



APPROVALS



ENGINEERING CODE
862AA51

APPROVED REFRIGERANT
R-290

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
EN12900

APPLICATION
LBP

COOLING CAPACITY
275 W (LBP)

EFFICIENCY
1.25 W/W (LBP)

MOTOR TYPE
CSIR

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	-40 °C to -10 °C

Electrical Data

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	24.26 Ω at 25° C
Run Winding Resistance	7.79 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 Kg
Free Internal Volume	2.1 L

Electrical Components

	Description
Start Capacitor	53-64 Uf / 330 V
Starting Device	Relay MTRPH0027-59*
Motor Protection	T0168/G6

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
40.00°C	-35.00°C	275 W	220 W	3.13 kg/h	1.25 W/W

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Evaporation -35.00°C, Condensing 40.00°C, Ambient 35°C, Liquid 40°C, Subcooling 0K. 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
-40	229	178	2.51	1.29
-35	286	217	3.14	1.32
-30	358	253	3.95	1.42
-25	449	285	4.96	1.58
-20	559	312	6.19	1.79
-15	689	336	7.68	2.05
-10	843	356	9.44	2.37

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. 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
-35	249	230	3.00	1.08
-30	311	266	3.75	1.17
-25	388	302	4.71	1.29
-20	484	335	5.88	1.44
-15	598	366	7.31	1.63
-10	733	396	9.02	1.85

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. 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
-30	262	281	3.52	0.93
-25	326	317	4.41	1.03
-20	407	354	5.52	1.15
-15	504	391	6.88	1.29
-10	621	428	8.52	1.45

Test Condition: EN12900LBP, Fan/NotControlled/220, Return Gas 20°C, Ambient 35°C, Subcooling OK. Data are an indication of performance based simulation.

Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

