



APPROVALS



ENGINEERING CODE
212CN06

APPROVED REFRIGERANT
R-134a

POWER SUPPLY
200-240 V 50 Hz

STANDARD CONDITIONS
ASHRAE

APPLICATION
HBP

COOLING CAPACITY
2025 W (HBP)

EFFICIENCY
2.36 W/W (HBP)

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

| | |
|-----------------------------------|-----------------------------------|
| Type | Hermetic reciprocating |
| Technology Type | On-Off |
| Displacement | 22.37 cm ³ |
| Compressor Cooling | Fan/NotControlled/200 |
| Fan Air Flow | 520 m ³ /h |
| Expansion Device | Capillary Tube or Expansion Valve |
| Horse Power | 1 hp |
| Max Condensing Pressure Operating | 13.92 bar |
| Max Condensing Pressure Peak | 15.62 bar |
| Power Supply | 200-240 V 50 Hz / 230 V 60 Hz |
| Evaporating Temperature Range | -15 °C to 10 °C |

Electrical Data

| | |
|--------------------------|------------------|
| Motor type | CSIR |
| Starting Torque | HST |
| Start Winding Resistance | 12.16 Ω at 25° C |
| Run Winding Resistance | 1.86 Ω at 25° C |

Mechanical Data

| | |
|--|----------------|
| Maximum Recommended Refrigerant Charge | 800 g |
| Oil Charge | 450 ml |
| Oil Type Configuration | ESTER |
| Oil Type Viscosity | ISO22 |
| Pressurization | Dry air charge |
| Weight | 17.2 Kg |
| Free Internal Volume | 3.3 L |

Electrical Components

| | Description |
|------------------|-------------------|
| Start Capacitor | 88-108 Uf / 330 V |
| Starting Device | Relay MTRPH-55* |
| Motor Protection | T0901/G6 |

External Characteristics

| Base Plate | Universal | |
|-------------|-------------------|--------------------|
| Tray Holder | No | |
| Height | 220 mm | |
| Connector | Internal Diameter | Shape |
| Suction | 9.6 mm | Slanted 42°/Copper |
| Discharge | 6.42 mm | Straight/Copper |
| Process | 6.42 mm | Vertical/Copper |

PERFORMANCE

Rated Points

| Condensing Temperature | Evaporating Temperature | Cooling Capacity | Power Consumption | Current | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------|---------------|------------|
| 54.40°C | 7.20°C | 2025 W | 857 W | 5.21 A | 44.85 kg/h | 2.36 W/W |

Test Condition: ASHRAE HBP46, Fan/NotControlled/200, 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 | 1012 | 456 | 3.55 | 18.66 | 2.22 |
| -10 | 1275 | 507 | 3.73 | 23.62 | 2.52 |
| -5 | 1594 | 559 | 3.93 | 29.64 | 2.85 |
| 0 | 1972 | 615 | 4.16 | 36.81 | 3.21 |
| 5 | 2411 | 672 | 4.41 | 45.26 | 3.59 |
| 10 | 2917 | 732 | 4.7 | 55.10 | 3.98 |

Test Condition: ASHRAEHBP46, Fan/NotControlled/200, 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 | 893 | 487 | 3.67 | 17.80 | 1.83 |
| -10 | 1113 | 547 | 3.89 | 22.28 | 2.04 |
| -5 | 1389 | 611 | 4.14 | 27.89 | 2.27 |
| 0 | 1723 | 679 | 4.41 | 34.77 | 2.54 |
| 5 | 2118 | 751 | 4.72 | 43.01 | 2.82 |
| 10 | 2579 | 827 | 5.07 | 52.74 | 3.12 |

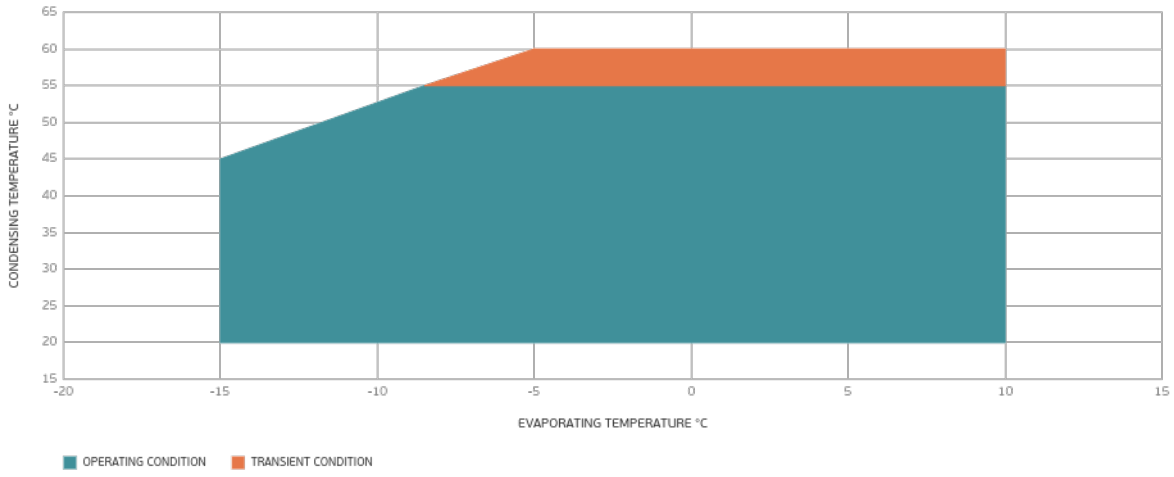
Test Condition: ASHRAEHBP46, Fan/NotControlled/200, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 55°C

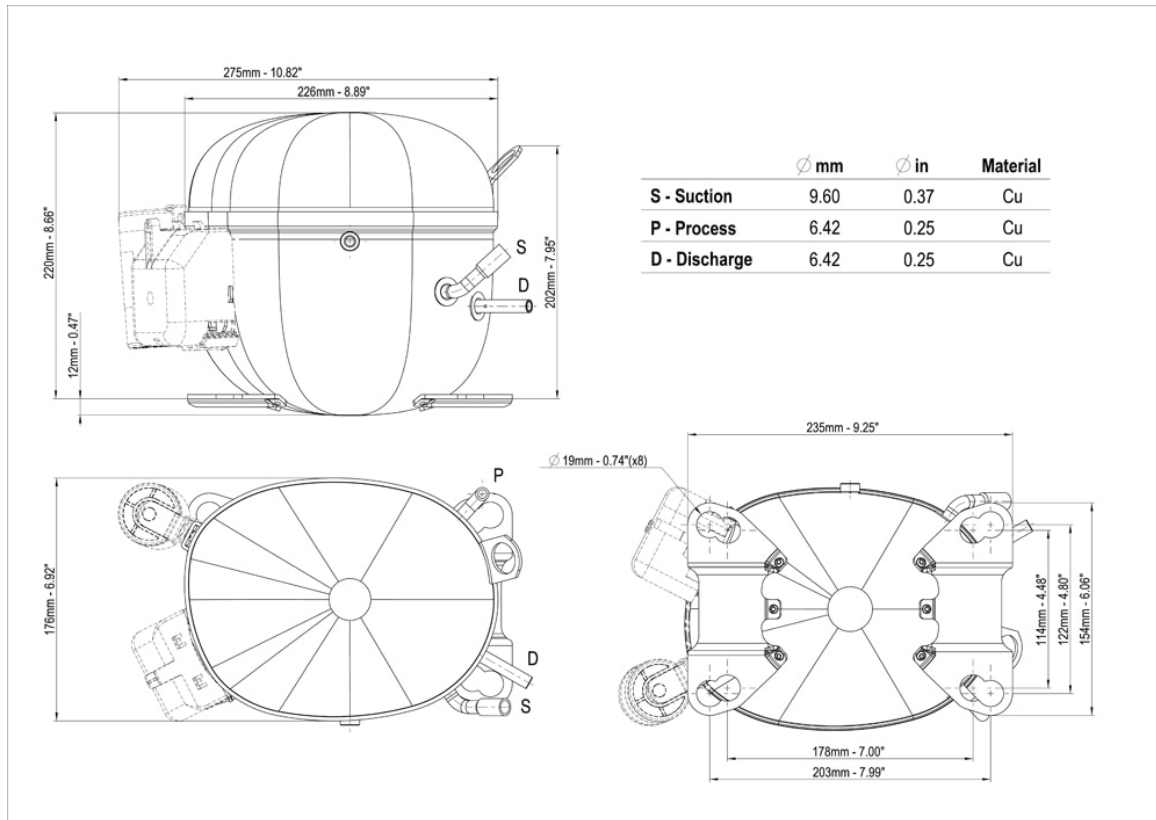
| Evaporating Temperature °C | Cooling Capacity W | Power W | Current A | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -10 | 987 | 591 | 4.05 | 21.54 | 1.67 |
| -5 | 1212 | 662 | 4.35 | 26.57 | 1.83 |
| 0 | 1495 | 739 | 4.69 | 32.96 | 2.02 |
| 5 | 1840 | 822 | 5.06 | 40.81 | 2.24 |
| 10 | 2249 | 911 | 5.47 | 50.24 | 2.47 |

Test Condition: ASHRAEHBP46, Fan/NotControlled/200, 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.

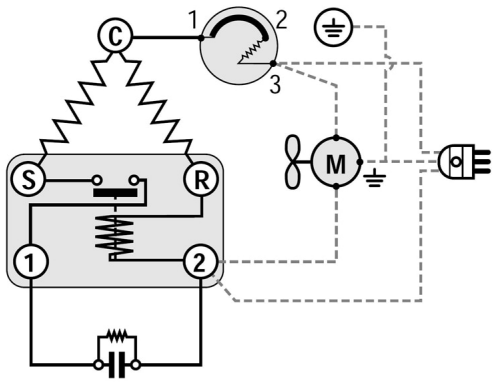
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

