



**APPROVALS**




 **ENGINEERING CODE**  
958CA51


 **APPROVED REFRIGERANT**  
R-404A


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

 **STANDARD CONDITIONS**  
ASHRAE

 **APPLICATION**  
MBP

 **COOLING CAPACITY**  
775 W (MBP)

 **EFFICIENCY**  
1.55 W/W (MBP)

 **MOTOR TYPE**  
CSIR

 **STARTING TORQUE**  
HST

**DATA**

**General Data**

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Type                              | Hermetic reciprocating            |
| Technology Type                   | On-Off                            |
| Displacement                      | 8.77 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 | 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               | CSIR            |
| Starting Torque          | HST             |
| Start Winding Resistance | 31.7 Ω at 25° C |
| Run Winding Resistance   | 5.18 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 Kg          |
| Free Internal Volume                   | 2.1 L          |

## Electrical Components

|                  | Description        |
|------------------|--------------------|
| Starting Device  | Relay   MTRP-0029* |
| Motor Protection | T0660/G5           |
| Start Capacitor  | 53-64 Uf/330 V     |

## External Characteristics

| Base Plate  | European          |                    |
|-------------|-------------------|--------------------|
| Tray Holder | No                |                    |
| Height      | 200 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 | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------------|------------|
| 54.40°C                | -6.70°C                 | 775 W            | 499 W             | 21.16 kg/h    | 1.55 W/W   |

Test Condition: ASHRAEMB46, 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                        | 635                | 329     | 13.78              | 1.93           |
| -15                        | 774                | 361     | 16.92              | 2.14           |
| -10                        | 942                | 391     | 20.72              | 2.41           |
| -5                         | 1144               | 419     | 25.32              | 2.73           |
| 0                          | 1382               | 444     | 30.85              | 3.11           |
| 5                          | 1659               | 468     | 37.44              | 3.55           |
| 10                         | 1980               | 489     | 45.23              | 4.04           |

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                        | 546                | 346     | 13.09              | 1.58           |
| -15                        | 668                | 390     | 16.12              | 1.71           |
| -10                        | 814                | 431     | 19.78              | 1.89           |
| -5                         | 988                | 470     | 24.20              | 2.1            |
| 0                          | 1193               | 507     | 29.51              | 2.35           |
| 5                          | 1432               | 542     | 35.83              | 2.64           |
| 10                         | 1709               | 576     | 43.31              | 2.97           |

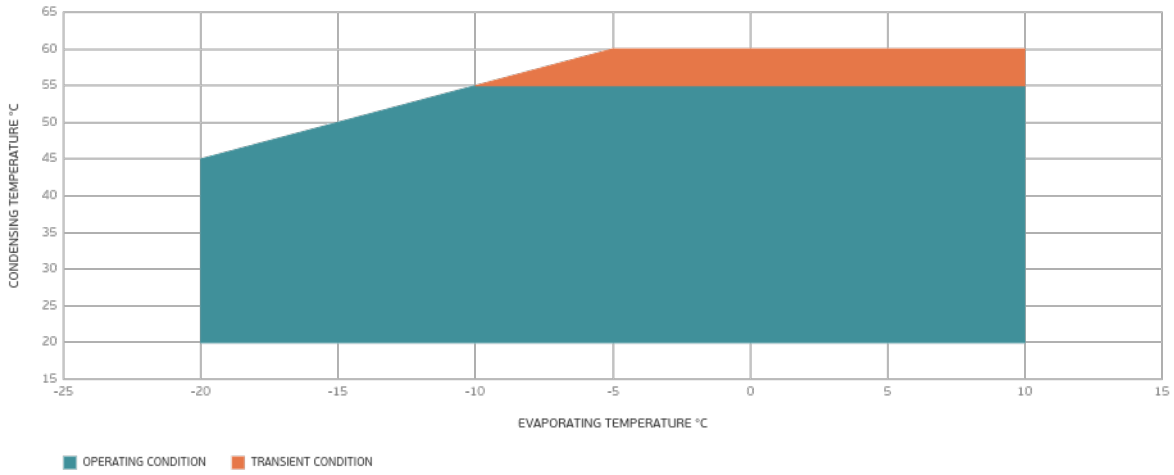
Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C , Subcooling 8.3K. Data are an indication of performance based simulation.

### Condensing Temperature 55°C

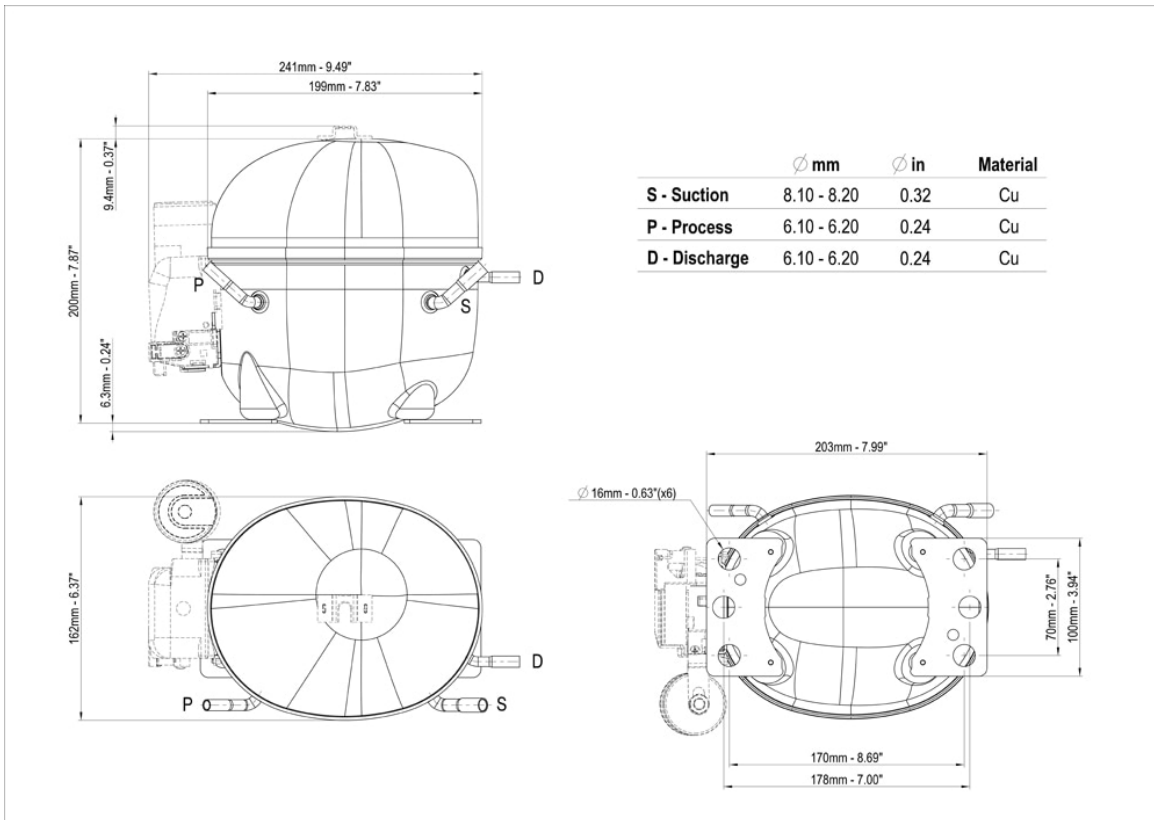
| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -20                        | 443                | 368     | 11.94              | 1.2            |
| -15                        | 548                | 420     | 14.87              | 1.31           |
| -10                        | 673                | 470     | 18.38              | 1.43           |
| -5                         | 820                | 518     | 22.61              | 1.58           |
| 0                          | 992                | 563     | 27.68              | 1.76           |
| 5                          | 1193               | 607     | 33.74              | 1.97           |
| 10                         | 1427               | 649     | 40.90              | 2.2            |

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

