



**APPROVALS**



**ENGINEERING CODE**  
513306233

**APPROVED REFRIGERANT**  
R-290

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

**STANDARD CONDITIONS**  
ASHRAE

**APPLICATION**  
LBP

**COOLING CAPACITY**  
300 W (LBP)

**EFFICIENCY**  
1.48 W/W (LBP)

**MOTOR TYPE**  
CSIR

**STARTING TORQUE**  
HST

**DATA**

**General Data**

|                               |                                   |
|-------------------------------|-----------------------------------|
| Type                          | Hermetic reciprocating            |
| Technology Type               | On-Off                            |
| Displacement                  | 5.96 cm <sup>3</sup>              |
| Compressor Cooling            | Fan/NotControlled/220             |
| Expansion Device              | Capillary Tube or Expansion Valve |
| Horse Power                   | 1/3 hp                            |
| 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           | 19.15 Ω at 25° C |
| Run Winding Resistance             | 11.3 Ω at 25° C  |
| Rated Load Amperage (RLA) at 50 Hz | 1.35 A           |

## Mechanical Data

|                        |         |
|------------------------|---------|
| Oil Charge             | 180 ml  |
| Oil Type Configuration | ESTER   |
| Oil Type Viscosity     | ISO22   |
| Weight                 | 7.75 Kg |

## Electrical Components

|                  | Description      |
|------------------|------------------|
| Starting Device  | Relay   MTRP-36* |
| Start Capacitor  | 64-77 Uf / 330 V |
| Motor Protection | MSP61AMK-3259    |

## External Characteristics

| Tray Holder | Yes               |  |
|-------------|-------------------|--|
| Connector   | Internal Diameter | Shape                                  |
| Suction     | 6.1 mm            | Slanted 42° up + 45° to Back/Copper    |
| Discharge   | 4.94 mm           | Slanted parallel BP+24° to Back/Copper |
| Process     | 6.1 mm            | Slanted 45° up + 45° to Back/Copper    |

## PERFORMANCE

## Rated Points

| Condensing Temperature | Evaporating Temperature | Cooling Capacity | Power Consumption | Current | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------|---------------|------------|
| 54.40°C                | -23.30°C                | 300 W            | 203 W             | 1.43 A  | 3.05 kg/h     | 1.48 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                        | 151                | 130     | 1.26      | 1.52               | 1.15           |
| -35                        | 196                | 146     | 1.29      | 1.98               | 1.34           |
| -30                        | 249                | 161     | 1.32      | 2.52               | 1.55           |
| -25                        | 311                | 174     | 1.35      | 3.15               | 1.78           |
| -20                        | 382                | 187     | 1.38      | 3.89               | 2.04           |
| -15                        | 464                | 199     | 1.42      | 4.74               | 2.34           |
| -10                        | 557                | 209     | 1.45      | 5.72               | 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 |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -40                        | 137                | 133     | 1.27      | 1.38               | 1.04           |
| -35                        | 181                | 150     | 1.3       | 1.83               | 1.21           |
| -30                        | 234                | 168     | 1.34      | 2.36               | 1.39           |
| -25                        | 295                | 186     | 1.38      | 2.99               | 1.59           |
| -20                        | 365                | 203     | 1.43      | 3.72               | 1.8            |
| -15                        | 447                | 220     | 1.48      | 4.57               | 2.03           |
| -10                        | 540                | 236     | 1.53      | 5.55               | 2.29           |

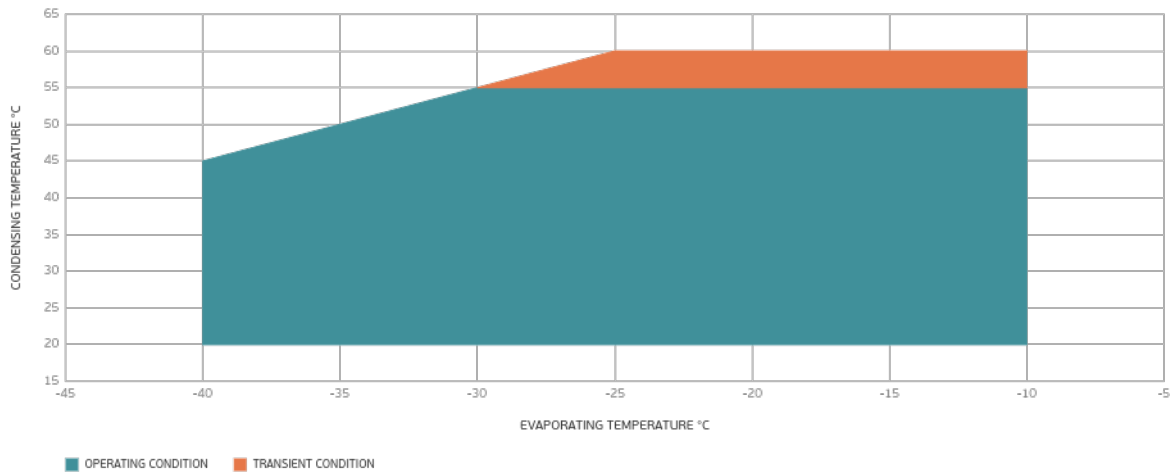
Test Condition: ASHRAELBP32, Fan/NotControlled/220, Return Gas 32.2°C, Ambient 32.2°C, Liquid 32.2°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

## Condensing Temperature 55°C

| Evaporating Temperature °C | Cooling Capacity W | Power W | Current A | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|-----------|--------------------|----------------|
| -40                        | 124                | 136     | 1.27      | 1.25               | 0.91           |
| -35                        | 166                | 155     | 1.31      | 1.68               | 1.07           |
| -30                        | 217                | 175     | 1.36      | 2.20               | 1.24           |
| -25                        | 277                | 195     | 1.41      | 2.81               | 1.42           |
| -20                        | 347                | 217     | 1.47      | 3.53               | 1.6            |
| -15                        | 428                | 238     | 1.53      | 4.38               | 1.8            |
| -10                        | 521                | 259     | 1.6       | 5.35               | 2.01           |

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

