





**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 <sup>3</sup>              |
| 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             |
| Start Winding Resistance           | 21.1 Ω at 25° C |
| Run Winding Resistance             | 14.4 Ω at 25° C |
| Rated Load Amperage (RLA) at 50 Hz | 1.35 A          |

## Mechanical Data

|                        |         |
|------------------------|---------|
| Oil Charge             | 180 ml  |
| Oil Type Configuration | MINERAL |
| Oil Type Viscosity     | ISO10   |
| Weight                 | 7.7 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° 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 |
|------------------------|-------------------------|------------------|-------------------|---------------|------------|
| 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           |

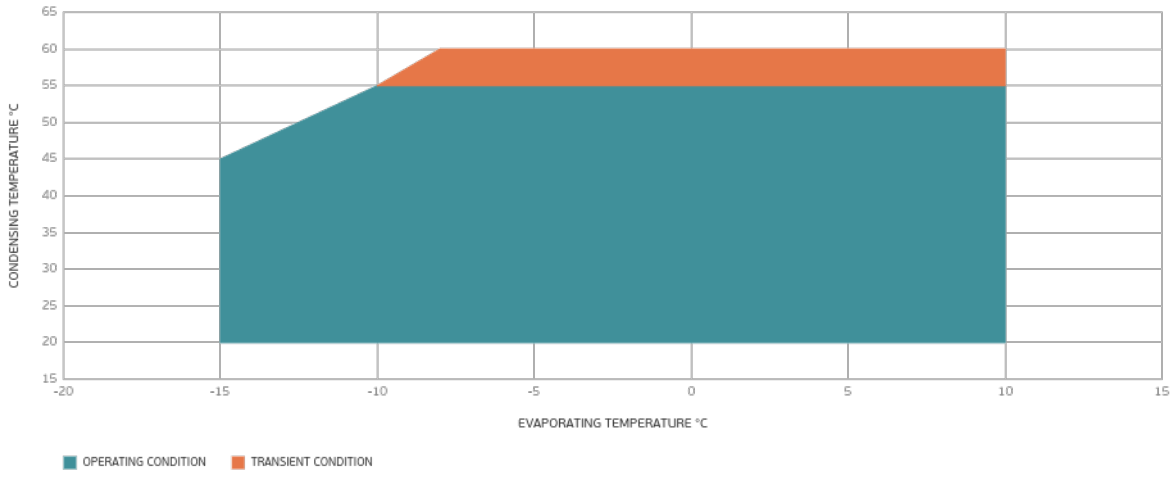
Test Condition: EN12900HBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C , Subcooling OK. Data are an indication of performance based simulation.

### Condensing Temperature 55°C

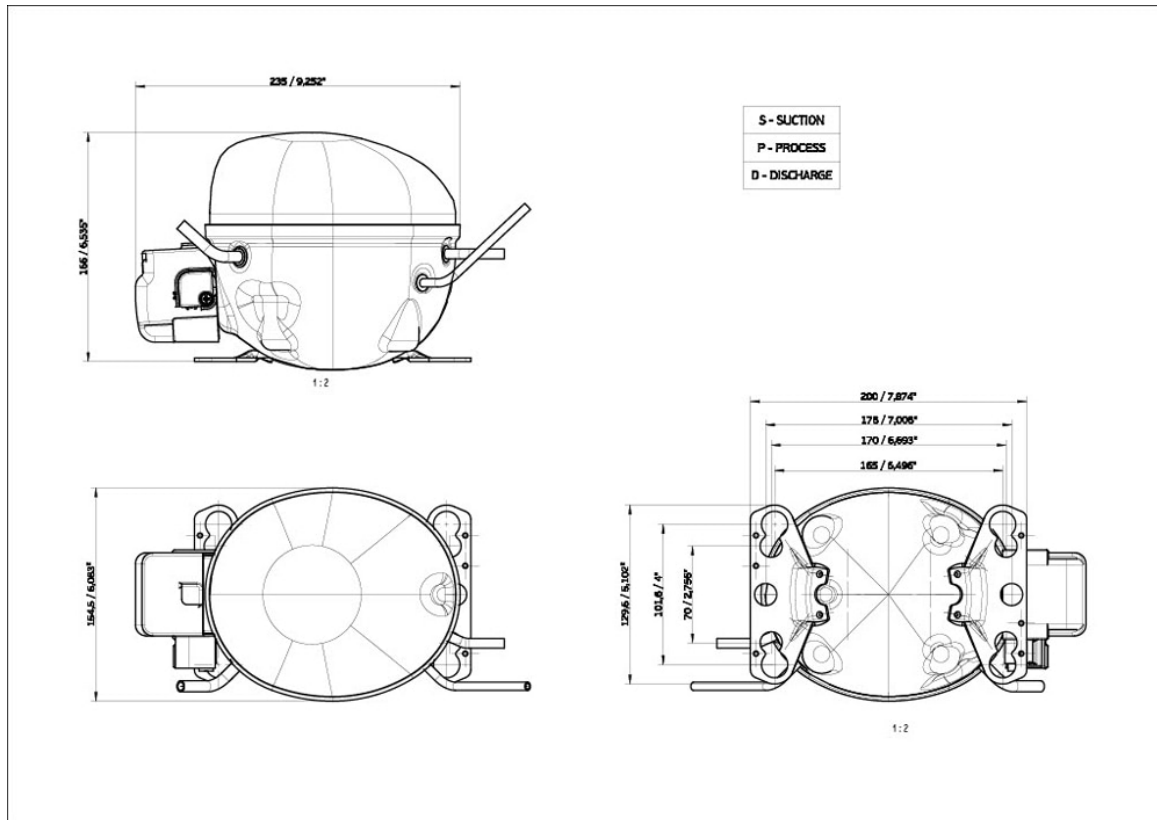
| Evaporating Temperature °C | Cooling Capacity W | Power W | Gas Flow Rate kg/h | Efficiency W/W |
|----------------------------|--------------------|---------|--------------------|----------------|
| -15                        | 192                | 142     | 2.71               | 1.35           |
| -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

