




**APPROVALS**




 **ENGINEERING CODE**  
862AA51


 **APPROVED REFRIGERANT**  
R-290


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

 **STANDARD CONDITIONS**  
ASHRAE

 **APPLICATION**  
LBP

 **COOLING CAPACITY**  
448 W (LBP)

 **EFFICIENCY**  
1.36 W/W (LBP)

 **MOTOR TYPE**  
CSIR

 **STARTING TORQUE**  
HST

**DATA**

**General Data**

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	9.99 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	1/2 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	Current	Gas Flow Rate	Efficiency
54.40°C	-23.30°C	448 W	330 W	2.03 A	4.55 kg/h	1.36 W/W

Test Condition: ASHRAELBP32, Fan/NotControlled/220, Return Gas 32.2°C, Evaporation -23.30°C, Condensing 54.40°C, Ambient 32.2°C, Liquid 32.2°C, Subcooling 22.2K. Data in accordance to EN

12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

## Performance Curve Data

### Condensing Temperature 35°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-40	239	178	1.28	2.40	1.34
-35	298	217	1.45	3.01	1.37
-30	373	253	1.62	3.78	1.48
-25	467	285	1.77	4.74	1.64
-20	581	313	1.92	5.91	1.86
-15	716	337	2.05	7.32	2.13
-10	876	357	2.19	8.99	2.46

Test Condition: ASHRAELBP32, Fan/NotControlled/220, Return Gas 32.2°C, Ambient 32.2°C, Liquid 32.2°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

### Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-35	284	230	1.56	2.87	1.24
-30	355	266	1.72	3.59	1.33
-25	443	302	1.88	4.50	1.47
-20	552	335	2.03	5.62	1.65
-15	683	367	2.17	6.98	1.86
-10	837	396	2.31	8.59	2.11

Test Condition: ASHRAELBP32, Fan/NotControlled/220, Return Gas 32.2°C, Ambient 32.2°C, Liquid 32.2°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

### Condensing Temperature 55°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-30	333	281	1.83	3.36	1.18
-25	416	318	1.99	4.21	1.31
-20	518	354	2.14	5.27	1.46
-15	643	392	2.29	6.57	1.64
-10	791	429	2.43	8.12	1.84

Test Condition: ASHRAELBP32, Fan/NotControlled/220, Return Gas 32.2°C, Ambient 32.2°C, Liquid 32.2°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

## Operating Envelope



## External Dimensions



## Wiring Diagram



## Assembly Instructions

