

APPROVALS



**ENGINEERING CODE**  
861IA51

**APPROVED REFRIGERANT**  
R-600a

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

**STANDARD CONDITIONS**  
ASHRAE

**APPLICATION**  
HBP

**COOLING CAPACITY**  
685 W

**EFFICIENCY**  
2.57 W/W

**MOTOR TYPE**  
CSIR

**STARTING TORQUE**  
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	12.11 cm <sup>3</sup>
Compressor Cooling	Fan
Fan Air Flow	520 m <sup>3</sup> /h
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1/4 hp
Max Condensing Pressure Operating	6.73 bar
Max Condensing Pressure Peak	7.69 bar
Power Supply	220-240 V 50 Hz
Evaporating Temperature Range	-15 °C to 10 °C

Electrical Data

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	28.9 Ω at 25° C
Run Winding Resistance	6.8 Ω at 25° C

## Mechanical Data

Maximum Recommended Refrigerant Charge	150 g
Oil Charge	350 ml
Oil Type Configuration	Polyolester
Oil Type Viscosity	ISO22
Pressurization	Without dry air charge
Weight	10.1 Kg
Free Internal Volume	2.1 L

## External Characteristics

Base Plate	European	
Tray Holder	Yes	
Height	188 mm	
Connector	Internal Diameter	Shape
Suction	8.1 mm	Slanted 42°
Discharge	6.1 mm	Straight
Process	6.1 mm	Slanted 42°

## PERFORMANCE

## Rated Points

Condensing Temperature	Evaporating Temperature	Cooling Capacity	Power Consumption	Current	Gas Flow Rate	Efficiency
54.40°C	7.20°C	685 W	266 W	1.82 A	8.23 kg/h	2.57 W/W

Test Condition: ASHRAE, Fan, Return Gas 35°C, Evaporation 7.20°C, Condensing 54.40°C, Ambient 35°C, Liquid 46.1°C. Data in accordance to ASHRAE guideline polynomial curve.

## 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
-15	326	164	1.52	3.33	1.99
-10	411	178	1.56	4.21	2.31
-5	516	191	1.59	5.29	2.7
0	637	203	1.63	6.55	3.14
5	773	214	1.66	7.96	3.61
10	919	224	1.69	9.50	4.1

Test Condition: ASHRAE, Fan, HBP. Data in accordance to ASHRAE guideline polynomial curve.

### Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-15	291	173	1.55	3.20	1.68
-10	368	191	1.6	4.05	1.93
-5	464	208	1.64	5.11	2.23
0	575	223	1.69	6.36	2.57
5	699	238	1.73	7.76	2.93
10	833	252	1.78	9.29	3.3

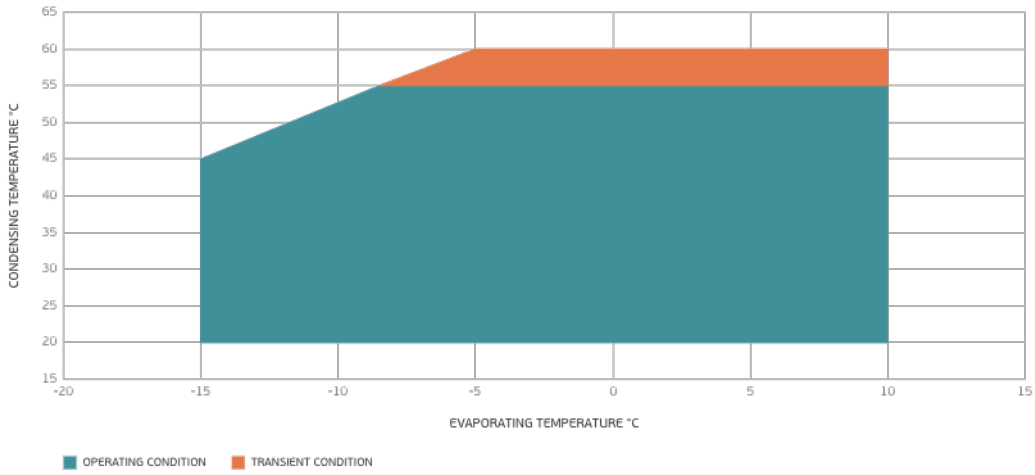
Test Condition: ASHRAE, Fan, HBP. Data in accordance to ASHRAE guideline polynomial curve.

### Condensing Temperature 55°C

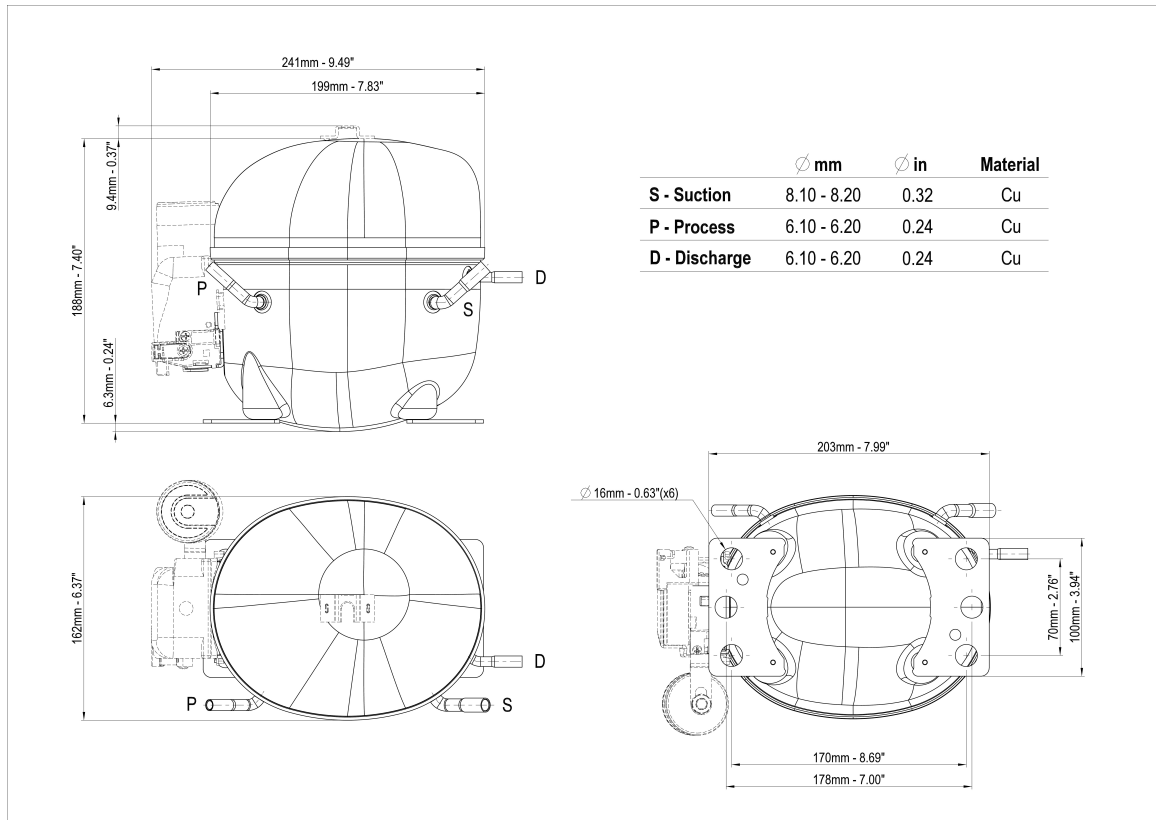
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-10	325	201	1.63	3.88	1.62
-5	411	221	1.69	4.93	1.86
0	513	241	1.75	6.16	2.13
5	627	259	1.8	7.56	2.42
10	751	278	1.86	9.09	2.7

Test Condition: ASHRAE, Fan, HBP. Data in accordance to ASHRAE guideline polynomial curve.

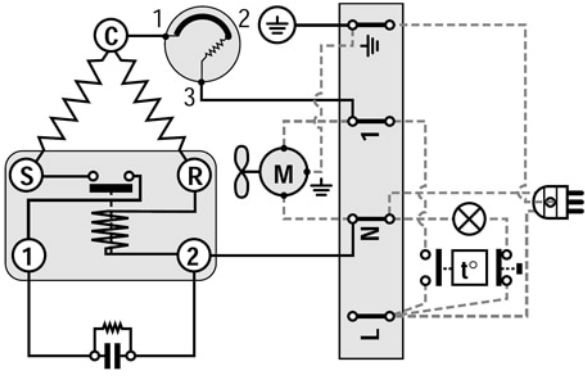
## Operating Envelope



## External Dimensions



## Wiring Diagram



## Assembly Instructions

