

**APPROVALS**



**ENGINEERING CODE**  
861KE71

**APPROVED REFRIGERANT**  
R-290

**POWER SUPPLY**  
115-127 V 60 Hz

**STANDARD CONDITIONS**  
ASHRAE

**APPLICATION**  
LBP

**COOLING CAPACITY**  
523 W (LBP)

**EFFICIENCY**  
1.29 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/115
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	115-127 V 60 Hz
Evaporating Temperature Range	-40 °C to -10 °C

**Electrical Data**

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	7.19 Ω at 25° C
Run Winding Resistance	1.57 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 Kg
Free Internal Volume	2.1 L

## Electrical Components

	Description
Start Capacitor	189-227 Uf / 250 V
Starting Device	Relay   MTRPH-60-59*
Motor Protection	T0808/G9

## External Characteristics

Base Plate	Universal	
Tray Holder	No	
Height	188 mm	
Connector	Internal Diameter	Shape
Suction	8.1 mm	Slanted 42°/Copper
Discharge	6.45 mm	Straight/Copper
Process	6.45 mm	Slanted 42°/Copper

## PERFORMANCE

## Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Gas Flow Rate	Efficiency
54.40°C	-23.30°C	523 W	405 W	5.30 kg/h	1.29 W/W

Test Condition: ASHRAELBP32, Fan/NotControlled/115, 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 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	252	256	2.54	0.98
-35	335	290	3.38	1.15
-30	438	323	4.43	1.35
-25	562	356	5.70	1.58
-20	706	388	7.18	1.82
-15	870	420	8.89	2.07
-10	1054	450	10.82	2.34

Test Condition: ASHRAELBP32, Fan/NotControlled/115, Return Gas 32.2°C, Ambient 32.2°C, Liquid 32.2°C. 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	308	301	3.11	1.02
-30	403	338	4.07	1.19
-25	519	376	5.27	1.38
-20	658	416	6.70	1.58
-15	819	456	8.37	1.79
-10	1001	498	10.27	2.01

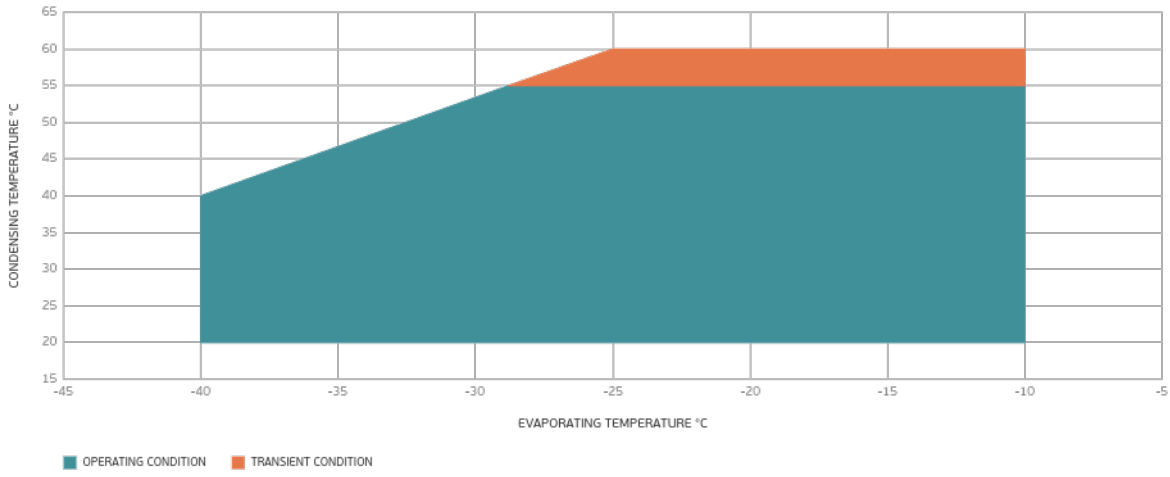
Test Condition: ASHRAELBP32, Fan/NotControlled/115, Return Gas 32.2°C, Ambient 32.2°C, Liquid 32.2°C. Data are an indication of performance based simulation.

### Condensing Temperature 55°C

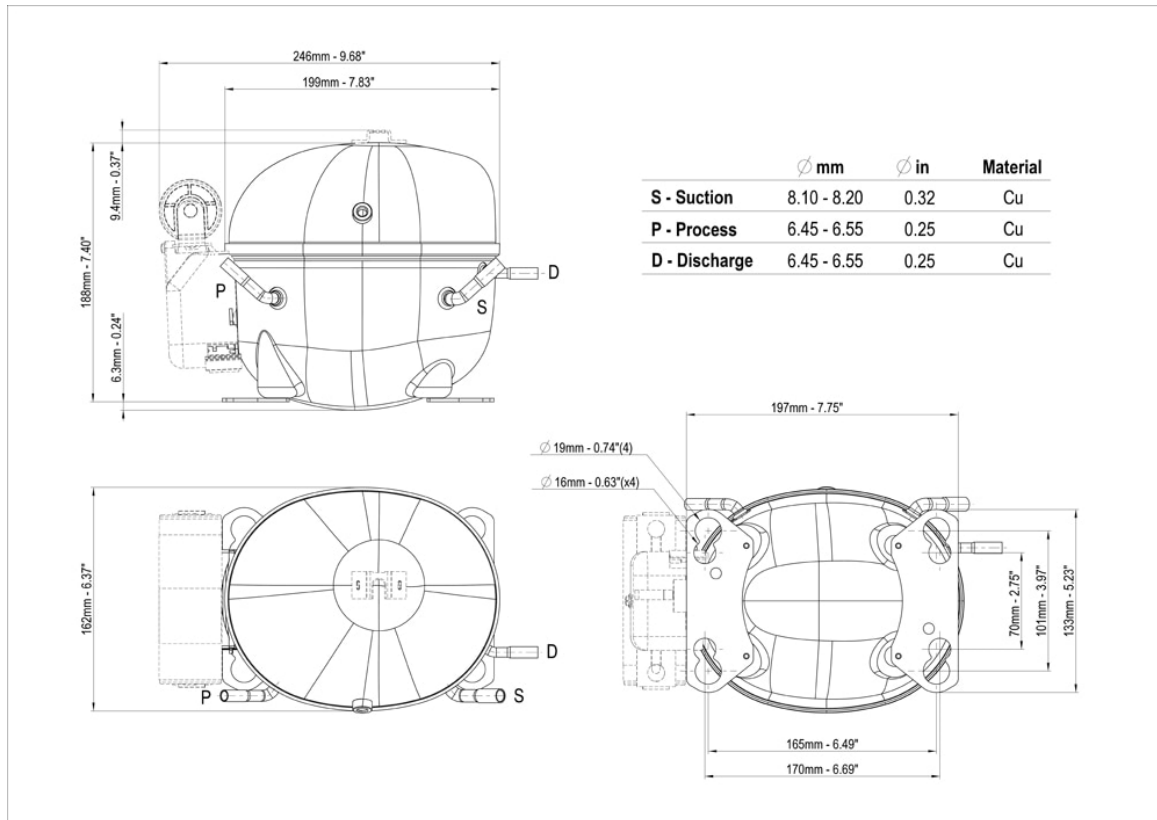
Evaporating Temperature °C	Cooling Capacity W	Power W	Gas Flow Rate kg/h	Efficiency W/W
-30	374	348	3.78	1.07
-25	480	390	4.87	1.23
-20	611	436	6.22	1.4
-15	765	484	7.82	1.58
-10	943	535	9.67	1.76

Test Condition: ASHRAELBP32, Fan/NotControlled/115, Return Gas 32.2°C, Ambient 32.2°C, Liquid 32.2°C. Data are an indication of performance based simulation.

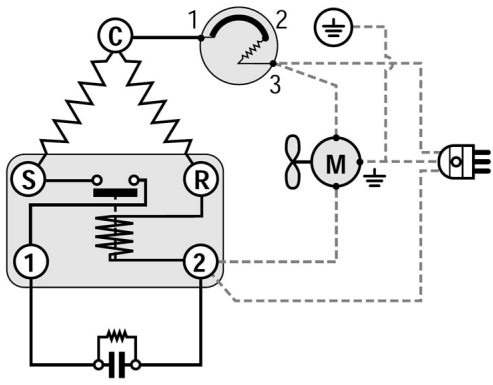
## Operating Envelope



## External Dimensions



## Wiring Diagram



## Assembly Instructions

