



APPROVALS




 **ENGINEERING CODE**
269NA51


 **APPROVED REFRIGERANT**
R-134a

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

 **STANDARD CONDITIONS**
ASHRAE

 **APPLICATION**
HBP

 **COOLING CAPACITY**
1636 W (HBP)

 **EFFICIENCY**
2.16 W/W (HBP)

 **MOTOR TYPE**
CSIR

 **STARTING TORQUE**
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	16.8 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	13.92 bar
Max Condensing Pressure Peak	15.62 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	14.26 Ω at 25° C
Run Winding Resistance	4.25 Ω at 25° C

Mechanical Data

Maximum Recommended Refrigerant Charge	350 g
Oil Charge	350 ml
Oil Type Configuration	ESTER
Oil Type Viscosity	ISO22
Pressurization	Dry air charge
Weight	11.6 Kg
Free Internal Volume	2.1 L

Electrical Components

	Description
Start Capacitor	108-130 Uf / 330 V
Starting Device	Relay MTRPH-0048-65*
Motor Protection	MST20APK-3259

External Characteristics

Base Plate	European	
Tray Holder	No	
Height	206 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	7.20°C	1637 W	758 W	3.98 A	36.24 kg/h	2.16 W/W

Test Condition: ASHRAE HBP46, Fan/NotControlled/220, Return Gas 35°C, Evaporation 7.20°C, Condensing 54.40°C, Ambient 35°C, Liquid 46.1°C, Subcooling 8.3K. 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
-15	803	386	2.6	14.81	2.08
-10	1015	431	2.74	18.80	2.35
-5	1267	482	2.91	23.55	2.63
0	1559	537	3.12	29.10	2.9
5	1892	597	3.35	35.51	3.17
10	2267	663	3.62	42.83	3.42

Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. 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
-15	714	411	2.69	14.23	1.74
-10	906	465	2.86	18.13	1.95
-5	1134	524	3.06	22.78	2.16
0	1398	589	3.3	28.22	2.37
5	1699	659	3.57	34.50	2.58
10	2038	735	3.87	41.66	2.77

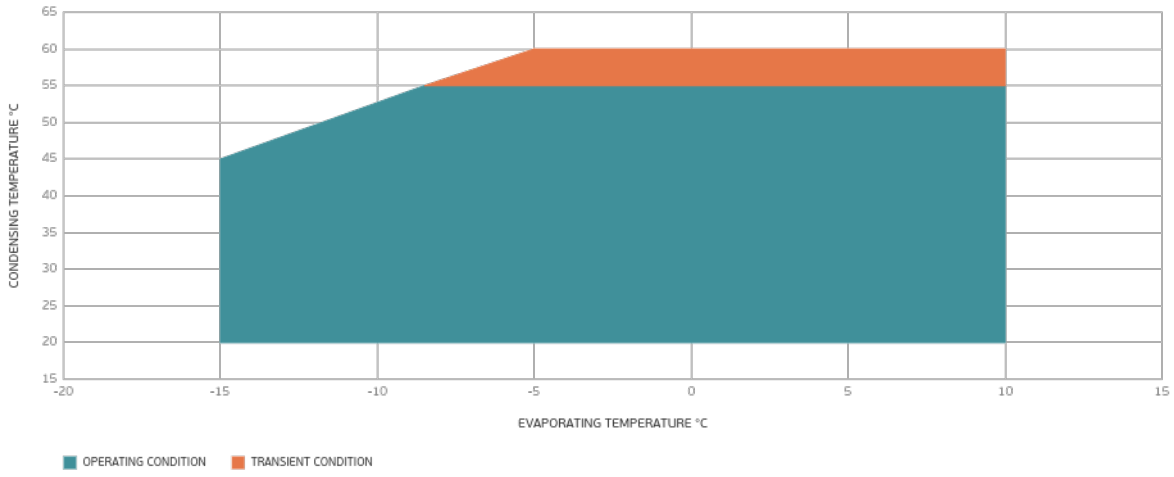
Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 55°C

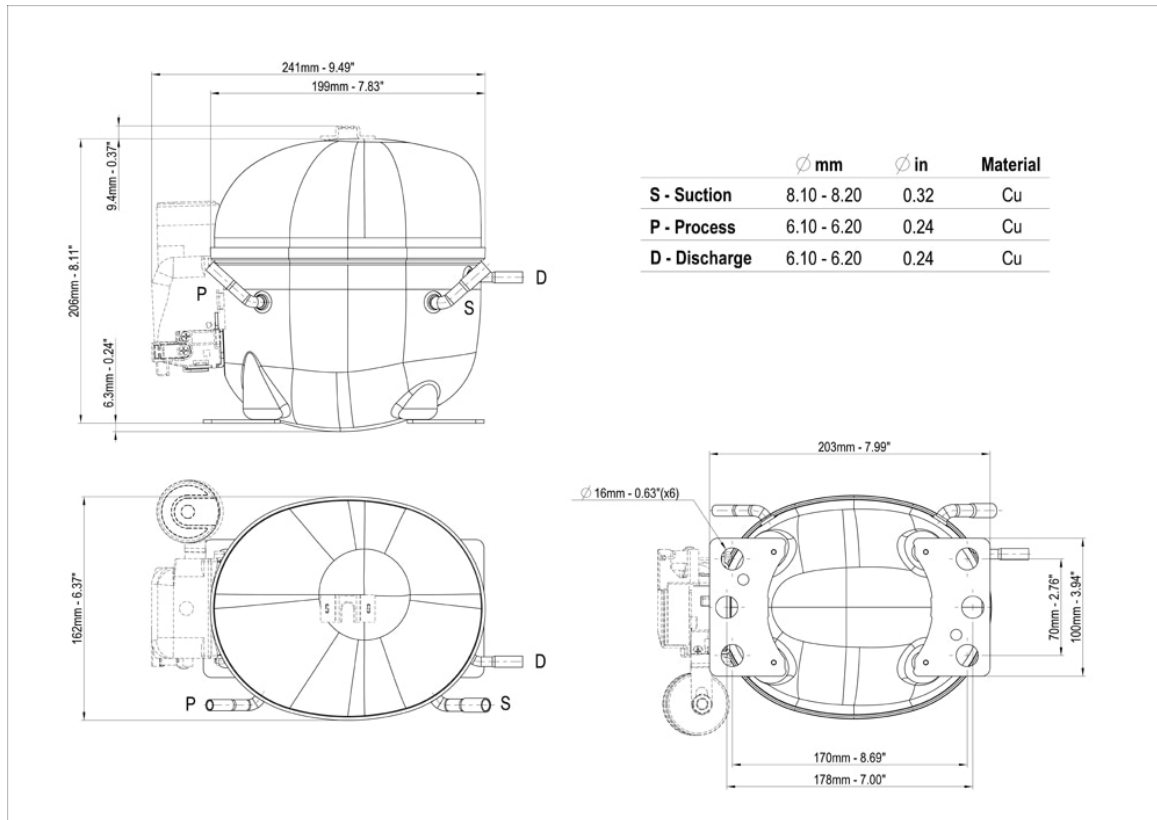
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-10	789	502	2.97	17.21	1.57
-5	992	571	3.22	21.75	1.74
0	1228	645	3.51	27.07	1.91
5	1497	724	3.84	33.20	2.07
10	1799	811	4.21	40.20	2.22

Test Condition: ASHRAEHBP46, Fan/NotControlled/220, Return Gas 35°C, Ambient 35°C, Subcooling 8.3K. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

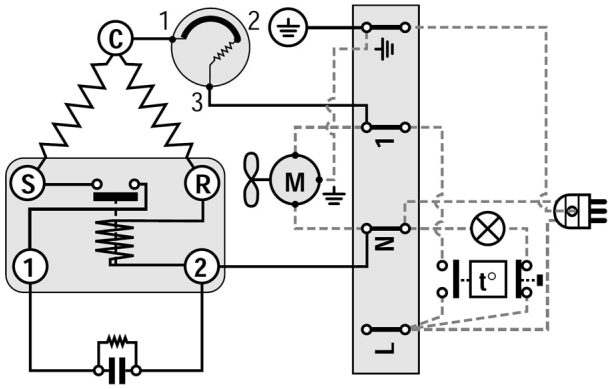
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

