



APPROVALS



ENGINEERING CODE
513306221

APPROVED REFRIGERANT
R-600a

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
EN12900

APPLICATION
HBP

COOLING CAPACITY
470 W (HBP)

EFFICIENCY
2.29 W/W (HBP)

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

| | |
|-------------------------------|-----------------------------------|
| Type | Hermetic reciprocating |
| Technology Type | On-Off |
| Displacement | 9.04 cm ³ |
| Compressor Cooling | Fan/NotControlled/220 |
| Expansion Device | Capillary Tube or Expansion Valve |
| Horse Power | 1/5 hp |
| Power Supply | 220-240 V 50 Hz |
| Evaporating Temperature Range | -15 °C to 10 °C |

Electrical Data

| | |
|-----------------|------|
| Motor type | CSIR |
| Starting Torque | HST |

Mechanical Data

| | |
|------------------------|--------|
| Oil Charge | 180 ml |
| Oil Type Configuration | ESTER |
| Oil Type Viscosity | ISO22 |
| Weight | 7.8 Kg |

Electrical Components

| | Description |
|------------------|--------------------|
| Starting Device | Relay MTRP-0015* |
| Start Capacitor | 43-53 Uf / 330 V |
| Motor Protection | T0933/G6 |

External Characteristics

| Tray Holder | Yes | |
|-------------|-------------------|------------------------|
| Connector | Internal Diameter | Shape |
| Suction | 6.1 mm | Slanted 42°/Copper |
| Discharge | 4.94 mm | Straight/Copper |
| Process | 6 mm | Slanted 42°/Copper(OD) |

PERFORMANCE

Rated Points

| Condensing Temperature | Evaporating Temperature | Cooling Capacity | Power Consumption | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------------|------------|
| 50.00°C | 5.00°C | 470 W | 205 W | 6.41 kg/h | 2.29 W/W |

Test Condition: EN12900HBP, Fan/NotControlled/220, Return Gas 20°C, Evaporation 5.00°C, Condensing 50.00°C, Ambient 35°C, Liquid 50°C, Subcooling OK. 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 |
|----------------------------|--------------------|---------|--------------------|----------------|
| -15 | 240 | 127 | 2.82 | 1.88 |
| -10 | 301 | 139 | 3.55 | 2.16 |
| -5 | 375 | 152 | 4.42 | 2.47 |
| 0 | 459 | 165 | 5.44 | 2.78 |
| 5 | 555 | 179 | 6.61 | 3.1 |
| 10 | 663 | 195 | 7.93 | 3.4 |

Test Condition: EN12900HBP, 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 |
|----------------------------|--------------------|---------|--------------------|----------------|
| -15 | 218 | 135 | 2.80 | 1.62 |
| -10 | 274 | 149 | 3.52 | 1.84 |
| -5 | 339 | 163 | 4.37 | 2.08 |
| 0 | 415 | 178 | 5.37 | 2.33 |
| 5 | 501 | 195 | 6.51 | 2.58 |
| 10 | 596 | 212 | 7.79 | 2.81 |

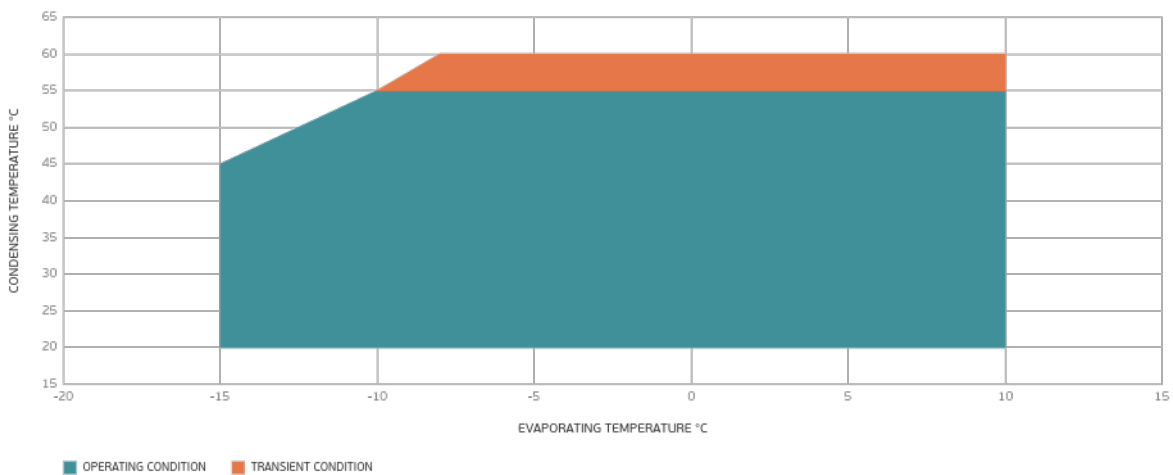
Test Condition: EN12900HBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C , Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

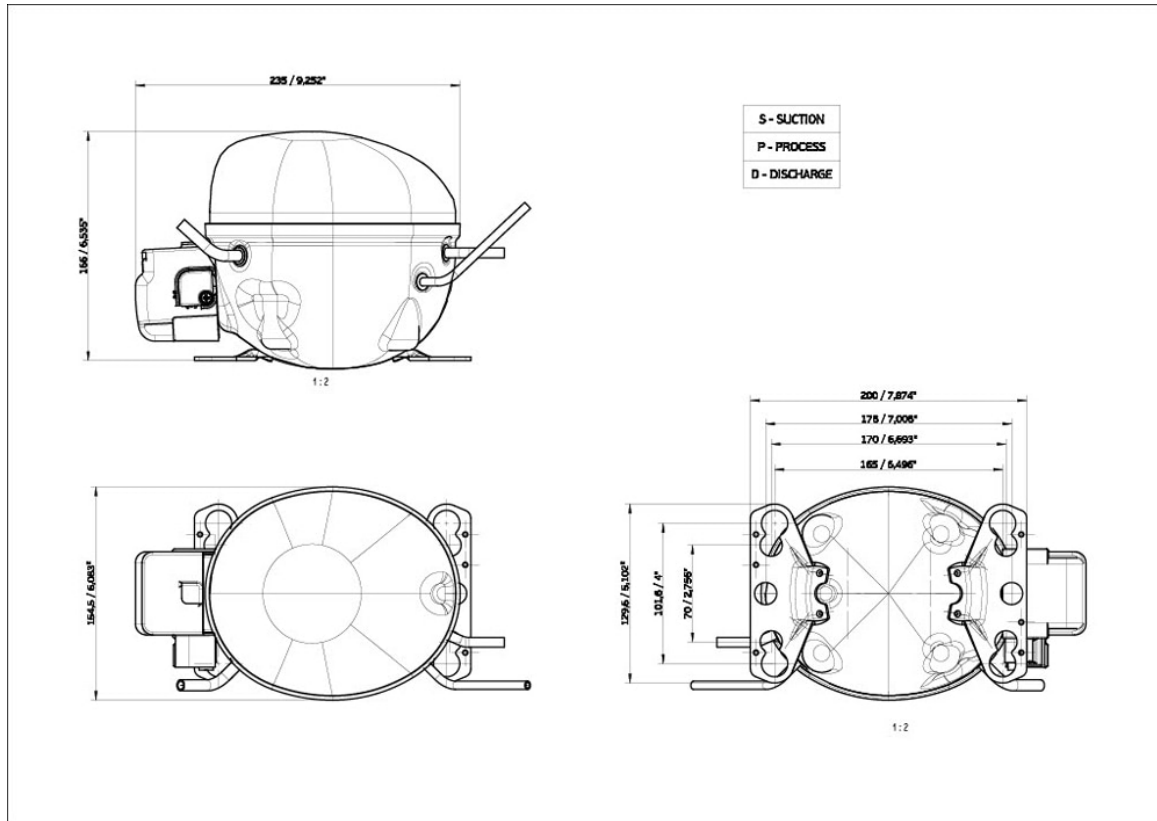
| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -15 | 192 | 142 | 2.71 | 1.35 |
| -10 | 241 | 158 | 3.42 | 1.53 |
| -5 | 300 | 174 | 4.27 | 1.72 |
| 0 | 367 | 191 | 5.24 | 1.92 |
| 5 | 443 | 209 | 6.35 | 2.12 |
| 10 | 526 | 228 | 7.59 | 2.31 |

Test Condition: EN12900HBP, 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

