



APPROVALS



 **ENGINEERING CODE**
863HA51


 **APPROVED REFRIGERANT**
R-290

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

 **STANDARD CONDITIONS**
EN12900

 **APPLICATION**
MBP

 **COOLING CAPACITY**
864 W (MBP)

 **EFFICIENCY**
1.84 W/W (MBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	12.11 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	18.67 Ω at 25° C
Run Winding Resistance	4.19 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	11.7 Kg
Free Internal Volume	2.1 L

Electrical Components

	Description
Start Capacitor	53-64 Uf / 330 V
Starting Device	Relay MTRP-0027*
Motor Protection	T0741/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	864 W	469 W	10.64 kg/h	1.84 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	651	365	7.23	1.78
-15	795	396	8.84	2.01
-10	980	425	10.97	2.31
-5	1201	452	13.53	2.66
0	1450	477	16.47	3.04
5	1721	500	19.72	3.44
10	2006	521	23.20	3.85

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	595	389	7.23	1.53
-15	712	430	8.72	1.66
-10	864	469	10.64	1.84
-5	1042	506	12.93	2.06
0	1241	542	15.52	2.29
5	1453	576	18.33	2.52
10	1672	609	21.31	2.75

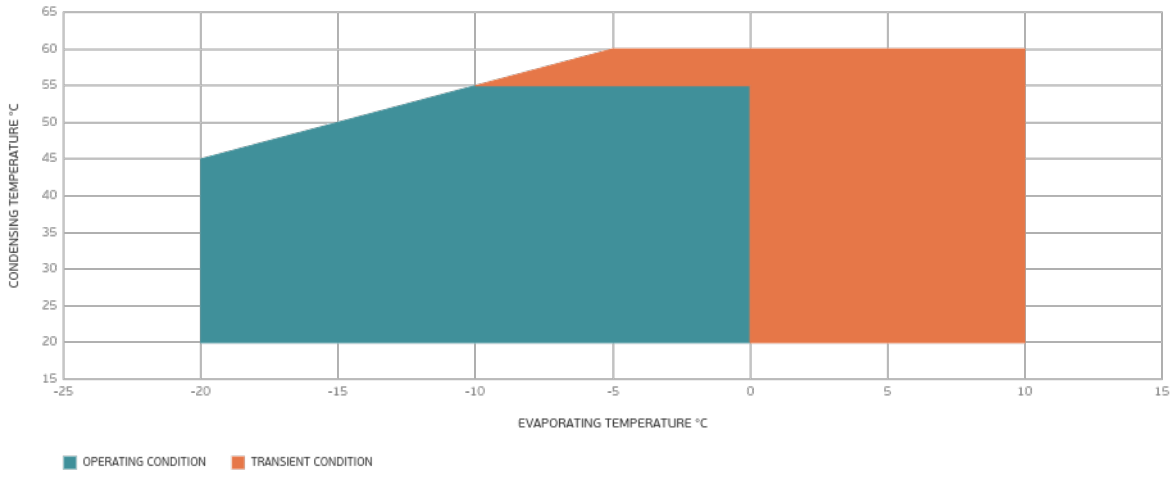
Test Condition: EN12900MBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

Condensing Temperature 55°C

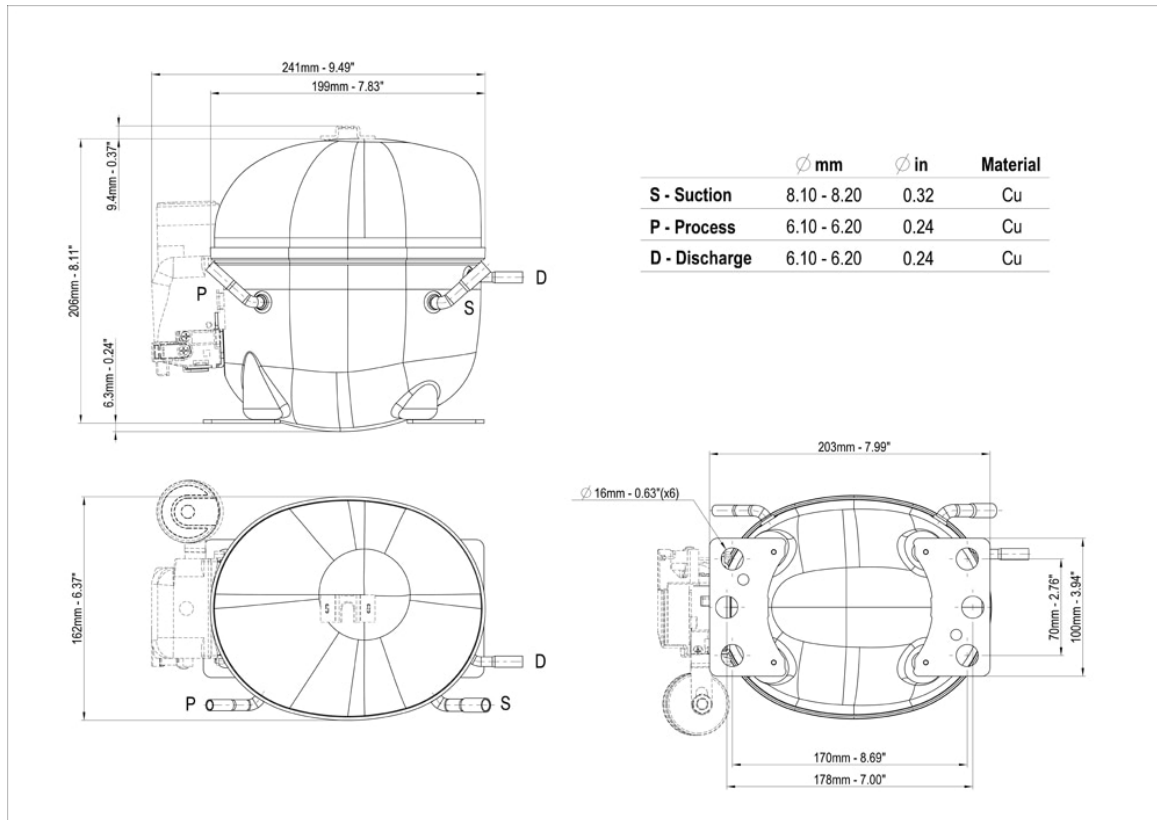
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-10	703	515	9.67	1.37
-5	845	560	11.69	1.51
0	999	605	13.94	1.65
5	1159	647	16.35	1.79
10	1316	688	18.84	1.91

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

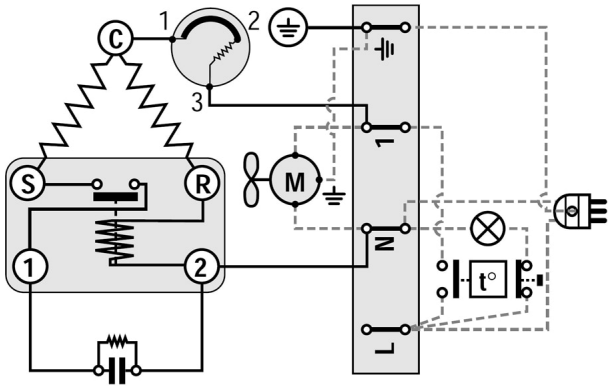
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

