

**APPROVALS**



**ENGINEERING CODE**  
922RA04

**APPROVED REFRIGERANT**  
R-404A

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

**STANDARD CONDITIONS**  
ASHRAE

**APPLICATION**  
MBP

**COOLING CAPACITY**  
1770 W (MBP)

**EFFICIENCY**  
1.68 W/W (MBP)

**MOTOR TYPE**  
CSCR

**STARTING TORQUE**  
HST

**DATA**

**General Data**

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	20.44 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 hp
Max Condensing Pressure Operating	24.71 bar
Max Condensing Pressure Peak	27.71 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	6.49 Ω at 25° C
Run Winding Resistance	1.69 Ω at 25° C

## Mechanical Data

Maximum Recommended Refrigerant Charge	800 g
Oil Charge	450 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO22
Pressurization	Dry air charge
Weight	17.2 Kg
Free Internal Volume	3.3 L

## Electrical Components

	Description
CSR / CSIR Box	YES
Run Capacitor	25
Motor Protection	MRA38112-3261
Start Capacitor	88-108 Uf/330 V
Starting Device	3ARR3B6AV3

## 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	1770 W	1052 W	48.36 kg/h	1.68 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	1367	744	29.68	1.84
-15	1734	803	37.88	2.16
-10	2159	862	47.47	2.51
-5	2644	918	58.55	2.88
0	3189	972	71.22	3.28
5	3793	1024	85.59	3.7
10	4455	1073	101.74	4.15

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	1148	777	27.54	1.48
-15	1462	852	35.28	1.72
-10	1831	927	44.48	1.98
-5	2256	1001	55.24	2.25
0	2736	1075	67.66	2.55
5	3271	1147	81.84	2.85
10	3861	1217	97.89	3.17

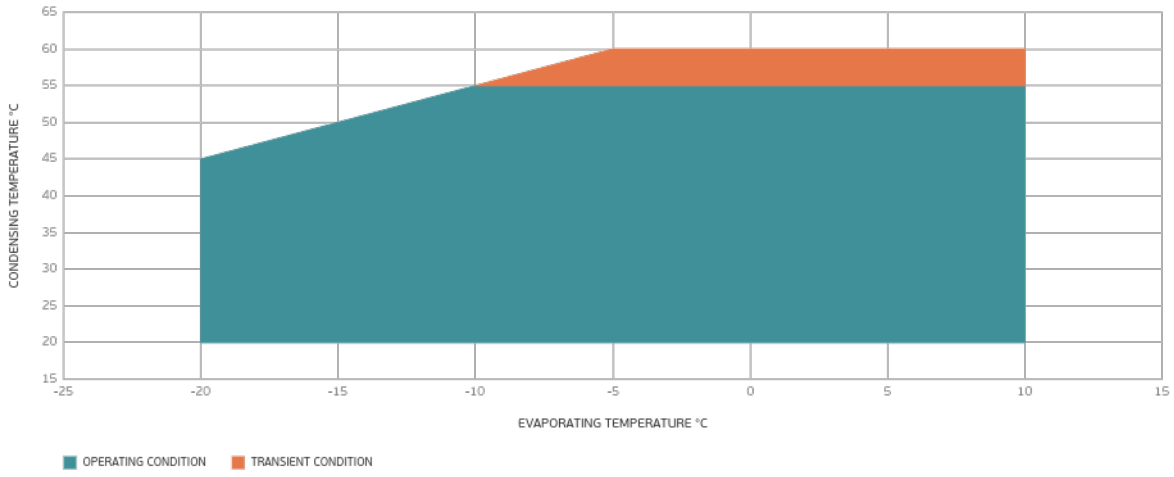
Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

### Condensing Temperature 55°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-20	961	841	25.89	1.14
-15	1217	921	33.01	1.32
-10	1524	1001	41.66	1.52
-5	1883	1082	51.95	1.74
0	2293	1163	63.97	1.97
5	2753	1244	77.81	2.21
10	3265	1325	93.60	2.46

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

