



APPROVALS




 **ENGINEERING CODE**
863GA51


 **APPROVED REFRIGERANT**
R-290

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

 **STANDARD CONDITIONS**
EN12900

 **APPLICATION**
MBP

 **COOLING CAPACITY**
1015 W (MBP)

 **EFFICIENCY**
1.73 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
45.00°C	-10.00°C	1015 W	588 W	12.49 kg/h	1.73 W/W

Test Condition: EN12900MBP, Fan/NotControlled/220, Return Gas 20°C, Evaporation -10.00°C, Condensing 45.00°C, Ambient 35°C, Liquid 45°C, Subcooling 0K. 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	785	465	8.70	1.69
-15	965	502	10.76	1.92
-10	1175	537	13.16	2.19
-5	1418	568	15.97	2.5
0	1694	596	19.23	2.84
5	2007	620	22.98	3.24
10	2358	641	27.27	3.68

Test Condition: EN12900MBP, 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
-20	676	492	8.23	1.38
-15	832	541	10.18	1.54
-10	1015	588	12.49	1.73
-5	1228	632	15.21	1.94
0	1472	674	18.39	2.18
5	1749	713	22.07	2.45
10	2062	750	26.30	2.75

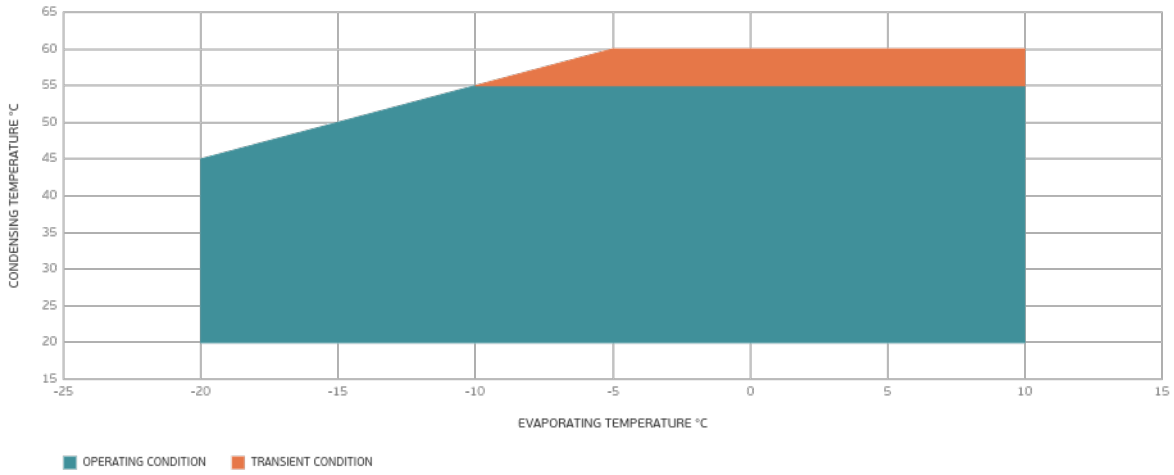
Test Condition: EN12900MBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

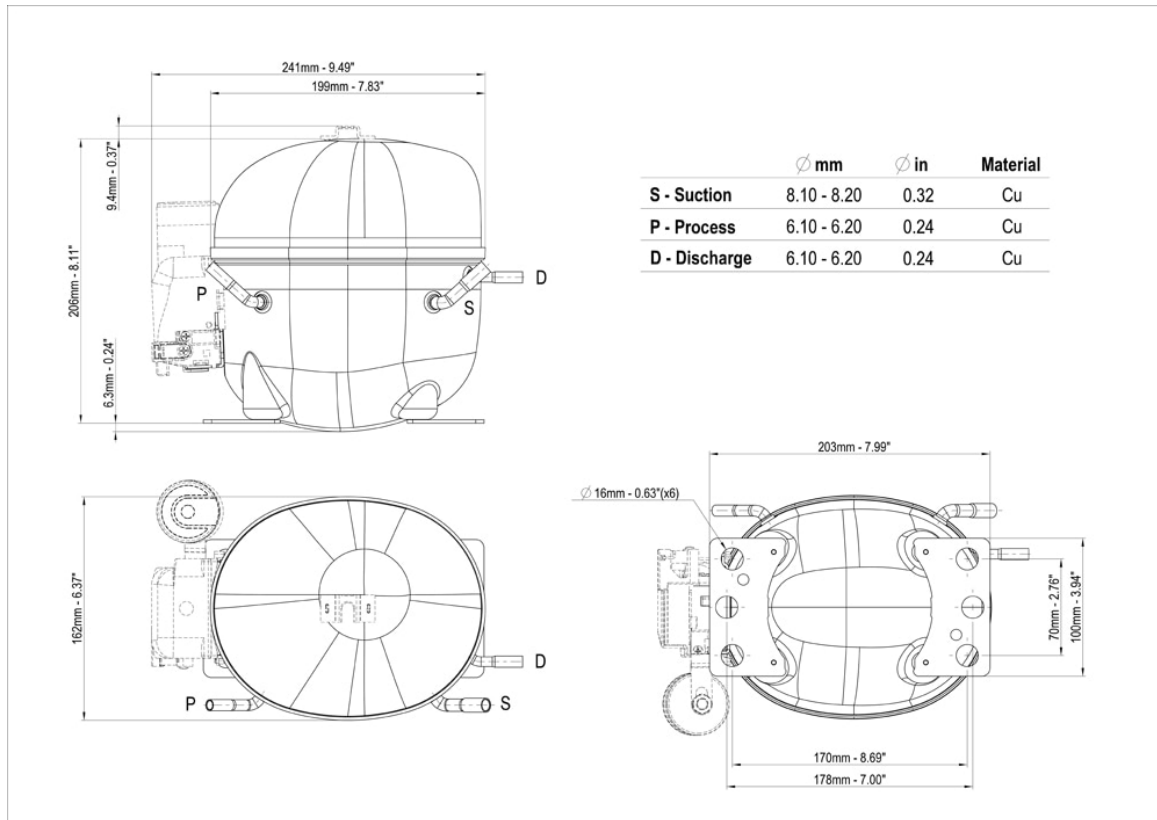
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-20	577	530	7.83	1.09
-15	706	587	9.64	1.2
-10	860	642	11.82	1.34
-5	1042	696	14.42	1.5
0	1251	747	17.49	1.67
5	1491	797	21.07	1.87
10	1764	845	25.21	2.09

Test Condition: EN12900MBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

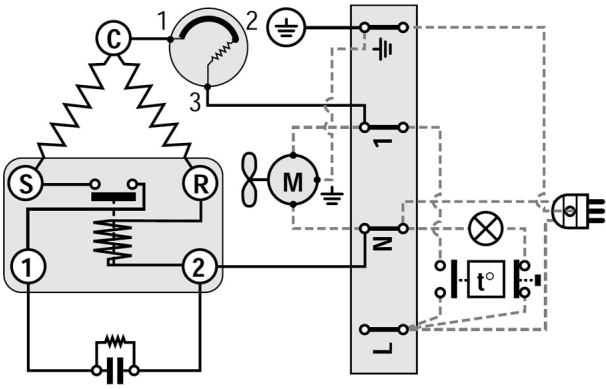
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

