

APPROVALS



 **ENGINEERING CODE**
863GA51


 **APPROVED REFRIGERANT**
R-290

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

 **STANDARD CONDITIONS**
ASHRAE

 **APPLICATION**
MBP

 **COOLING CAPACITY**
1110 W (MBP)

 **EFFICIENCY**
1.64 W/W (MBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	14.28 cm ³
Compressor Cooling	Fan/NotControlled/220
Fan Air Flow	520 m ³ /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	13.9 Ω at 25° C
Run Winding Resistance	3.1 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
Starting Device	Relay MTRPH-0050-65*
Motor Protection	T0485/G6

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	1110 W	678 W	12.71 kg/h	1.64 W/W

Test Condition: ASHRAEMB46, 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	854	465	8.22	1.84
-15	1049	503	10.15	2.09
-10	1277	537	12.40	2.38
-5	1540	569	15.02	2.71
0	1838	597	18.03	3.08
5	2175	622	21.47	3.5
10	2553	643	25.38	3.97

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	748	492	7.78	1.52
-15	919	542	9.60	1.7
-10	1121	589	11.76	1.9
-5	1355	634	14.29	2.14
0	1624	676	17.23	2.4
5	1929	716	20.62	2.69
10	2272	753	24.48	3.02

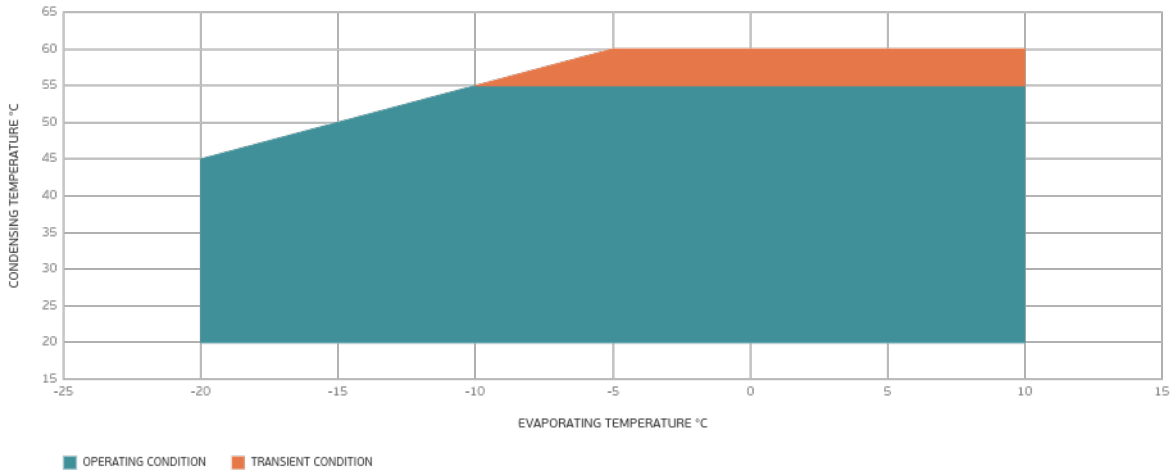
Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

Condensing Temperature 55°C

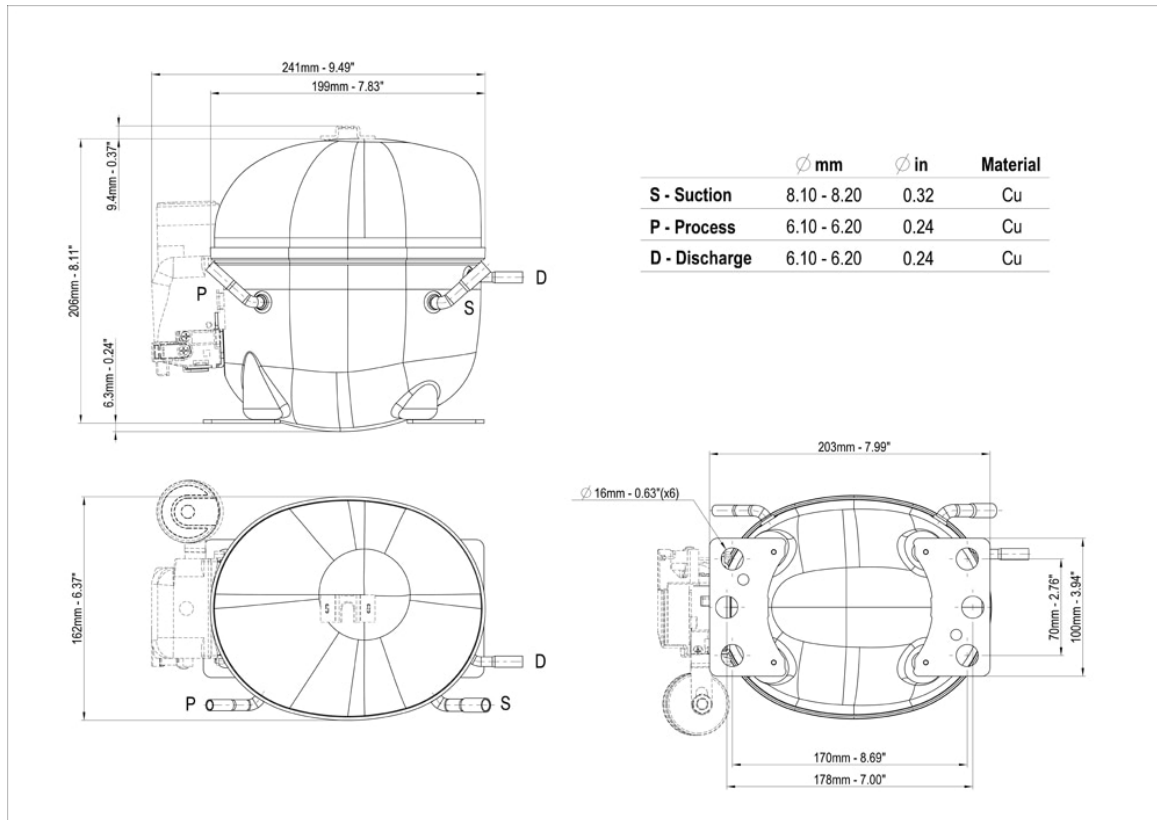
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-20	652	530	7.40	1.23
-15	797	588	9.09	1.36
-10	971	644	11.13	1.51
-5	1176	698	13.55	1.68
0	1412	751	16.39	1.88
5	1683	802	19.68	2.1
10	1990	850	23.46	2.34

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

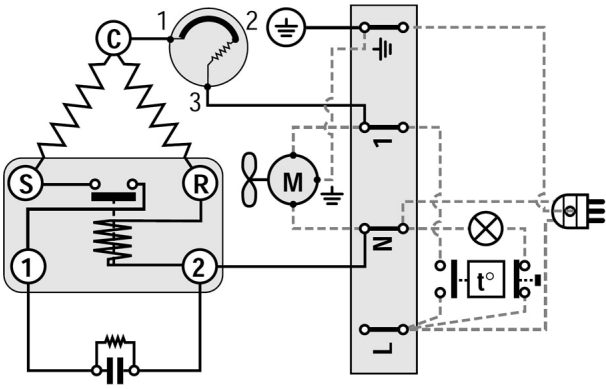
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

