



APPROVALS



ENGINEERING CODE
861LA51

APPROVED REFRIGERANT
R-600a

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
ASHRAE

APPLICATION
HBP

COOLING CAPACITY
812 W (HBP)

EFFICIENCY
2.49 W/W (HBP)

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

| | |
|-----------------------------------|-----------------------------------|
| Type | Hermetic reciprocating |
| Technology Type | On-Off |
| Displacement | 14.28 cm ³ |
| Compressor Cooling | Fan/NotControlled/220 |
| Fan Air Flow | 520 m ³ /h |
| Expansion Device | Capillary Tube or Expansion Valve |
| Horse Power | 1/4 hp |
| Max Condensing Pressure Operating | 6.73 bar |
| Max Condensing Pressure Peak | 7.69 bar |
| Power Supply | 220-240 V 50 Hz |
| Evaporating Temperature Range | -15 °C to 10 °C |

Electrical Data

| | |
|--------------------------|-----------------|
| Motor type | CSIR |
| Starting Torque | HST |
| Start Winding Resistance | 28.9 Ω at 25° C |
| Run Winding Resistance | 6.8 Ω at 25° C |

Mechanical Data

| | |
|--|------------------------|
| Maximum Recommended Refrigerant Charge | 150 g |
| Oil Charge | 350 ml |
| Oil Type Configuration | MINERAL |
| Oil Type Viscosity | ISO32 |
| Pressurization | Without dry air charge |
| Weight | 10.6 Kg |
| Free Internal Volume | 2.1 L |

Electrical Components

| | Description |
|------------------|------------------------|
| Start Capacitor | 43-53 Uf / 330 V |
| Motor Protection | T0186/G6 |
| Starting Device | Relay MTRPH-0026-59* |

External Characteristics

| Base Plate | European | |
|-------------|-------------------|--------------------|
| Tray Holder | No | |
| Height | 188 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 | 812 W | 326 W | 2.06 A | 9.76 kg/h | 2.49 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 | 401 | 196 | 1.62 | 4.09 | 2.04 |
| -10 | 504 | 213 | 1.67 | 5.16 | 2.36 |
| -5 | 624 | 229 | 1.72 | 6.40 | 2.72 |
| 0 | 762 | 244 | 1.77 | 7.84 | 3.13 |
| 5 | 919 | 257 | 1.82 | 9.48 | 3.57 |
| 10 | 1097 | 270 | 1.87 | 11.35 | 4.06 |

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 | 355 | 205 | 1.64 | 3.90 | 1.73 |
| -10 | 449 | 227 | 1.71 | 4.94 | 1.98 |
| -5 | 559 | 248 | 1.78 | 6.17 | 2.25 |
| 0 | 687 | 269 | 1.85 | 7.60 | 2.55 |
| 5 | 832 | 289 | 1.92 | 9.24 | 2.88 |
| 10 | 996 | 309 | 1.99 | 11.10 | 3.23 |

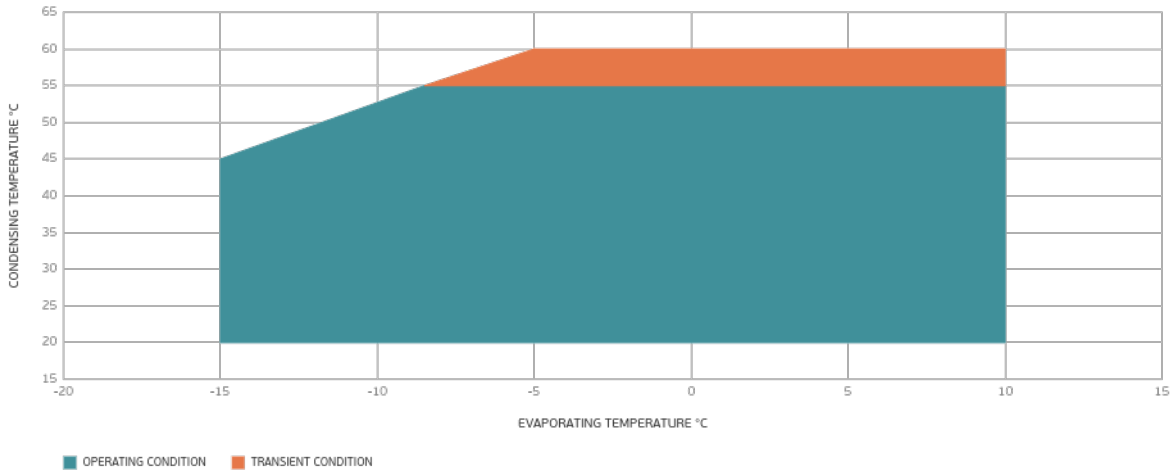
Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 55°C

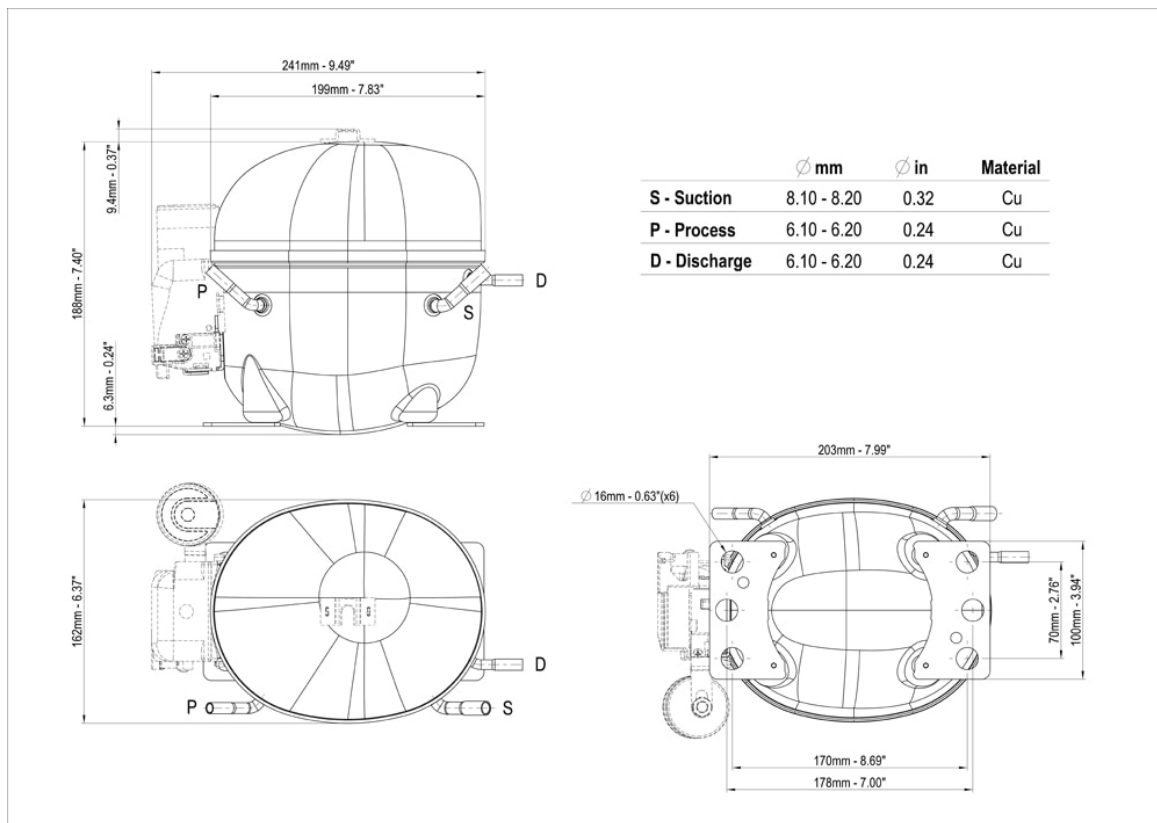
| Evaporating Temperature °C | Cooling Capacity W | Power W | Current A | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -10 | 396 | 241 | 1.75 | 4.73 | 1.64 |
| -5 | 495 | 266 | 1.84 | 5.93 | 1.86 |
| 0 | 611 | 291 | 1.93 | 7.34 | 2.1 |
| 5 | 744 | 315 | 2.02 | 8.96 | 2.36 |
| 10 | 894 | 340 | 2.12 | 10.82 | 2.63 |

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

