


APPROVALS




 **ENGINEERING CODE**
862HA51


 **APPROVED REFRIGERANT**
R-290

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

 **STANDARD CONDITIONS**
ASHRAE

 **APPLICATION**
MBP

 **COOLING CAPACITY**
850 W (MBP)

 **EFFICIENCY**
1.98 W/W (MBP)

 **MOTOR TYPE**
CSCR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	9.99 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	CSCR
Starting Torque	HST
Start Winding Resistance	27.92 Ω at 25° C
Run Winding Resistance	4.53 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
Run Capacitor	5
Start Capacitor	53-64 Uf / 330 V
CSR / CSIR Box	YES
Starting Device	RVA6M3C-114
Motor Protection	T0916/G9

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	850 W	430 W	9.74 kg/h	1.98 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	637	310	6.13	2.06
-15	792	333	7.66	2.38
-10	969	351	9.41	2.76
-5	1170	366	11.41	3.2
0	1398	377	13.70	3.71
5	1652	384	16.31	4.3
10	1937	387	19.26	5

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	551	329	5.73	1.67
-15	691	358	7.22	1.93
-10	852	383	8.94	2.22
-5	1036	406	10.92	2.55
0	1244	426	13.20	2.92
5	1478	444	15.80	3.33
10	1740	458	18.75	3.8

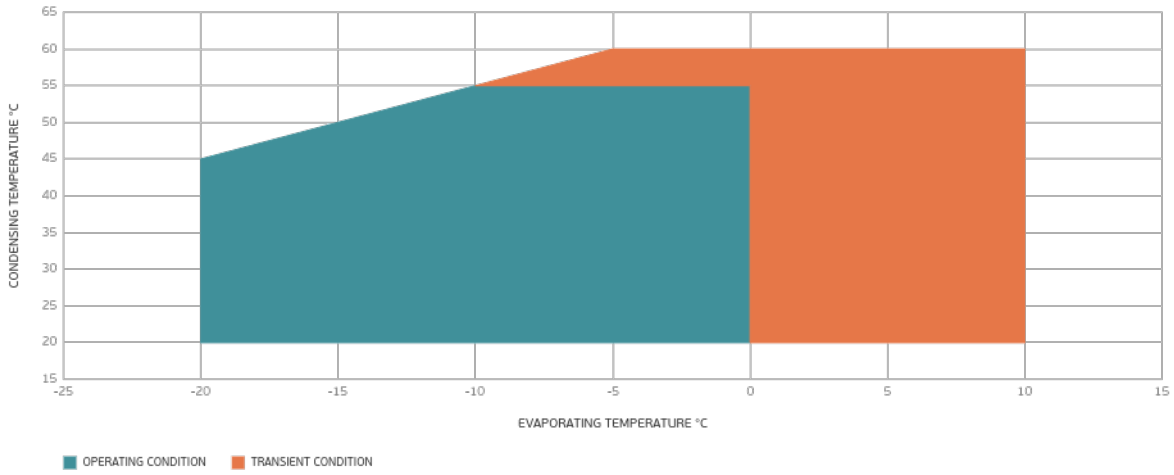
Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

Condensing Temperature 55°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-10	739	412	8.47	1.79
-5	904	440	10.42	2.05
0	1091	467	12.66	2.34
5	1303	491	15.24	2.65
10	1542	515	18.18	3

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

