



APPROVALS



ENGINEERING CODE
513306233

APPROVED REFRIGERANT
R-290

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
EN12900

APPLICATION
LBP

COOLING CAPACITY
178 W (LBP)

EFFICIENCY
1.23 W/W (LBP)

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

| | |
|-------------------------------|-----------------------------------|
| Type | Hermetic reciprocating |
| Technology Type | On-Off |
| Displacement | 5.96 cm ³ |
| 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 | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------------|------------|
| 40.00°C | -35.00°C | 178 W | 144 W | 1.99 kg/h | 1.23 W/W |

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Evaporation -35.00°C, Condensing 40.00°C, Ambient 35°C, Liquid 40°C, Subcooling 0K. 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 |
|----------------------------|--------------------|---------|--------------------|----------------|
| -40 | 145 | 131 | 1.59 | 1.11 |
| -35 | 189 | 146 | 2.07 | 1.29 |
| -30 | 240 | 161 | 2.64 | 1.49 |
| -25 | 299 | 174 | 3.30 | 1.72 |
| -20 | 368 | 187 | 4.08 | 1.97 |
| -15 | 447 | 199 | 4.98 | 2.25 |
| -10 | 537 | 208 | 6.01 | 2.57 |

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. 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 |
|----------------------------|--------------------|---------|--------------------|----------------|
| -40 | 121 | 133 | 1.45 | 0.91 |
| -35 | 160 | 151 | 1.92 | 1.06 |
| -30 | 205 | 168 | 2.48 | 1.22 |
| -25 | 259 | 186 | 3.14 | 1.39 |
| -20 | 321 | 203 | 3.91 | 1.58 |
| -15 | 393 | 220 | 4.81 | 1.79 |
| -10 | 474 | 235 | 5.84 | 2.02 |

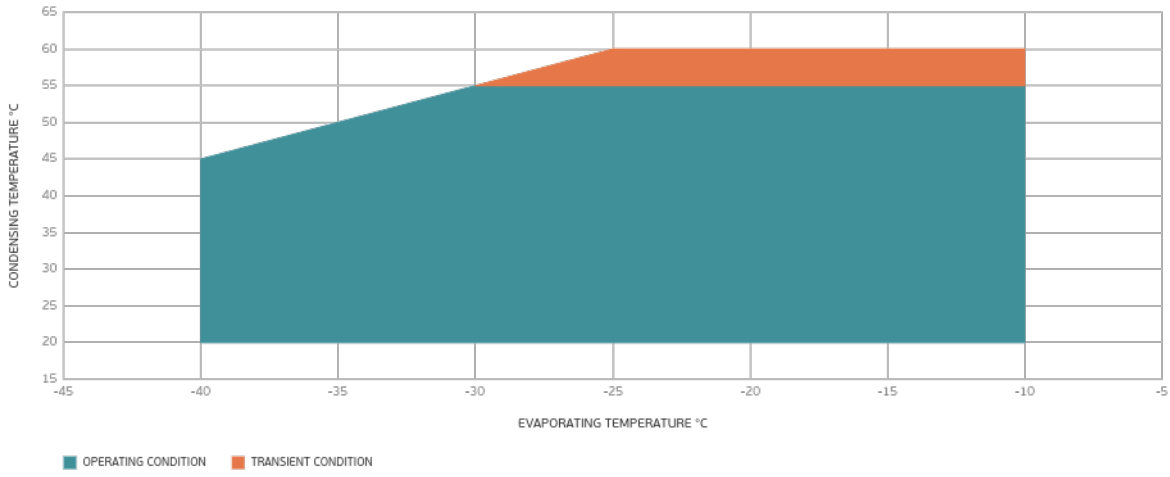
Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -40 | 98 | 136 | 1.31 | 0.72 |
| -35 | 132 | 155 | 1.77 | 0.85 |
| -30 | 172 | 175 | 2.31 | 0.98 |
| -25 | 219 | 195 | 2.96 | 1.12 |
| -20 | 274 | 216 | 3.72 | 1.27 |
| -15 | 338 | 237 | 4.62 | 1.42 |
| -10 | 411 | 258 | 5.65 | 1.59 |

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

Operating Envelope



External Dimensions

