



**APPROVALS**



**ENGINEERING CODE**  
872HA67

**APPROVED REFRIGERANT**  
R-290

**POWER SUPPLY**  
220-240 V 50 Hz

**STANDARD CONDITIONS**  
ASHRAE

**APPLICATION**  
MBP

**COOLING CAPACITY**  
364 W (MBP)

**EFFICIENCY**  
1.85 W/W (MBP)

**MOTOR TYPE**  
CSIR

**STARTING TORQUE**  
HST

**DATA**

**General Data**

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	4.5 cm <sup>3</sup>
Compressor Cooling	Static/NotControlled/220
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1/4 hp
Power Supply	220-240 V 50 Hz
Evaporating Temperature Range	-20 °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	T0765/G6

## External Characteristics

Tray Holder	Yes	
Connector	Internal Diameter	Shape
Suction	6.1 mm	Slanted 42°/Copper
Discharge	4.94 mm	Straight/Copper
Process	6.1 mm	Slanted 42°/Copper

## PERFORMANCE

### Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Gas Flow Rate	Efficiency
54.40°C	-6.70°C	364 W	197 W	4.17 kg/h	1.85 W/W

Test Condition: ASHRAEMB46, Static/NotControlled/220, Return Gas 35°C, Evaporation -6.70°C, Condensing 54.40°C, Ambient 35°C, Liquid 46.1°C, Subcooling 8.3K. 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
-20	331	138	3.19	2.4
-15	406	146	3.93	2.78
-10	499	154	4.84	3.25
-5	608	160	5.92	3.79
0	731	166	7.17	4.41
5	868	170	8.57	5.12
10	1018	172	10.13	5.94

Test Condition: ASHRAEMB46, Static/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. 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
-20	272	149	2.83	1.83
-15	331	160	3.46	2.07
-10	406	171	4.26	2.37
-5	496	182	5.23	2.73
0	599	192	6.36	3.12
5	715	201	7.64	3.56
10	843	208	9.08	4.05

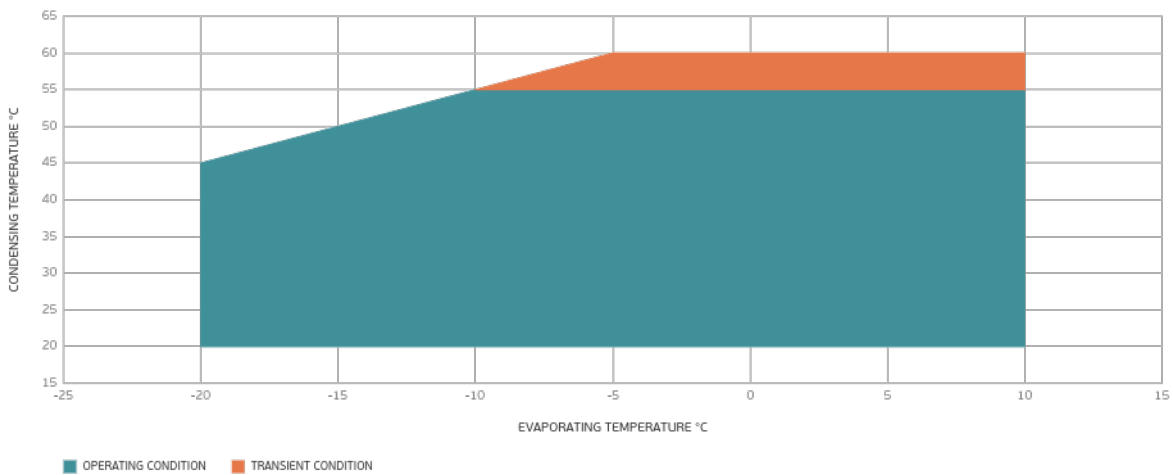
Test Condition: ASHRAEMBP46, Static/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

### Condensing Temperature 55°C

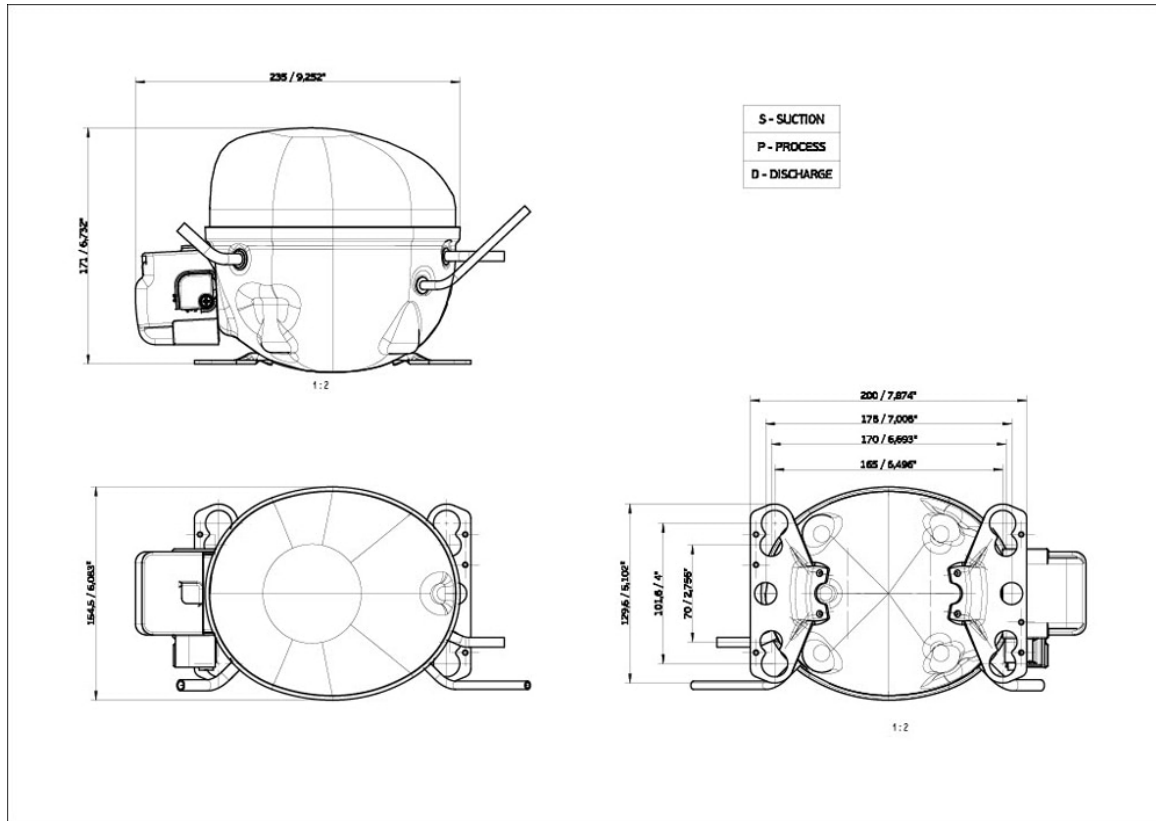
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-20	216	160	2.46	1.35
-15	258	174	2.95	1.48
-10	314	188	3.61	1.68
-5	385	202	4.43	1.91
0	467	215	5.42	2.17
5	562	229	6.57	2.46
10	667	241	7.87	2.77

Test Condition: ASHRAEMBP46, Static/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

### Operating Envelope



## External Dimensions



## Wiring Diagram

SM28-4

