



**APPROVALS**




 **ENGINEERING CODE**  
863CA51


 **APPROVED REFRIGERANT**  
R-290


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

 **STANDARD CONDITIONS**  
ASHRAE

 **APPLICATION**  
MBP

 **COOLING CAPACITY**  
973 W (MBP)

 **EFFICIENCY**  
1.69 W/W (MBP)

 **MOTOR TYPE**  
CSIR

 **STARTING TORQUE**  
HST

**DATA**

**General Data**

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	12.11 cm <sup>3</sup>
Compressor Cooling	Fan/NotControlled/220
Fan Air Flow	520 m <sup>3</sup> /h
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1/2 hp
Max Condensing Pressure Operating	18.07 bar
Max Condensing Pressure Peak	20.17 bar
Power Supply	220-240 V 50 Hz
Evaporating Temperature Range	-20 °C to 10 °C

**Electrical Data**

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	20.88 Ω at 25° C
Run Winding Resistance	3.93 Ω at 25° C

## Mechanical Data

Maximum Recommended Refrigerant Charge	150 g
Oil Charge	350 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO22
Pressurization	Without dry air charge
Weight	11.6 Kg
Free Internal Volume	2.1 L

## Electrical Components

	Description
Start Capacitor	53-64 Uf / 330 V
Motor Protection	T0743/G6
Starting Device	Relay   MTRP-0050*

## External Characteristics

Base Plate	European	
Tray Holder	No	
Height	206 mm	
Connector	Internal Diameter	Shape
Suction	8.1 mm	Slanted 42°/Copper
Discharge	6.1 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	973 W	575 W	11.14 kg/h	1.69 W/W

Test Condition: ASHRAEMBP46, Fan/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	725	404	6.98	1.79
-15	894	433	8.65	2.07
-10	1092	460	10.60	2.37
-5	1319	486	12.86	2.72
0	1575	509	15.44	3.1
5	1861	529	18.37	3.52
10	2179	546	21.66	3.99

Test Condition: ASHRAEMB46, Fan/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	644	431	6.70	1.49
-15	794	469	8.29	1.69
-10	970	506	10.18	1.92
-5	1173	542	12.38	2.17
0	1405	576	14.91	2.44
5	1665	610	17.79	2.73
10	1954	641	21.05	3.05

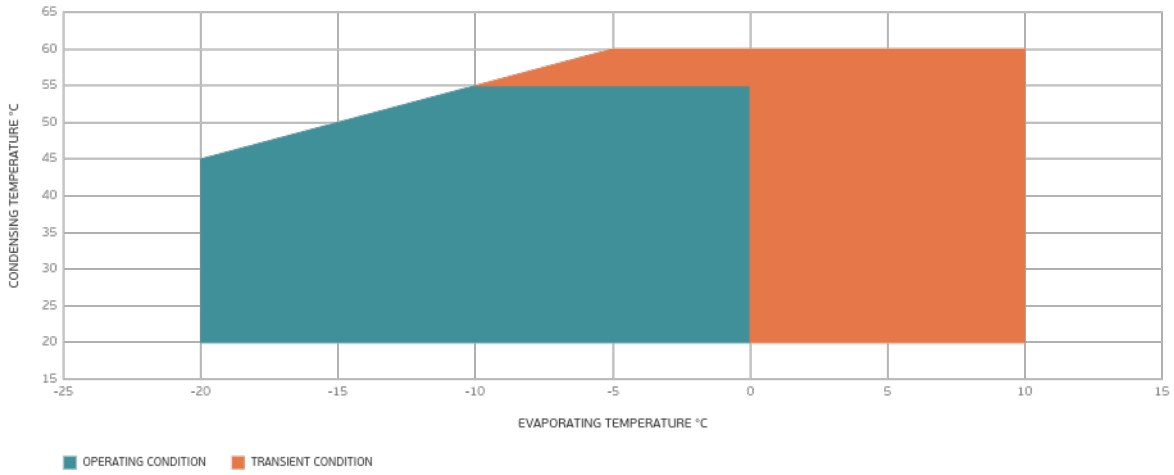
Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

### Condensing Temperature 55°C

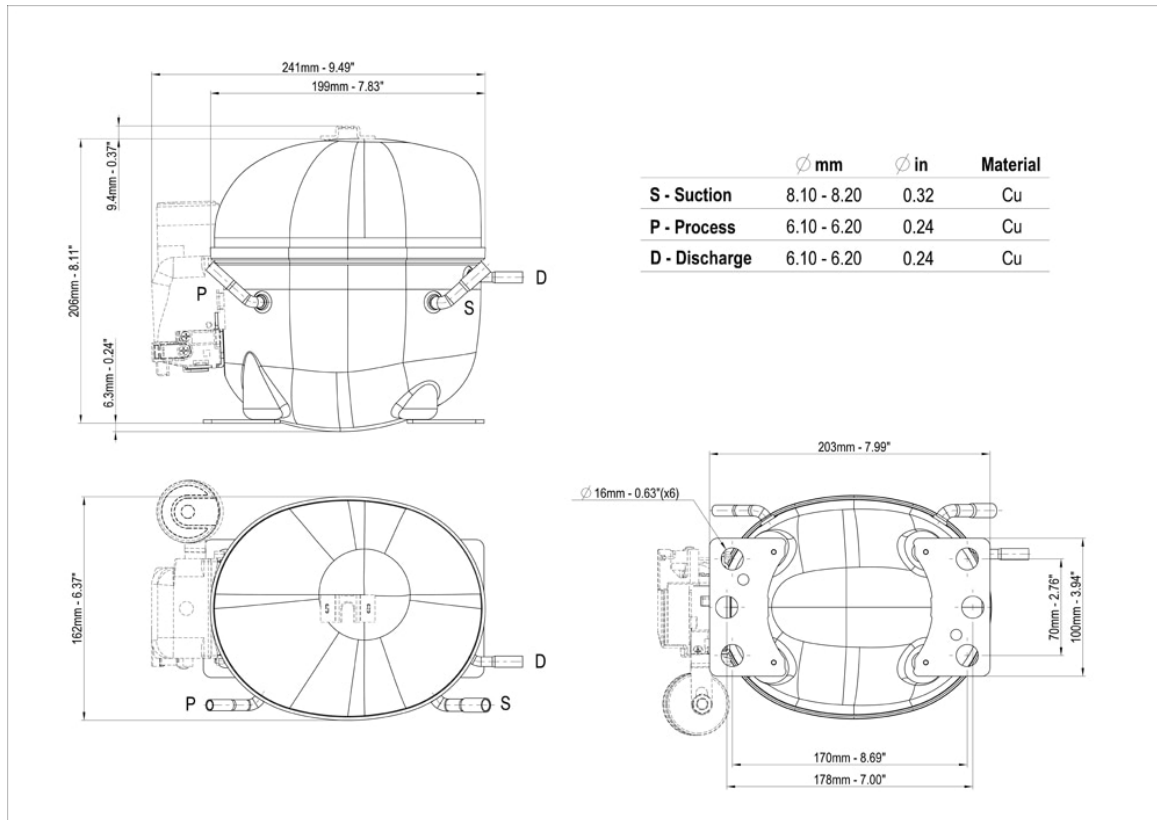
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-10	853	549	9.77	1.55
-5	1031	591	11.89	1.74
0	1236	634	14.34	1.95
5	1467	676	17.16	2.17
10	1726	717	20.36	2.41

Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

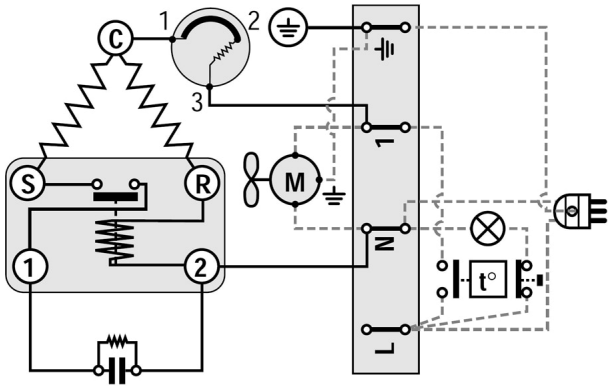
## Operating Envelope



## External Dimensions



## Wiring Diagram



## Assembly Instructions

