



APPROVALS



ENGINEERING CODE
513300160

APPROVED REFRIGERANT
R-134a

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
EN12900

APPLICATION
HBP

COOLING CAPACITY
770 W (HBP)

EFFICIENCY
2.36 W/W (HBP)

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

| | |
|-------------------------------|-----------------------------------|
| Type | Hermetic reciprocating |
| Technology Type | On-Off |
| Displacement | 7.96 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 | -15 °C to 10 °C |

Electrical Data

| | |
|------------------------------------|-----------------|
| Motor type | CSIR |
| Starting Torque | HST |
| Start Winding Resistance | 18.4 Ω at 25° C |
| Run Winding Resistance | 10.9 Ω at 25° C |
| Locked Rotor Amperage (LRA) | 26.7 A |
| Rated Load Amperage (RLA) at 60 Hz | 3 A |

Mechanical Data

| | |
|------------------------|--------|
| Oil Charge | 180 ml |
| Oil Type Configuration | ESTER |
| Oil Type Viscosity | ISO22 |
| Weight | 8.1 Kg |

Electrical Components

| | Description |
|------------------|-----------------------------|
| Starting Device | Relay Z13515005* MTRP-38* |
| Start Capacitor | 53-64 Uf / 350 V |
| Motor Protection | MRA58169 T0318/G6 |

External Characteristics

| Tray Holder | Yes | |
|-------------|-------------------|-------------------------------------|
| Connector | Internal Diameter | Shape |
| Suction | 6.2 mm | Slanted 40° up + 45° to Back/Copper |
| Discharge | 4.9 mm | Slanted 0° up + 24° to Back/Copper |
| Process | 6.2 mm | Slanted 40° up + 45° to Back/Copper |

PERFORMANCE

Rated Points

| Condensing Temperature | Evaporating Temperature | Cooling Capacity | Power Consumption | Gas Flow Rate | Efficiency |
|------------------------|-------------------------|------------------|-------------------|---------------|------------|
| 50.00°C | 5.00°C | 770 W | 326 W | 18.74 kg/h | 2.36 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 | 278 | 263 | 8.28 | 1.05 |
| -10 | 365 | 302 | 10.23 | 1.21 |
| -5 | 474 | 341 | 12.71 | 1.39 |
| 0 | 606 | 382 | 15.71 | 1.59 |
| 5 | 758 | 426 | 19.22 | 1.78 |
| 10 | 928 | 472 | 23.22 | 1.96 |

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 | 356 | 213 | 8.26 | 1.67 |
| -10 | 443 | 239 | 10.34 | 1.86 |
| -5 | 551 | 266 | 12.91 | 2.07 |
| 0 | 676 | 296 | 15.97 | 2.29 |
| 5 | 819 | 329 | 19.50 | 2.49 |
| 10 | 977 | 367 | 23.48 | 2.66 |

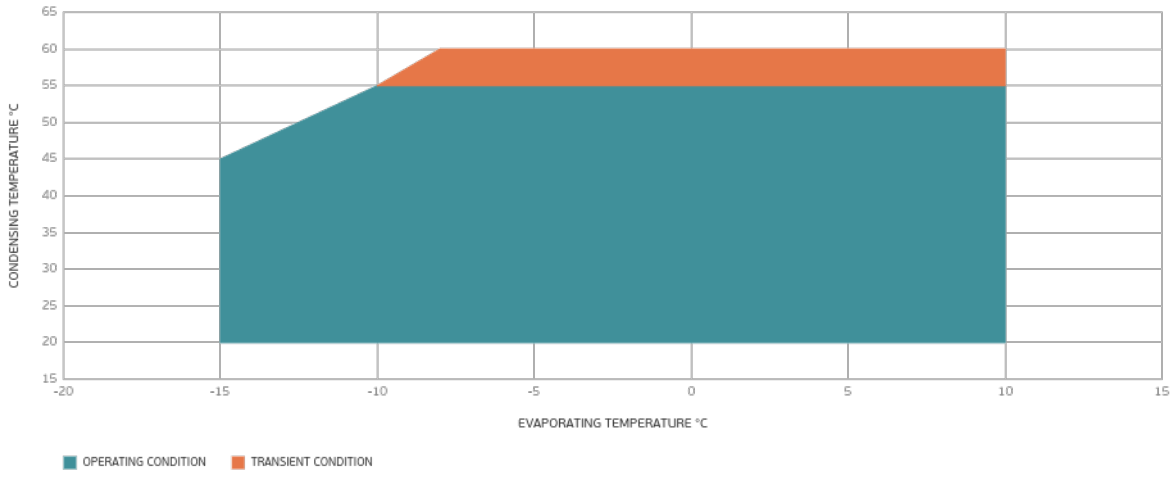
Test Condition: EN12900HBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C , Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

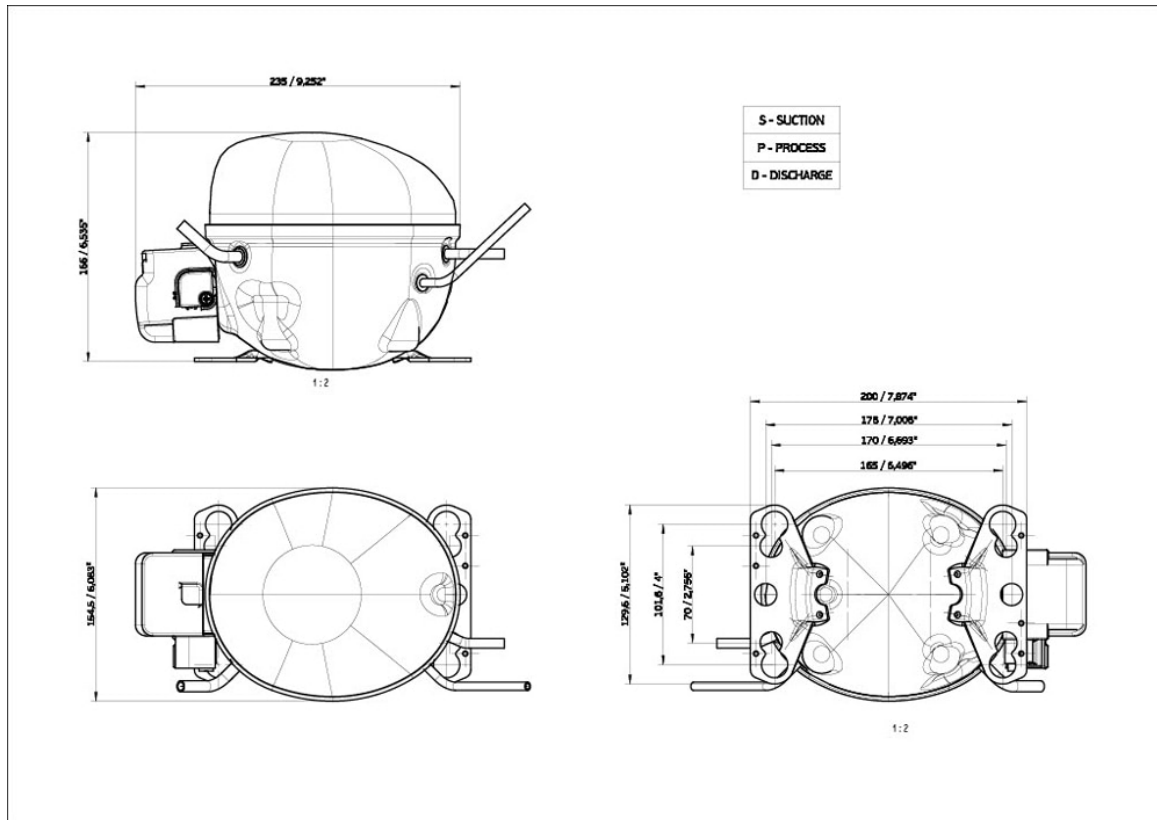
| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -15 | 281 | 228 | 7.25 | 1.23 |
| -10 | 351 | 256 | 9.10 | 1.37 |
| -5 | 437 | 287 | 11.41 | 1.53 |
| 0 | 539 | 321 | 14.16 | 1.68 |
| 5 | 654 | 360 | 17.35 | 1.82 |
| 10 | 781 | 403 | 20.95 | 1.94 |

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

