



APPROVALS




 **ENGINEERING CODE**
862IA51


 **APPROVED REFRIGERANT**
R-290

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

 **STANDARD CONDITIONS**
ASHRAE

 **APPLICATION**
LBP

 **COOLING CAPACITY**
486 W (LBP)

 **EFFICIENCY**
1.49 W/W (LBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

| | |
|-----------------------------------|-----------------------------------|
| Type | Hermetic reciprocating |
| Technology Type | On-Off |
| Displacement | 9.99 cm ³ |
| Compressor Cooling | Fan/NotControlled/220 |
| Fan Air Flow | 520 m ³ /h |
| Expansion Device | Capillary Tube or Expansion Valve |
| Horse Power | 1/2 hp |
| Max Condensing Pressure Operating | 18.07 bar |
| Max Condensing Pressure Peak | 20.17 bar |
| Power Supply | 220-240 V 50 Hz |
| Evaporating Temperature Range | -40 °C to -10 °C |

Electrical Data

| | |
|--------------------------|------------------|
| Motor type | CSIR |
| Starting Torque | HST |
| Start Winding Resistance | 24.26 Ω at 25° C |
| Run Winding Resistance | 7.79 Ω at 25° C |

Mechanical Data

| | |
|--|------------------------|
| Maximum Recommended Refrigerant Charge | 150 g |
| Oil Charge | 350 ml |
| Oil Type Configuration | ESTER |
| Oil Type Viscosity | ISO22 |
| Pressurization | Without dry air charge |
| Weight | 10.5 Kg |
| Free Internal Volume | 2.1 L |

Electrical Components

| | Description |
|------------------|------------------------|
| Starting Device | Relay MTRPH-0025-65* |
| Start Capacitor | 64-77 Uf / 330 V |
| Motor Protection | T0660/G6 |

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 | Current | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------|---------------|------------|
| 54.40°C | -23.30°C | 486 W | 326 W | 1.94 A | 4.93 kg/h | 1.49 W/W |

Test Condition: ASHRAELBP32, Fan/NotControlled/220, Return Gas 32.2°C, Evaporation -23.30°C, Condensing 54.40°C, Ambient 32.2°C, Liquid 32.2°C, Subcooling 22.2K. 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 |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -40 | 237 | 195 | 1.51 | 2.39 | 1.22 |
| -35 | 308 | 222 | 1.59 | 3.11 | 1.39 |
| -30 | 395 | 248 | 1.67 | 4.00 | 1.6 |
| -25 | 500 | 273 | 1.75 | 5.07 | 1.83 |
| -20 | 622 | 297 | 1.83 | 6.33 | 2.09 |
| -15 | 761 | 320 | 1.92 | 7.77 | 2.38 |
| -10 | 916 | 343 | 2.01 | 9.40 | 2.67 |

Test Condition: ASHRAELBP32, Fan/NotControlled/220, Return Gas 32.2°C, Ambient 32.2°C, Liquid 32.2°C. 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 |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -35 | 293 | 232 | 1.63 | 2.96 | 1.26 |
| -30 | 376 | 263 | 1.73 | 3.81 | 1.43 |
| -25 | 477 | 295 | 1.83 | 4.84 | 1.62 |
| -20 | 594 | 326 | 1.95 | 6.05 | 1.82 |
| -15 | 728 | 358 | 2.07 | 7.44 | 2.03 |
| -10 | 879 | 390 | 2.2 | 9.02 | 2.25 |

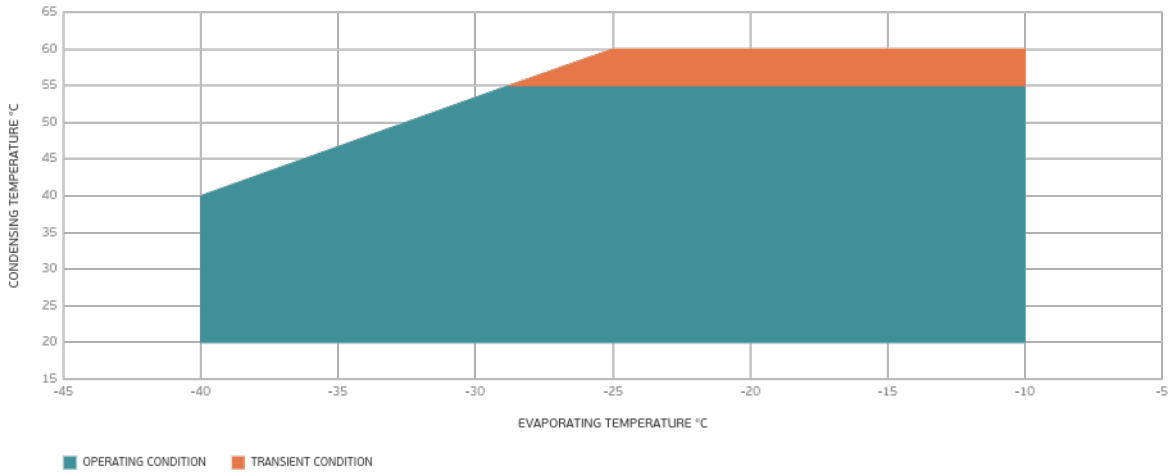
Test Condition: ASHRAELBP32, Fan/NotControlled/220, Return Gas 32.2°C, Ambient 32.2°C, Liquid 32.2°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 55°C

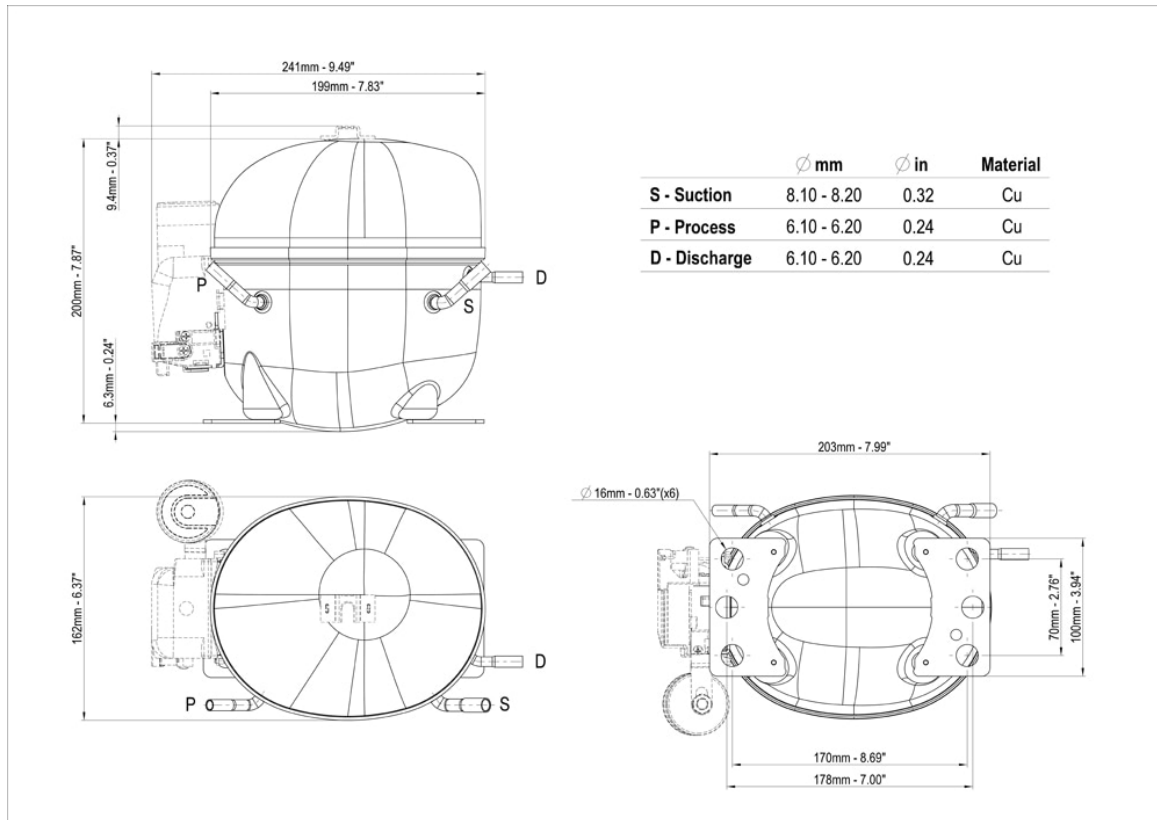
| Evaporating Temperature °C | Cooling Capacity W | Power W | Current A | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -30 | 354 | 277 | 1.77 | 3.58 | 1.28 |
| -25 | 449 | 314 | 1.9 | 4.55 | 1.43 |
| -20 | 561 | 351 | 2.04 | 5.71 | 1.6 |
| -15 | 690 | 391 | 2.19 | 7.05 | 1.77 |
| -10 | 836 | 432 | 2.35 | 8.57 | 1.94 |

Test Condition: ASHRAELBP32, Fan/NotControlled/220, Return Gas 32.2°C, Ambient 32.2°C, Liquid 32.2°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

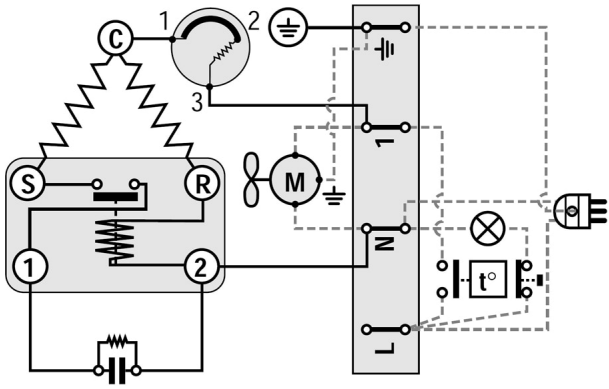
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

