

APPROVALS



ENGINEERING CODE
8420A04

APPROVED REFRIGERANT
R-290

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
ASHRAE

APPLICATION
MBP

COOLING CAPACITY
1527 W (MBP)

EFFICIENCY
1.81 W/W (MBP)

MOTOR TYPE
CSCR

STARTING TORQUE
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	20.44 cm ³
Compressor Cooling	Fan/NotControlled/220
Fan Air Flow	520 m ³ /h
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1 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	9 Ω at 25° C
Run Winding Resistance	2.3 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	17 Kg
Free Internal Volume	3.3 L

Electrical Components

	Description
Run Capacitor	15
Start Capacitor	43-53 Uf / 330 V
CSR / CSIR Box	YES
Starting Device	RVA4AL3C-560
Motor Protection	T0485/G9

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	1527 W	844 W	17.49 kg/h	1.81 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	1146	593	11.03	1.93
-15	1440	644	13.92	2.23
-10	1781	691	17.30	2.58
-5	2176	733	21.22	2.97
0	2629	772	25.78	3.41
5	3146	806	31.04	3.9
10	3729	836	37.08	4.46

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

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-20	974	624	10.14	1.56
-15	1235	687	12.90	1.8
-10	1541	748	16.17	2.06
-5	1898	807	20.01	2.35
0	2310	863	24.50	2.68
5	2781	917	29.72	3.03
10	3317	969	35.74	3.42

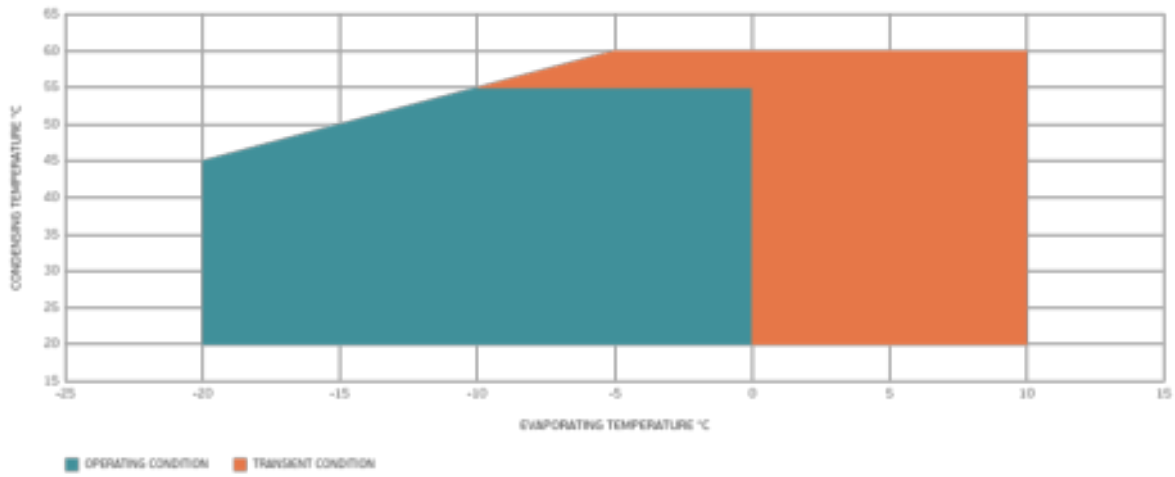
Test Condition: ASHRAEMB46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data are an indication of performance based simulation.

Condensing Temperature 55°C

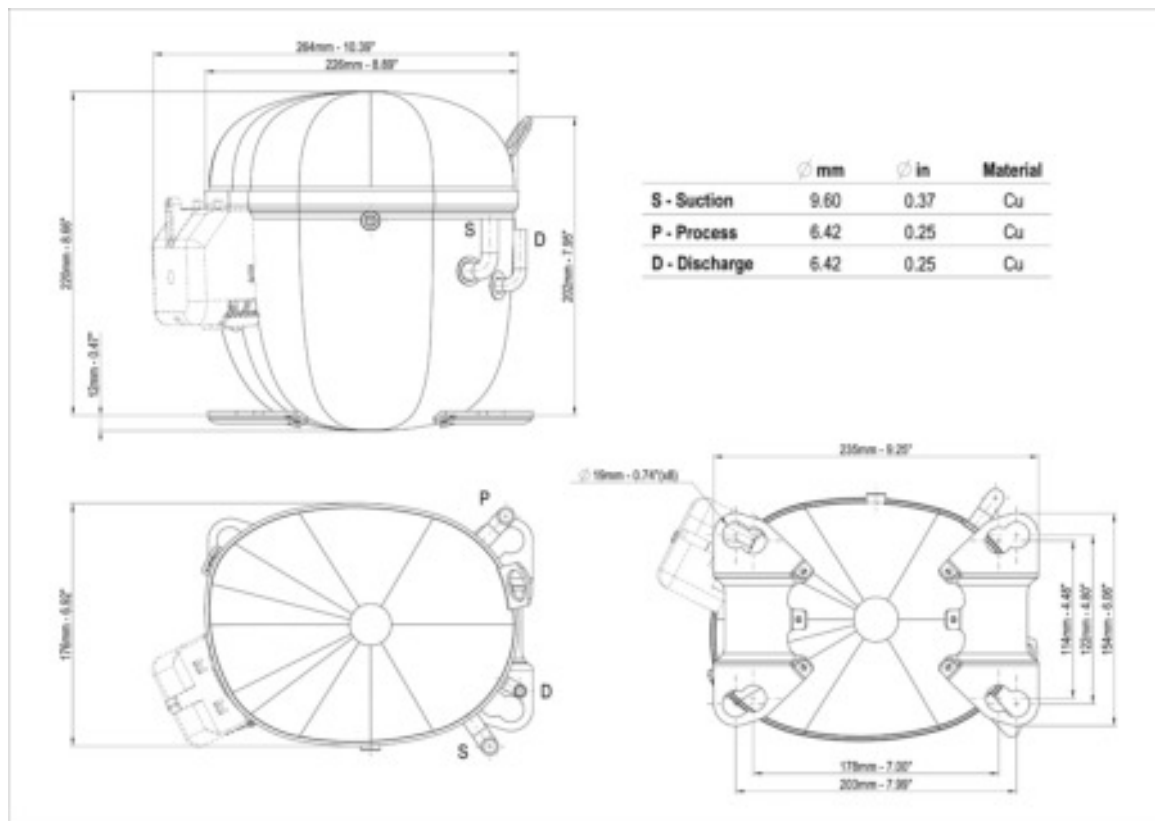
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-10	1315	801	15.06	1.64
-5	1629	869	18.78	1.87
0	1996	937	23.16	2.13
5	2419	1005	28.29	2.41
10	2904	1072	34.24	2.71

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

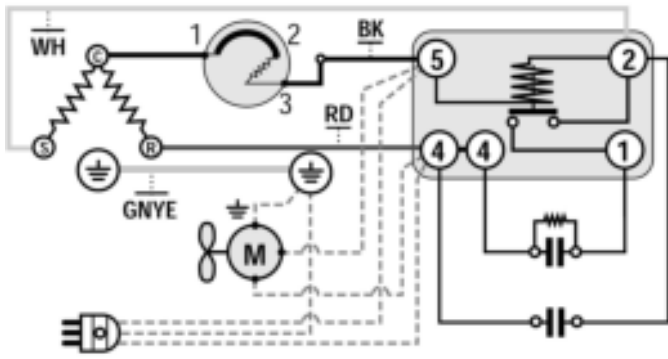
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

