |                                            |                                            |
| 90.0                | 100.5         | 80.0                           | 70.0           | 63.0           | 60.2           | 19081           | 11090                        | 23523                       | 14.7                                       | 8.51                                       |
| Heating Performance |               |                                |                |                |                |                 |                              |                             |                                            |                                            |
| Fluid Temperature   |               | Air Temperature                |                |                |                | Capacity        | Heat of Absorption<br>Btu/hr | COP @ design                | Fluid Pressure Drop<br>ft H <sub>2</sub> O |                                            |
| Entering<br>°F      | Leaving<br>°F | Entering                       |                | Leaving        |                | Total<br>Btu/hr |                              |                             |                                            |                                            |
|                     |               | Dry Bulb<br>°F                 |                | Dry Bulb<br>°F |                |                 |                              |                             |                                            |                                            |
| 70.0                | 61.5          | 70.0                           |                | 107.0          |                | 24085           | 19186                        | 4.9                         | 8.82                                       |                                            |

\*System WPD is calculated without the autoflow valve as the CV of an autoflow valve varies dependent on the system WPD. As long as the WPD is >3 psid, the autoflow valve will provide the selected GPM flowrate.

| Electrical     |                 |                              |                                                   |
|----------------|-----------------|------------------------------|---------------------------------------------------|
| Unit Voltage   | Minimum Voltage | Total Unit Full Load Current | Total Unit MCA                                    |
| 208-230/60/1   | 197 V           | 8.2 A                        | 10.0 A                                            |
| Compressor RLA | Compressor LRA  | Motor FLA                    | Maximum Recommended Fuse Size / HACR Breaker Size |
| 7.2 A          | 41.8 A          | 1.0 A                        | 15 A                                              |

\*Short-Circuit Current = 5 kA rms symmetrical, 600 V maximum

| Physical              |         |         |          |                  |            |            |
|-----------------------|---------|---------|----------|------------------|------------|------------|
| Unit                  |         |         |          |                  |            |            |
| Length                | Height  | Width   | Weight   |                  | Connection |            |
|                       |         |         | Shipping | Operating        | Water      | Condensate |
| 42.0 in               | 17.0 in | 19.0 in | 201 lb   | 150 lb           | 0.50 in    | 0.75 in    |
| Fan                   |         |         |          |                  |            |            |
| Motor Type            |         |         |          | Motor Horsepower |            |            |
| PSC - Standard Static |         |         |          | 0.17 hp          |            |            |

| Unit Options                 |                           |
|------------------------------|---------------------------|
| Controls                     |                           |
| Unit Control:                | Microtech Unit Controller |
| Control Transformer:         | 50 VA Transformer         |
| Thermostat / Sensor Control: | Thermostat Control        |
| Alarm Relay:                 | Included                  |
| Unit Airflow Configuration   |                           |
| Return Air Location:         | Left Hand                 |
| Discharge Air Location:      | Straight                  |

| Construction Options                  |                                    |
|---------------------------------------|------------------------------------|
| Cabinet                               |                                    |
| Finish:                               | Galvanized                         |
| Color:                                | Galvanized                         |
| Condensate Drain Pan                  |                                    |
| Primary Drain Pan Material:           | Stainless Steel                    |
| Filters                               |                                    |
| Filter Rack Type:                     | 1 in rail & 1 in Disposable Filter |
| Filter Type:                          | Disposable                         |
| (Quantity) Nominal Filter Dimensions: | (1) 16 in x 25 in x 2 in           |
| Insulation / Sound Package            |                                    |
| Compressor Side:                      | 1/2 inch Fiberglass, Skin-faced    |
| Air Compartment:                      |                                    |
| Miscellaneous                         |                                    |
| Coil Treatment:                       | None                               |

| Water Pressure Drop Calculation |                          |
|---------------------------------|--------------------------|
| Base Unit Cool Pressure Drop:   | 8.51 ft H <sub>2</sub> O |
| Base Unit Heat Pressure Drop:   | 8.82 ft H <sub>2</sub> O |
| Total Cool Pressure Drop:       | 8.51 ft H <sub>2</sub> O |
| Total Heat Pressure Drop:       | 8.82 ft H <sub>2</sub> O |

| Warranty       |                          |
|----------------|--------------------------|
| Unit Warranty: | 1st Year Labor Allowance |

#### AHRI Certification



All equipment is rated and certified in accordance with AHRI / ISO 13256-1 and tested, investigated, and determined to comply with the requirements of the standards for Heating and Cooling Equipment UL-1995 for the United States and CAN/CSA-C22.2 NO.236 for Canada.