



APPROVALS




 **ENGINEERING CODE**
861JA51

 **APPROVED REFRIGERANT**
R-290


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

 **STANDARD CONDITIONS**
ASHRAE

 **APPLICATION**
MBP

 **COOLING CAPACITY**
598 W (MBP)

 **EFFICIENCY**
1.9 W/W (MBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	7.28 cm ³
Compressor Cooling	Fan/NotControlled/220
Fan Air Flow	520 m ³ /h
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1/3 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

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	10 Kg
Free Internal Volume	2.1 L

Electrical Components

	Description
Starting Device	Relay MTRPH-0025-59*
Start Capacitor	43-53 Uf/330 V
Motor Protection	T0866/G6

External Characteristics

Base Plate	European	
Tray Holder	No	
Height	188 mm	
Connector	Internal Diameter	Shape
Suction	8.1 mm	Vertical/Copper
Discharge	6.1 mm	Vertical/Copper
Process	6.1 mm	Vertical/Copper

PERFORMANCE

Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Gas Flow Rate	Efficiency
54.40°C	-6.70°C	598 W	315 W	6.85 kg/h	1.9 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	455	219	4.38	2.08
-15	568	236	5.49	2.41
-10	698	250	6.78	2.8
-5	848	260	8.27	3.26
0	1018	267	9.98	3.81
5	1207	271	11.92	4.46
10	1419	270	14.11	5.25

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	392	231	4.08	1.7
-15	490	254	5.12	1.93
-10	605	275	6.35	2.2
-5	739	293	7.79	2.52
0	892	308	9.47	2.9
5	1065	320	11.38	3.33
10	1258	328	13.55	3.83

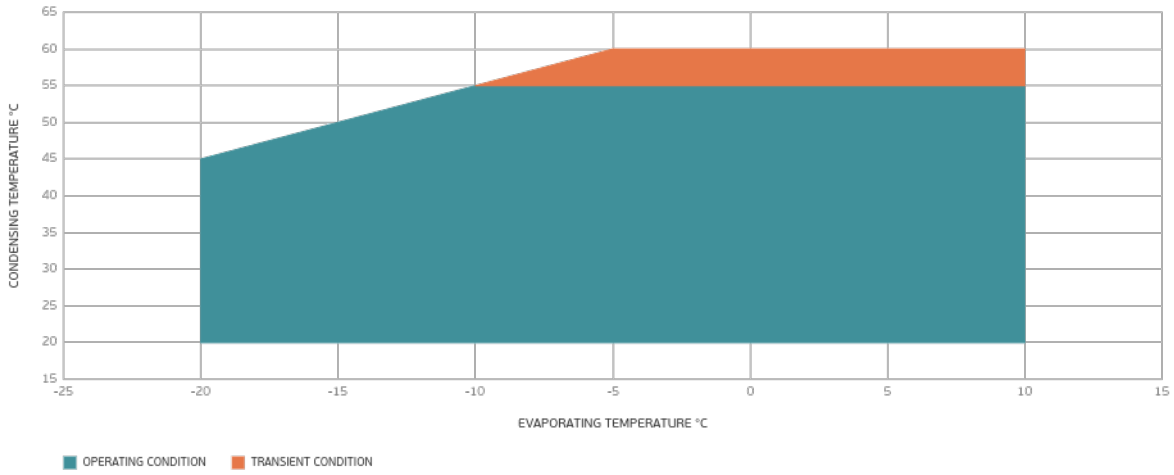
Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

Condensing Temperature 55°C

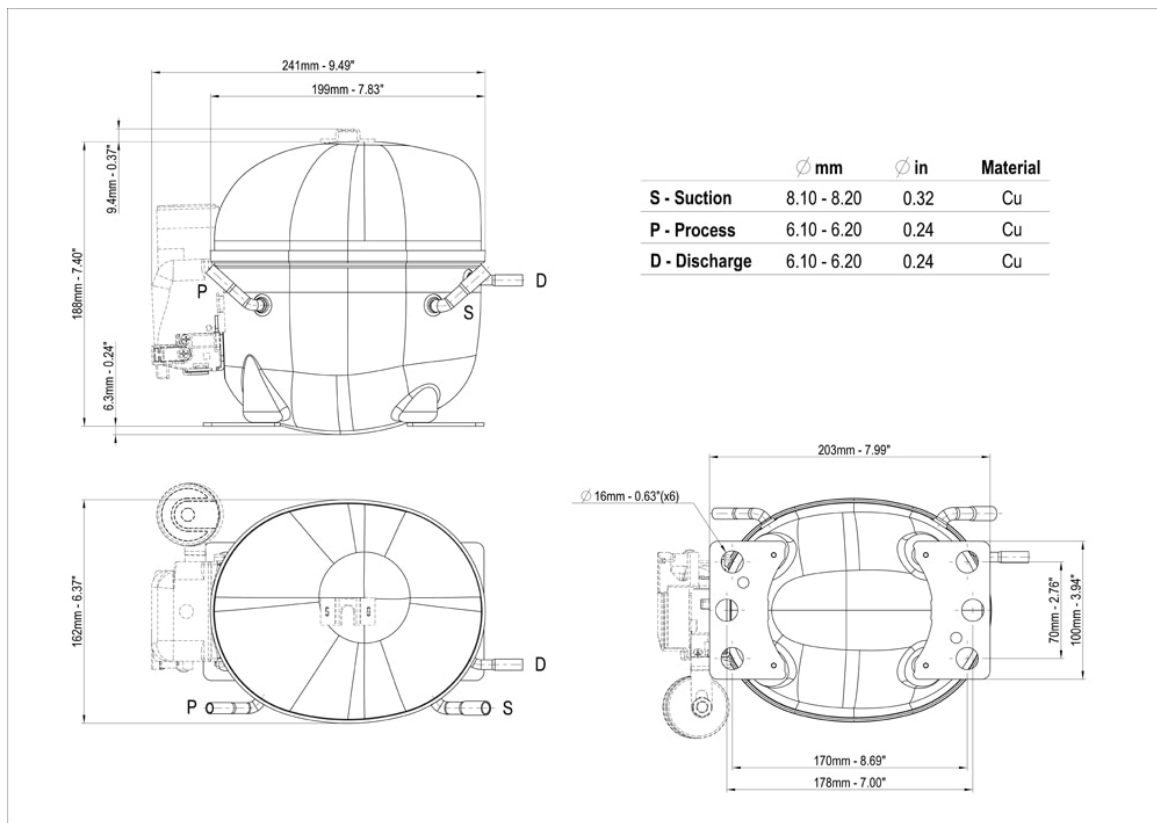
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-20	339	246	3.86	1.38
-15	421	274	4.80	1.54
-10	520	300	5.96	1.73
-5	636	324	7.33	1.96
0	771	345	8.95	2.24
5	925	363	10.81	2.55
10	1098	378	12.95	2.9

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

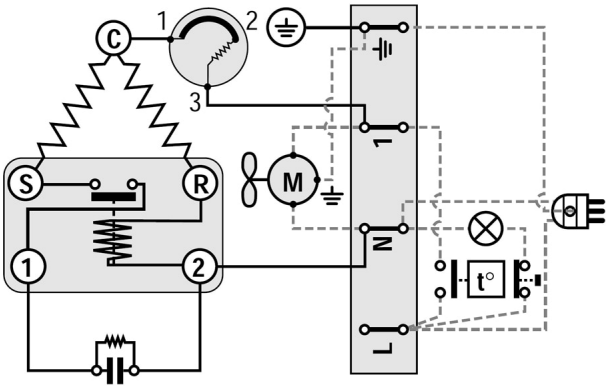
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

