



**APPROVALS**



 **ENGINEERING CODE**  
862GA51


 **APPROVED REFRIGERANT**  
R-290

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

 **STANDARD CONDITIONS**  
ASHRAE

 **APPLICATION**  
MBP

 **COOLING CAPACITY**  
999 W (MBP)

 **EFFICIENCY**  
1.82 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	27.95 Ω at 25° C
Run Winding Resistance	5.11 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	11.2 Kg
Free Internal Volume	2.1 L

## Electrical Components

	Description
Start Capacitor	53-64 Uf / 330 V
Starting Device	Relay   MTRP-49-65*
Motor Protection	T0964/G6

## External Characteristics

Base Plate	European	
Tray Holder	No	
Height	200 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	999 W	548 W	11.44 kg/h	1.82 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	754	373	7.26	2.02
-15	931	403	9.00	2.31
-10	1137	431	11.04	2.64
-5	1373	457	13.39	3.01
0	1640	481	16.08	3.41
5	1937	502	19.12	3.86
10	2266	522	22.53	4.34

Test Condition: ASHRAEMBP46, 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	663	399	6.90	1.66
-15	821	438	8.58	1.88
-10	1006	475	10.55	2.12
-5	1218	511	12.84	2.38
0	1458	546	15.47	2.67
5	1726	580	18.44	2.98
10	2022	612	21.78	3.3

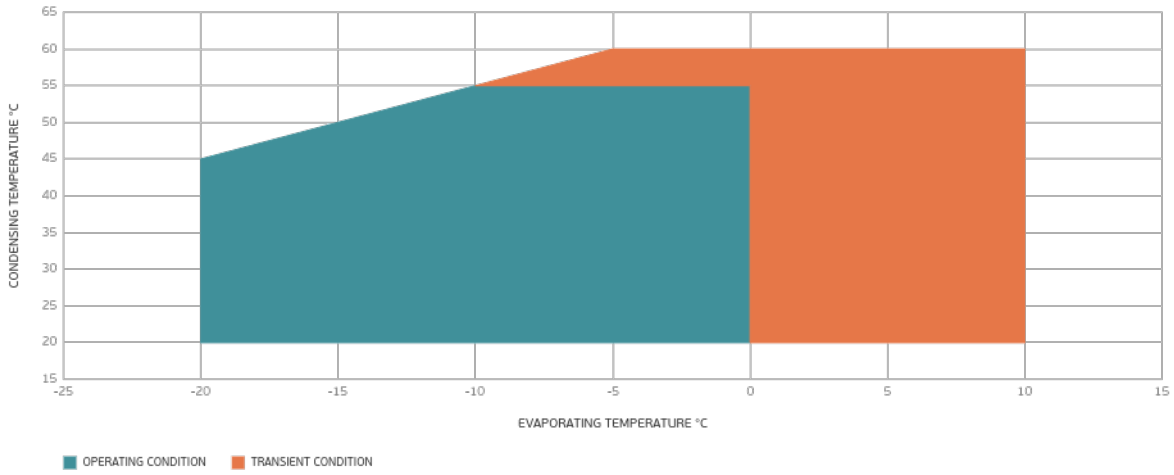
Test Condition: ASHRAEMBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

### Condensing Temperature 55°C

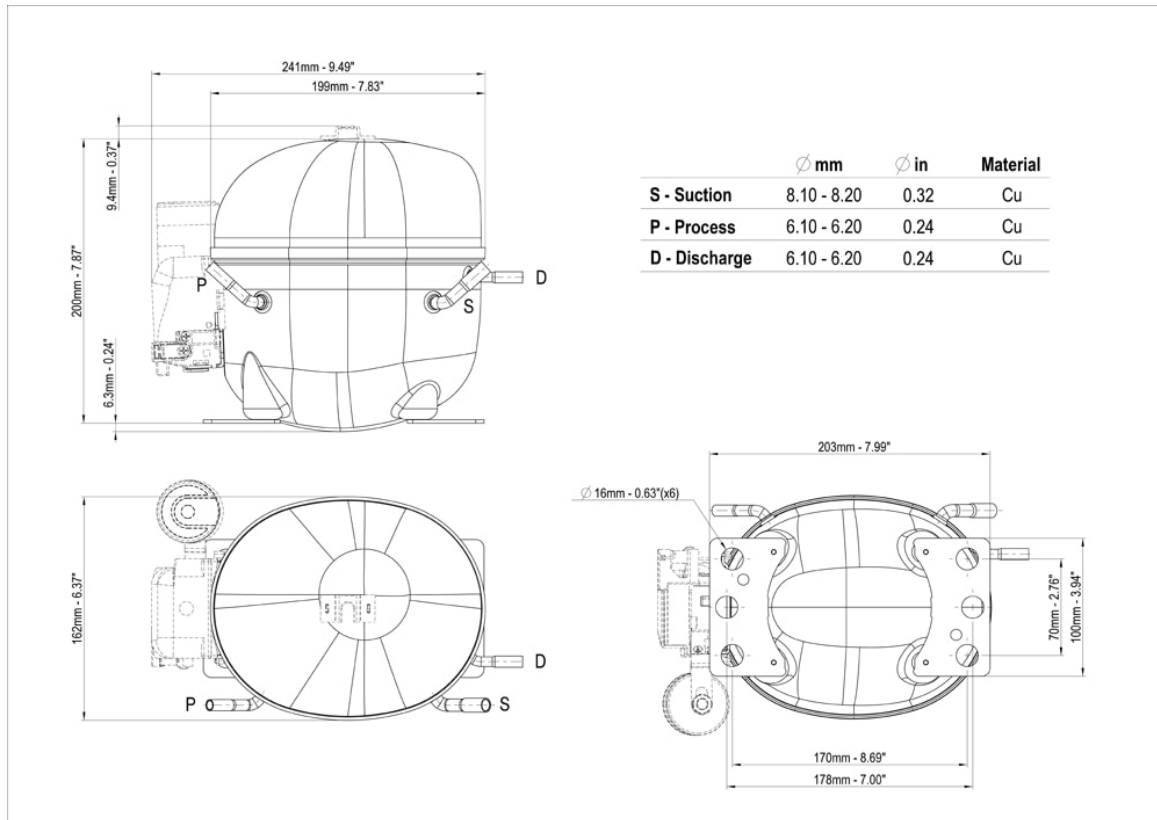
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-10	872	521	9.99	1.67
-5	1059	565	12.21	1.87
0	1271	609	14.75	2.09
5	1509	652	17.65	2.32
10	1773	694	20.91	2.55

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

## Operating Envelope

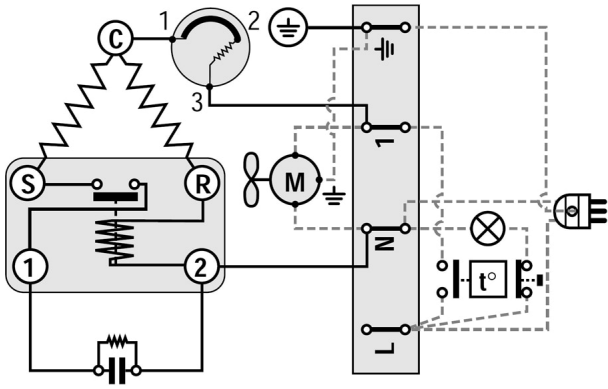


## External Dimensions



	∅ mm	∅ in	Material
<b>S - Suction</b>	8.10 - 8.20	0.32	Cu
<b>P - Process</b>	6.10 - 6.20	0.24	Cu
<b>D - Discharge</b>	6.10 - 6.20	0.24	Cu

## Wiring Diagram



## Assembly Instructions

