


**APPROVALS**




 **ENGINEERING CODE**  
943NA19

 **APPROVED REFRIGERANT**  
R-404A

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

 **STANDARD CONDITIONS**  
ASHRAE

 **APPLICATION**  
MBP

 **COOLING CAPACITY**  
2284 W (MBP)

 **EFFICIENCY**  
1.86 W/W (MBP)

 **MOTOR TYPE**  
CSCR

 **STARTING TORQUE**  
HST

**DATA**

**General Data**

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Type                              | Hermetic reciprocating            |
| Technology Type                   | On-Off                            |
| Displacement                      | 26.11 cm <sup>3</sup>             |
| Compressor Cooling                | Fan/NotControlled/220             |
| Fan Air Flow                      | 800 m <sup>3</sup> /h             |
| Expansion Device                  | Capillary Tube or Expansion Valve |
| Horse Power                       | 1 1/4 hp                          |
| Max Condensing Pressure Operating | 24.71 bar                         |
| Max Condensing Pressure Peak      | 27.71 bar                         |
| Power Supply                      | 220-240 V 50 Hz                   |
| Evaporating Temperature Range     | -20 °C to 10 °C                   |

**Electrical Data**

|                          |                 |
|--------------------------|-----------------|
| Motor type               | CSCR            |
| Starting Torque          | HST             |
| Start Winding Resistance | 5.4 Ω at 25° C  |
| Run Winding Resistance   | 1.75 Ω at 25° C |

## Mechanical Data

|  |                |
|--|----------------|
| Maximum Recommended Refrigerant Charge | 800 g          |
| Oil Charge                             | 750 ml         |
| Oil Type Configuration                 | ESTER          |
| Oil Type Viscosity                     | ISO22          |
| Pressurization                         | Dry air charge |
| Weight                                 | 21.6 Kg        |
| Free Internal Volume                   | 3.9 L          |

## Electrical Components

|                  | Description       |
|------------------|-------------------|
| Start Capacitor  | 88-108 Uf / 330 V |
| CSR / CSIR Box   | YES               |
| Run Capacitor    | 30                |
| Starting Device  | RVA3H3C-108       |
| Motor Protection | T0809/C9          |

## External Characteristics

| Base Plate  | Large             |                                      |
|-------------|-------------------|--------------------------------------|
| Tray Holder | No                |                                      |
| Height      | 276 mm            |                                      |
| Connector   | Internal Diameter | Shape                                |
| Suction     | 12.7 mm           | ROTOLOCK(Ex. thr. 1"-14UNS-2A)/Steel |
| Discharge   | 8 mm              | Slanted J/Copper                     |
| Process     | 6.42 mm           | Vertical/Copper                      |

## PERFORMANCE

## Rated Points

| Condensing Temperature | Evaporating Temperature | Cooling Capacity | Power Consumption | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------------|------------|
| 54.40°C                | -6.70°C                 | 2284 W           | 1227 W            | 62.43 kg/h    | 1.86 W/W   |

Test Condition: ASHRAEMBP46, Fan/NotControlled/220, Return Gas 35°C, Evaporation -6.70°C, Condensing 54.40°C, Ambient 35°C, Liquid 46.1°C, Subcooling 8.3K. Data are an indication of performance based simulation.

## Performance Curve Data

### Condensing Temperature 35°C

| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -20                        | 1691               | 866     | 36.73              | 1.95           |
| -15                        | 2175               | 954     | 47.51              | 2.28           |
| -10                        | 2755               | 1035    | 60.55              | 2.66           |
| -5                         | 3440               | 1111    | 76.17              | 3.1            |
| 0                          | 4238               | 1180    | 94.65              | 3.59           |
| 5                          | 5154               | 1244    | 116.31             | 4.14           |
| 10                         | 6198               | 1303    | 141.43             | 4.76           |

Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

### Condensing Temperature 45°C

| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -20                        | 1421               | 869     | 34.08              | 1.64           |
| -15                        | 1846               | 981     | 44.55              | 1.88           |
| -10                        | 2355               | 1089    | 57.22              | 2.16           |
| -5                         | 2955               | 1193    | 72.39              | 2.48           |
| 0                          | 3653               | 1291    | 90.34              | 2.83           |
| 5                          | 4456               | 1386    | 111.39             | 3.22           |
| 10                         | 5373               | 1476    | 135.84             | 3.64           |

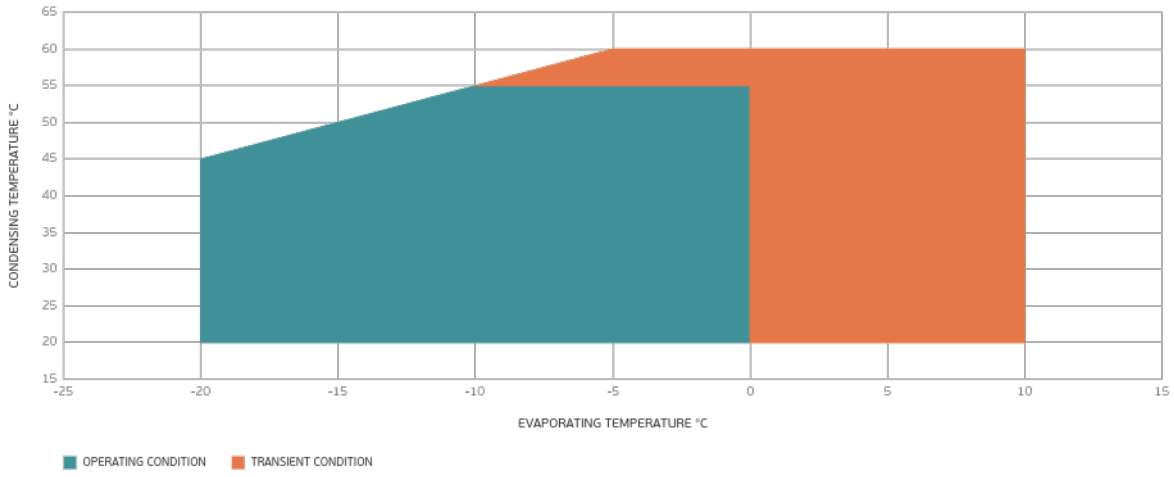
Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

### Condensing Temperature 55°C

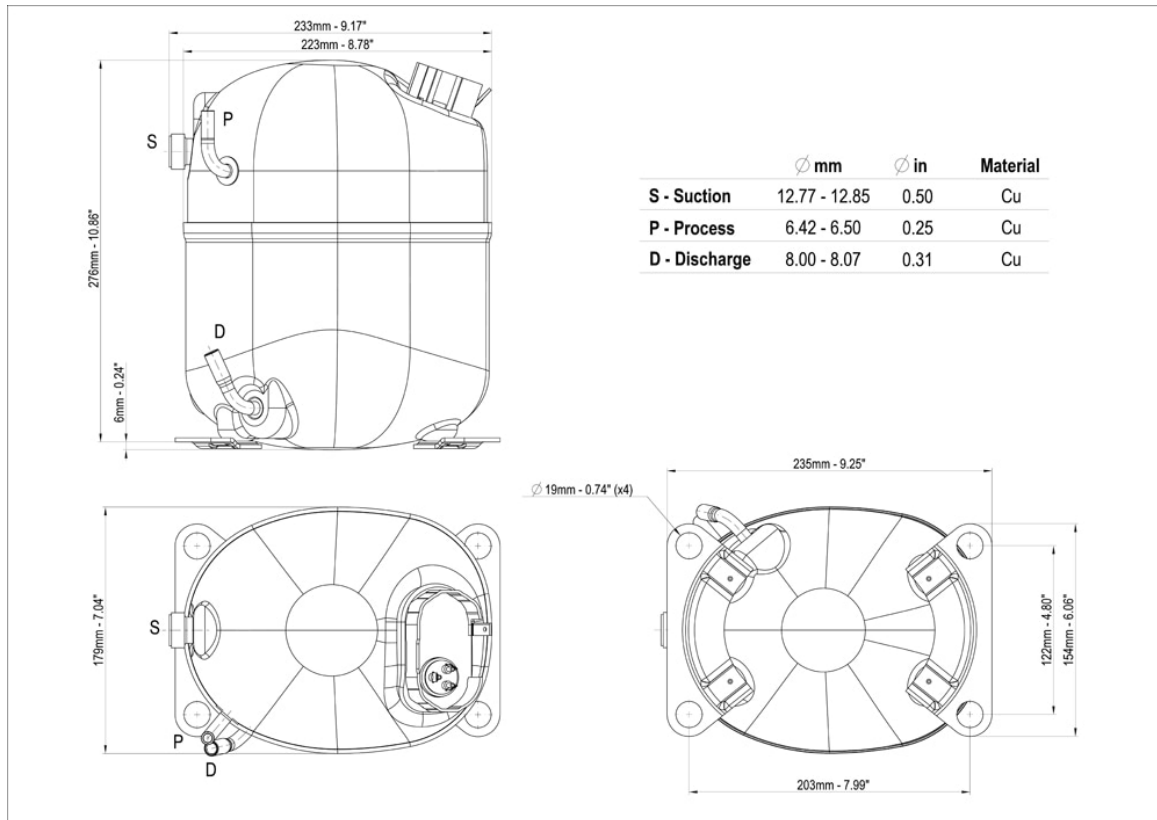
| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -10                        | 1932               | 1145    | 52.82              | 1.69           |
| -5                         | 2447               | 1274    | 67.52              | 1.92           |
| 0                          | 3045               | 1400    | 84.93              | 2.17           |
| 5                          | 3735               | 1524    | 105.35             | 2.45           |
| 10                         | 4526               | 1644    | 129.09             | 2.75           |

Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

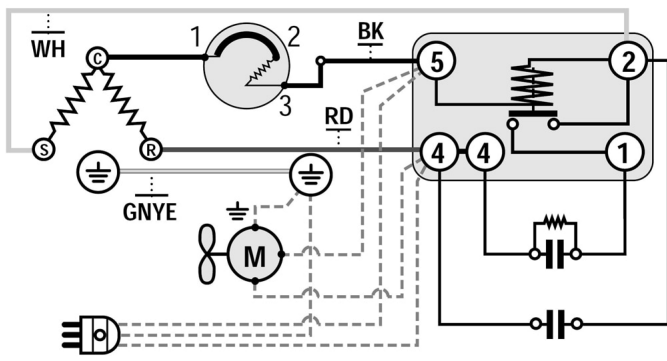
## Operating Envelope



## External Dimensions



## Wiring Diagram



## Assembly Instructions

