



**APPROVALS**



**ENGINEERING CODE**  
842FA04

**APPROVED REFRIGERANT**  
R-290

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

**STANDARD CONDITIONS**  
EN12900

**APPLICATION**  
MBP

**COOLING CAPACITY**  
951 W (MBP)

**EFFICIENCY**  
1.87 W/W (MBP)

**MOTOR TYPE**  
CSIR

**STARTING TORQUE**  
HST

**DATA**

**General Data**

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	14.5 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	12.7 Ω at 25° C
Run Winding Resistance	2.7 Ω at 25° C

## Mechanical Data

Maximum Recommended Refrigerant Charge	150 g
Oil Charge	450 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO22
Pressurization	Without dry air charge
Weight	16.9 Kg
Free Internal Volume	3.3 L

## Electrical Components

	Description
Motor Protection	T0645/G6
Starting Device	Relay   MTRPH-54-65*
Start Capacitor	53-64 Uf/330 V

## External Characteristics

Base Plate	Universal	
Tray Holder	No	
Height	220 mm	
Connector	Internal Diameter	Shape
Suction	9.6 mm	Vertical/Copper
Discharge	6.42 mm	Vertical/Copper
Process	6.42 mm	Vertical/Copper

## PERFORMANCE

## Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Gas Flow Rate	Efficiency
45.00°C	-10.00°C	951 W	509 W	11.70 kg/h	1.87 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	734	410	8.13	1.79
-15	923	438	10.29	2.11
-10	1146	464	12.84	2.47
-5	1404	486	15.82	2.89
0	1700	504	19.30	3.37
5	2037	519	23.33	3.93
10	2419	529	27.98	4.57

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	598	423	7.28	1.41
-15	759	468	9.29	1.62
-10	951	509	11.70	1.87
-5	1176	545	14.56	2.16
0	1437	576	17.95	2.49
5	1737	602	21.91	2.88
10	2078	623	26.51	3.34

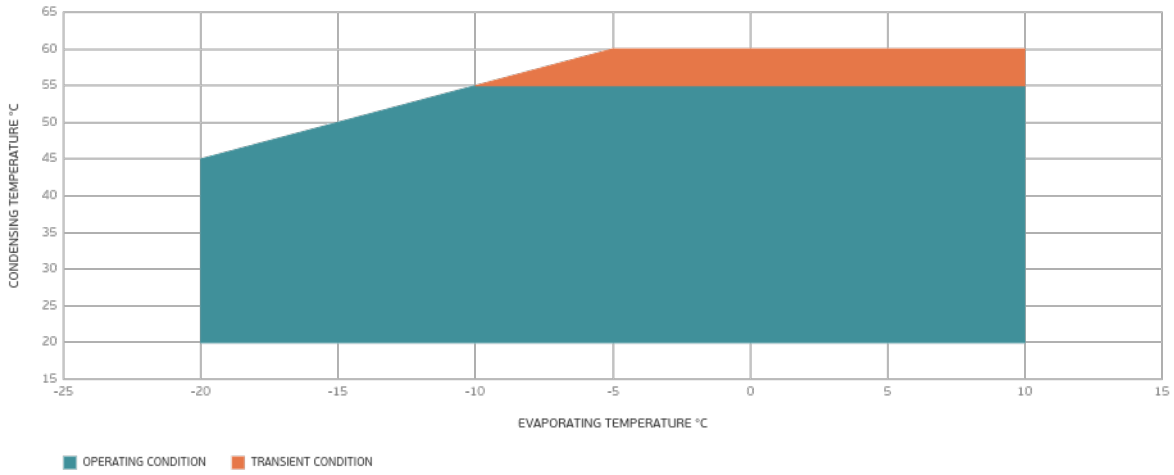
Test Condition: EN12900MBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

### Condensing Temperature 55°C

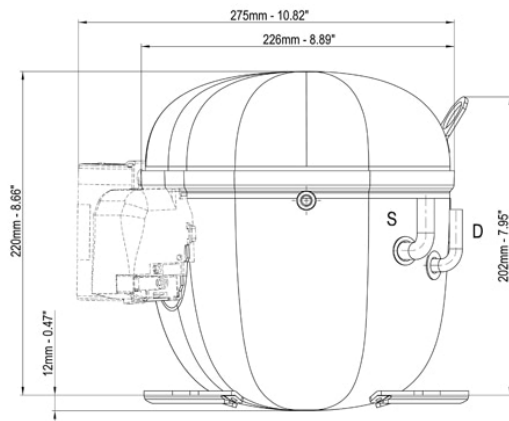
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-20	484	439	6.57	1.1
-15	614	497	8.37	1.23
-10	772	550	10.59	1.4
-5	961	597	13.30	1.61
0	1183	639	16.54	1.85
5	1443	674	20.38	2.14
10	1741	703	24.88	2.48

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

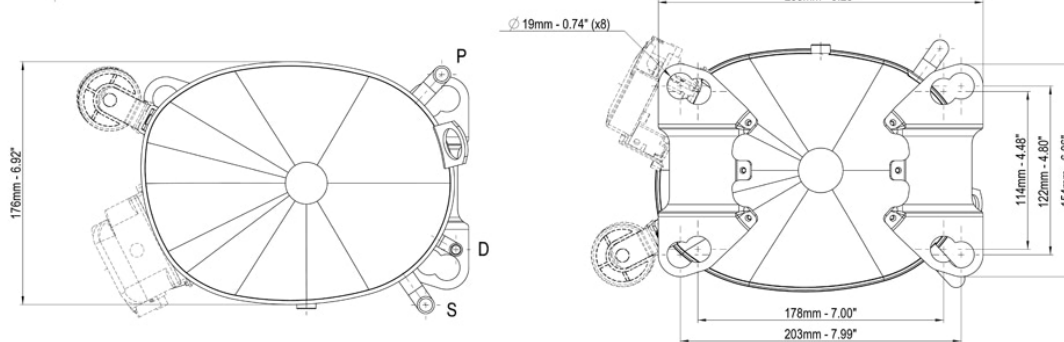
## Operating Envelope



## External Dimensions



	∅ mm	∅ in	Material
<b>S - Suction</b>	9.60	0.37	Cu
<b>P - Process</b>	6.42	0.25	Cu
<b>D - Discharge</b>	6.42	0.25	Cu



## Wiring Diagram



## Assembly Instructions

