



**APPROVALS**




 **ENGINEERING CODE**  
862IA51


 **APPROVED REFRIGERANT**  
R-290

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

 **STANDARD CONDITIONS**  
ASHRAE

 **APPLICATION**  
LBP

 **COOLING CAPACITY**  
486 W (LBP)

 **EFFICIENCY**  
1.49 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	10.5 Kg
Free Internal Volume	2.1 L

## Electrical Components

	Description
Starting Device	Relay   MTRPH-0025-65*
Start Capacitor	64-77 Uf / 330 V
Motor Protection	T0660/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	486 W	326 W	1.94 A	4.93 kg/h	1.49 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	237	195	1.51	2.39	1.22
-35	308	222	1.59	3.11	1.39
-30	395	248	1.67	4.00	1.6
-25	500	273	1.75	5.07	1.83
-20	622	297	1.83	6.33	2.09
-15	761	320	1.92	7.77	2.38
-10	916	343	2.01	9.40	2.67

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	293	232	1.63	2.96	1.26
-30	376	263	1.73	3.81	1.43
-25	477	295	1.83	4.84	1.62
-20	594	326	1.95	6.05	1.82
-15	728	358	2.07	7.44	2.03
-10	879	390	2.2	9.02	2.25

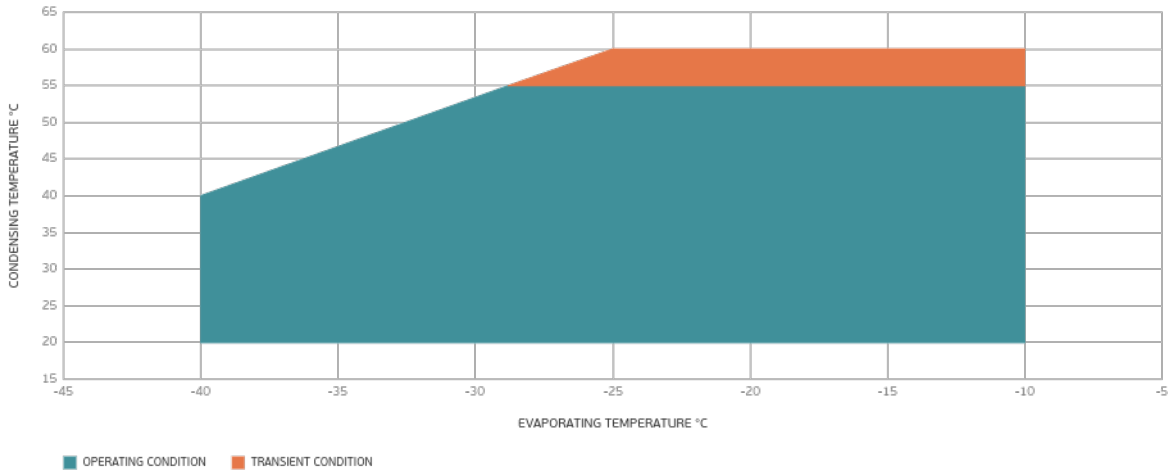
Test Condition: ASHRAELBP32, Fan/NotControlled/220, Return Gas 32.2°C, Ambient 32.2°C, Liquid 32.2°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

### Condensing Temperature 55°C

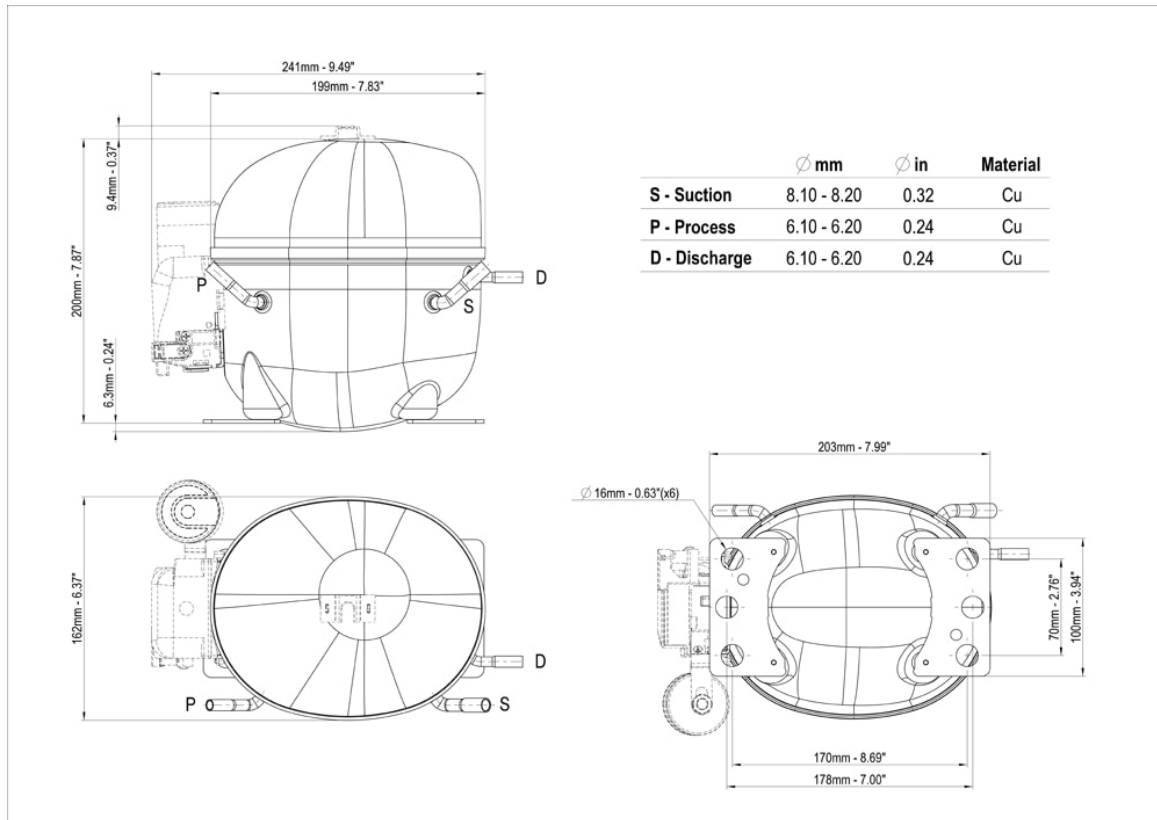
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-30	354	277	1.77	3.58	1.28
-25	449	314	1.9	4.55	1.43
-20	561	351	2.04	5.71	1.6
-15	690	391	2.19	7.05	1.77
-10	836	432	2.35	8.57	1.94

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.

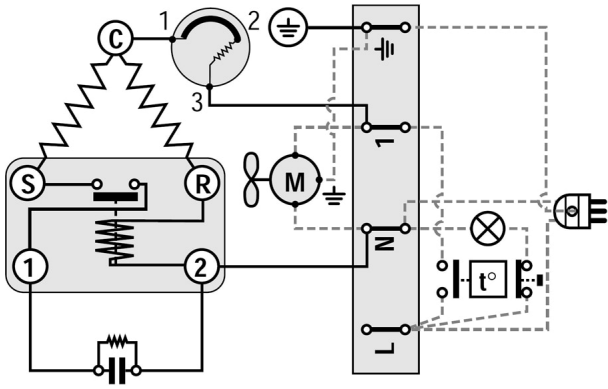
## Operating Envelope



## External Dimensions



## Wiring Diagram



## Assembly Instructions

