



APPROVALS



ENGINEERING CODE
513306231

APPROVED REFRIGERANT
R-290

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
EN12900

APPLICATION
LBP

COOLING CAPACITY
197 W (LBP)

EFFICIENCY
1.15 W/W (LBP)

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

| | |
|-------------------------------|-----------------------------------|
| Type | Hermetic reciprocating |
| Technology Type | On-Off |
| Displacement | 6.76 cm ³ |
| Compressor Cooling | Fan/NotControlled/220 |
| Expansion Device | Capillary Tube or Expansion Valve |
| Horse Power | 1/2 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 | 17 Ω at 25° C |
| Run Winding Resistance | 10 Ω at 25° C |

Mechanical Data

| | |
|------------------------|--------|
| Oil Charge | 180 ml |
| Oil Type Configuration | ESTER |
| Oil Type Viscosity | ISO22 |
| Weight | 8 Kg |

Electrical Components

| | Description |
|------------------|------------------------|
| Starting Device | Relay MTRPH-0025-65* |
| Motor Protection | T0933/G6 |
| Start Capacitor | 72-88 Uf / 330 V |

External Characteristics

| Tray Holder | No | |
|-------------|-------------------|--------------------|
| Connector | Internal Diameter | Shape |
| Suction | 6.1 mm | Slanted 42°/Copper |
| Discharge | 4.94 mm | Straight/Copper |
| Process | 6.1 mm | Slanted 42°/Copper |

PERFORMANCE

Rated Points

| Condensing Temperature | Evaporating Temperature | Cooling Capacity | Power Consumption | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------------|------------|
| 40.00°C | -35.00°C | 197 W | 171 W | 2.24 kg/h | 1.15 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 | 159 | 155 | 1.75 | 1.03 |
| -35 | 207 | 172 | 2.28 | 1.21 |
| -30 | 265 | 188 | 2.91 | 1.41 |
| -25 | 331 | 204 | 3.66 | 1.62 |
| -20 | 409 | 220 | 4.53 | 1.86 |
| -15 | 498 | 235 | 5.55 | 2.12 |
| -10 | 600 | 248 | 6.72 | 2.41 |

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 | 134 | 159 | 1.61 | 0.84 |
| -35 | 177 | 178 | 2.13 | 1 |
| -30 | 228 | 198 | 2.76 | 1.15 |
| -25 | 288 | 218 | 3.49 | 1.32 |
| -20 | 358 | 239 | 4.36 | 1.5 |
| -15 | 439 | 259 | 5.37 | 1.69 |
| -10 | 530 | 279 | 6.53 | 1.9 |

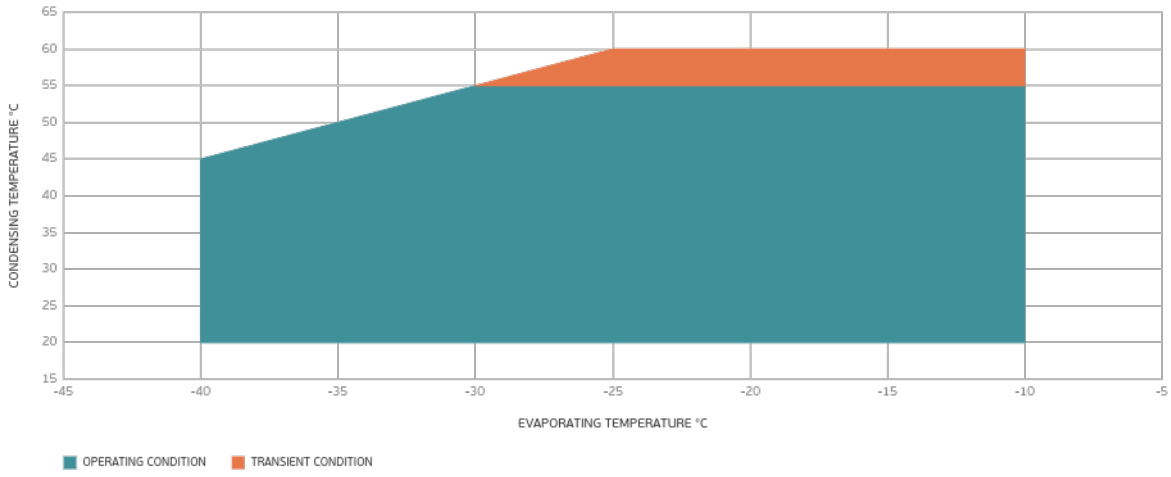
Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

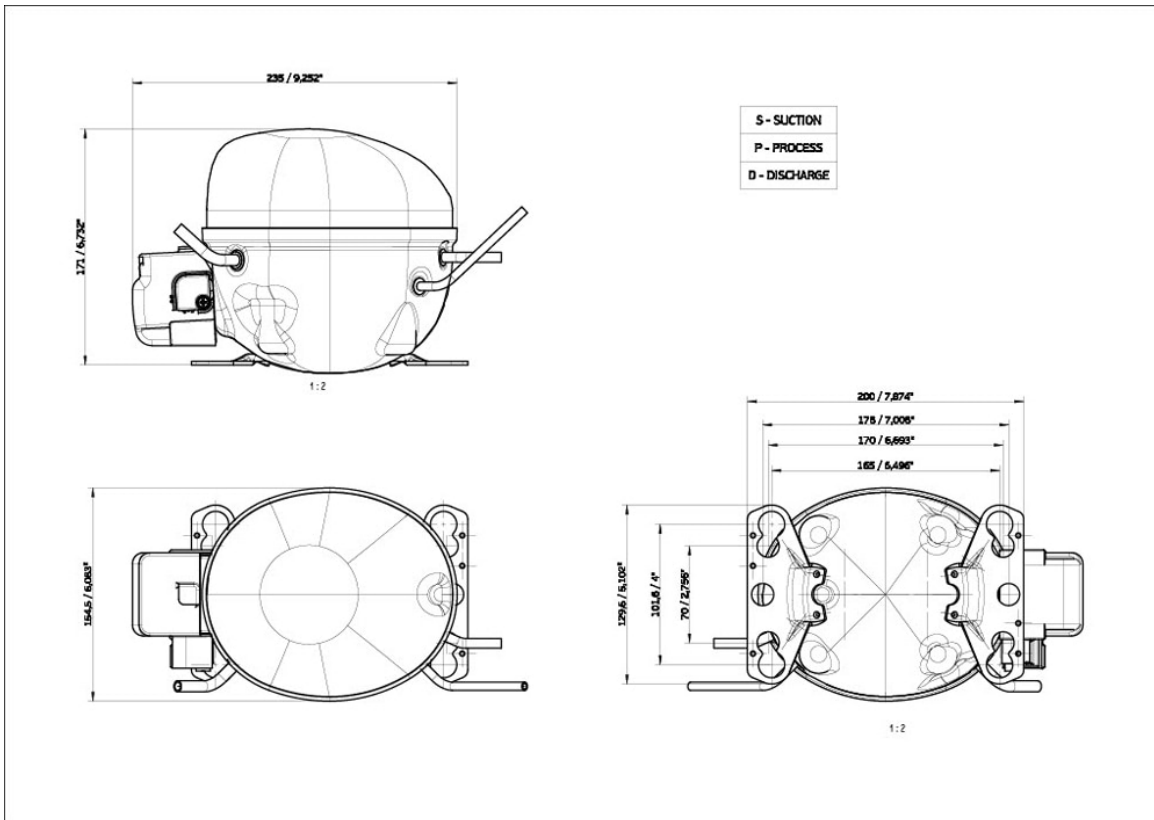
| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -40 | 109 | 162 | 1.46 | 0.67 |
| -35 | 147 | 183 | 1.97 | 0.8 |
| -30 | 192 | 205 | 2.58 | 0.94 |
| -25 | 245 | 228 | 3.31 | 1.07 |
| -20 | 307 | 253 | 4.16 | 1.21 |
| -15 | 378 | 278 | 5.16 | 1.36 |
| -10 | 460 | 303 | 6.32 | 1.52 |

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



Wiring Diagram

SM28-4

