

APPROVALS




 **ENGINEERING CODE**
842FA04


 **APPROVED REFRIGERANT**
R-290

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

 **STANDARD CONDITIONS**
ASHRAE

 **APPLICATION**
MBP

 **COOLING CAPACITY**
1016 W (MBP)

 **EFFICIENCY**
1.75 W/W (MBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	14.5 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	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
54.40°C	-6.70°C	1016 W	582 W	11.64 kg/h	1.75 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	798	410	7.68	1.95
-15	1004	439	9.71	2.29
-10	1245	465	12.09	2.68
-5	1525	487	14.87	3.13
0	1845	506	18.09	3.65
5	2209	520	21.80	4.25
10	2619	530	26.04	4.94

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	661	424	6.88	1.56
-15	839	469	8.76	1.79
-10	1050	510	11.02	2.06
-5	1298	546	13.69	2.38
0	1586	578	16.82	2.74
5	1916	605	20.47	3.17
10	2290	626	24.67	3.66

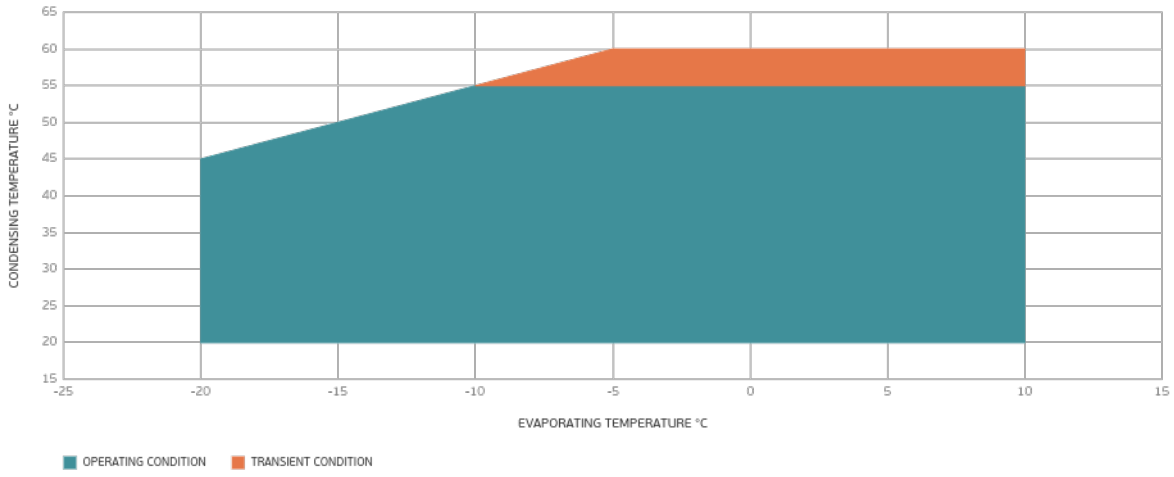
Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C , Subcooling 8.3K. Data are an indication of performance based simulation.

Condensing Temperature 55°C

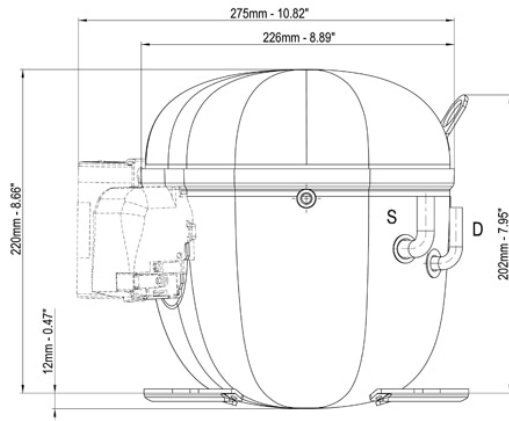
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-20	546	440	6.21	1.24
-15	693	498	7.90	1.39
-10	871	552	9.98	1.58
-5	1084	599	12.50	1.81
0	1336	642	15.51	2.08
5	1628	678	19.04	2.4
10	1964	707	23.16	2.78

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

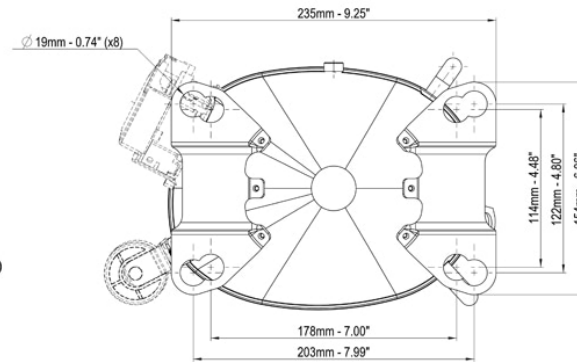
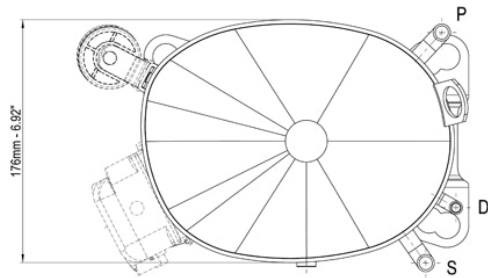
Operating Envelope



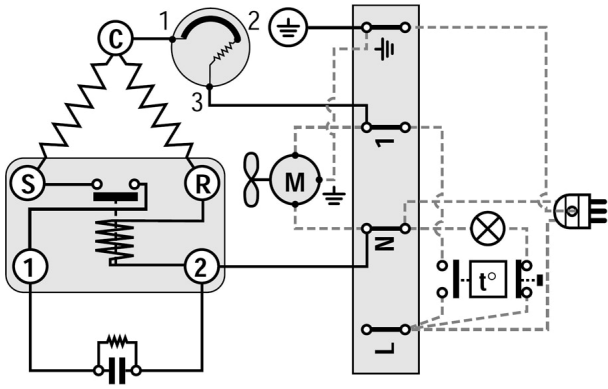
External Dimensions



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



Wiring Diagram



Assembly Instructions

