



**APPROVALS**




 **ENGINEERING CODE**  
269NA51


 **APPROVED REFRIGERANT**  
R-134a

 **POWER SUPPLY**  
220-240 V 50 Hz

 **STANDARD CONDITIONS**  
ASHRAE

 **APPLICATION**  
HBP

 **COOLING CAPACITY**  
1684 W (HBP)

 **EFFICIENCY**  
2.46 W/W (HBP)

 **MOTOR TYPE**  
CSCR

 **STARTING TORQUE**  
HST

**DATA**

**General Data**

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Type                              | Hermetic reciprocating            |
| Technology Type                   | On-Off                            |
| Displacement                      | 16.8 cm <sup>3</sup>              |
| Compressor Cooling                | Fan/NotControlled/220             |
| Fan Air Flow                      | 520 m <sup>3</sup> /h             |
| Expansion Device                  | Capillary Tube or Expansion Valve |
| Horse Power                       | 1/2 hp                            |
| Max Condensing Pressure Operating | 13.92 bar                         |
| Max Condensing Pressure Peak      | 15.62 bar                         |
| Power Supply                      | 220-240 V 50 Hz                   |
| Evaporating Temperature Range     | -15 °C to 10 °C                   |

**Electrical Data**

|                          |                  |
|--------------------------|------------------|
| Motor type               | CSCR             |
| Starting Torque          | HST              |
| Start Winding Resistance | 14.26 Ω at 25° C |
| Run Winding Resistance   | 4.25 Ω at 25° C  |

## Mechanical Data

|  |                |
|--|----------------|
| Maximum Recommended Refrigerant Charge | 350 g          |
| Oil Charge                             | 350 ml         |
| Oil Type Configuration                 | ESTER          |
| Oil Type Viscosity                     | ISO22          |
| Pressurization                         | Dry air charge |
| Weight                                 | 11.6 Kg        |
| Free Internal Volume                   | 2.1 L          |

## Electrical Components

|                  | Description       |
|------------------|-------------------|
| Run Capacitor    | 15                |
| Start Capacitor  | 88-108 Uf / 330 V |
| CSR / CSIR Box   | YES               |
| Starting Device  | RVA3AN3C-647      |
| Motor Protection | MST30APK-3261     |

## External Characteristics

| Base Plate  | European          |                    |
|-------------|-------------------|--------------------|
| Tray Holder | No                |                    |
| Height      | 206 mm            |                    |
| Connector   | Internal Diameter | Shape              |
| Suction     | 8.1 mm            | Slanted 42°/Copper |
| Discharge   | 6.1 mm            | Straight/Copper    |
| Process     | 6.1 mm            | Slanted 42°/Copper |

## PERFORMANCE

## Rated Points

| Condensing Temperature | Evaporating Temperature | Cooling Capacity | Power Consumption | Current | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------|---------------|------------|
| 54.40°C                | 7.20°C                  | 1685 W           | 685 W             | 3.11 A  | 37.30 kg/h    | 2.46 W/W   |

Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Evaporation 7.20°C, Condensing 54.40°C, Ambient 35°C, Liquid 46.1°C, Subcooling 8.3K. Data in accordance to EN

12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

## Performance Curve Data

### Condensing Temperature 35°C

| Evaporating Temperature °C | Cooling Capacity W | Power W | Current A | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -15                        | 799                | 383     | 1.71      | 14.74              | 2.08           |
| -10                        | 1010               | 421     | 1.89      | 18.71              | 2.4            |
| -5                         | 1264               | 463     | 2.09      | 23.49              | 2.73           |
| 0                          | 1562               | 510     | 2.31      | 29.16              | 3.07           |
| 5                          | 1908               | 561     | 2.55      | 35.80              | 3.4            |
| 10                         | 2303               | 618     | 2.81      | 43.50              | 3.72           |

Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

### Condensing Temperature 45°C

| Evaporating Temperature °C | Cooling Capacity W | Power W | Current A | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -15                        | 720                | 403     | 1.82      | 14.35              | 1.79           |
| -10                        | 915                | 450     | 2.04      | 18.31              | 2.04           |
| -5                         | 1147               | 499     | 2.26      | 23.04              | 2.3            |
| 0                          | 1418               | 553     | 2.5       | 28.62              | 2.56           |
| 5                          | 1730               | 611     | 2.76      | 35.13              | 2.83           |
| 10                         | 2087               | 673     | 3.03      | 42.66              | 3.1            |

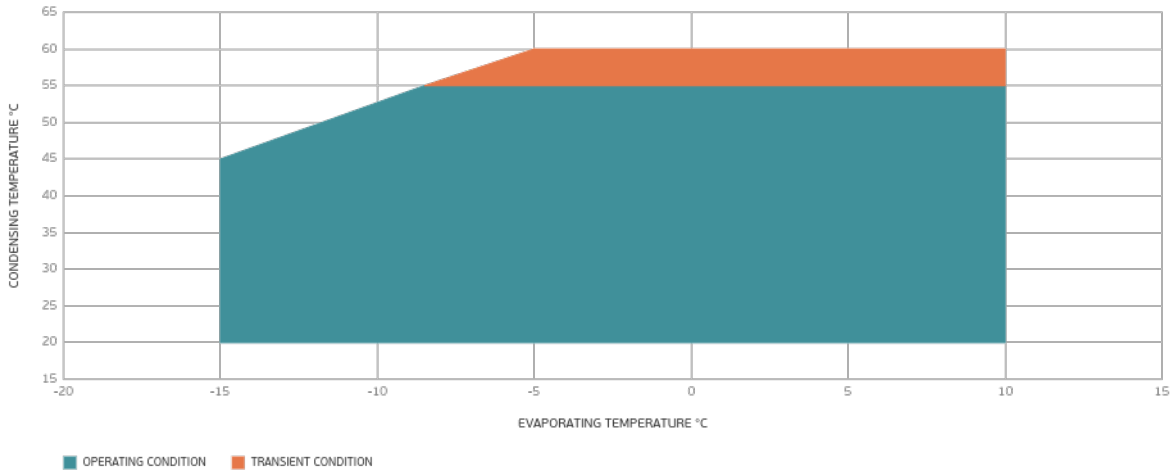
Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

### Condensing Temperature 55°C

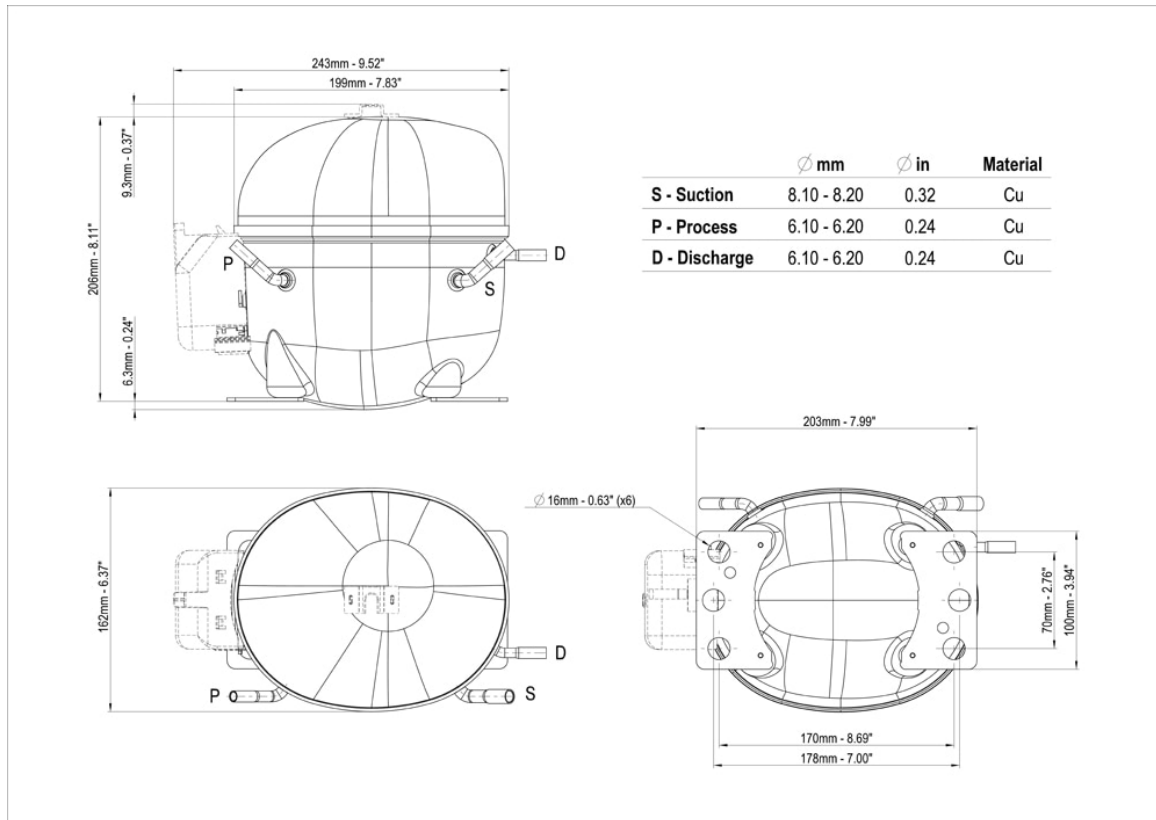
| Evaporating Temperature °C | Cooling Capacity W | Power W | Current A | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -10                        | 802                | 481     | 2.16      | 17.50              | 1.67           |
| -5                         | 1013               | 537     | 2.43      | 22.21              | 1.89           |
| 0                          | 1258               | 596     | 2.7       | 27.72              | 2.11           |
| 5                          | 1538               | 658     | 2.99      | 34.13              | 2.34           |
| 10                         | 1858               | 724     | 3.3       | 41.51              | 2.57           |

Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

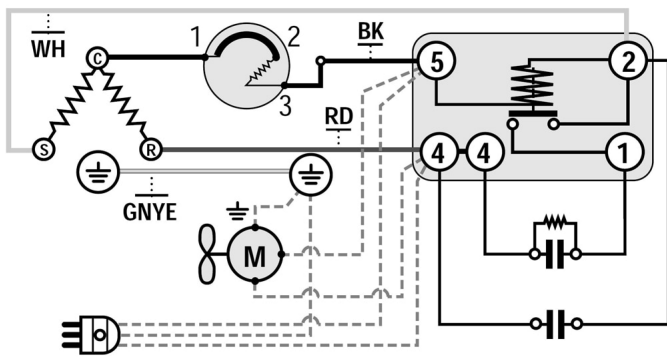
## Operating Envelope



## External Dimensions



## Wiring Diagram



## Assembly Instructions

