

APPROVALS



ENGINEERING CODE
269NA51

APPROVED REFRIGERANT
R-134a

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
ASHRAE

APPLICATION
HBP

COOLING CAPACITY
1638 W

EFFICIENCY
2.16 W/W

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	16.8 cm ³
Compressor Cooling	Fan
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	13.91 Ω at 25° C
Run Winding Resistance	4.48 Ω at 25° C
Locked Rotor Amperage (LRA)	22 A

Mechanical Data

Maximum Recommended Refrigerant Charge	350 g
Oil Charge	350 ml
Oil Type Configuration	Polyolester
Oil Type Viscosity	ISO22
Pressurization	Dry air charge
Weight	11.8 Kg
Free Internal Volume	2.1 L

Electrical Components

	Description
Starting Device	Current relay MTRPH-0048-65
Start Capacitor	108-130 μ F / 330V
Motor Protection	External 3/4" MST20APK-3259

External Characteristics

Base Plate	European	
Tray Holder	No	
Height	206 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	1639 W	759 W	3.98 A	36.24 kg/h	2.16 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	805	385	2.59	14.87	2.09
-10	1015	430	2.74	18.81	2.36
-5	1266	481	2.91	23.54	2.63
0	1558	537	3.12	29.09	2.9
5	1891	599	3.35	35.49	3.16
10	2264	666	3.62	42.76	3.4

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	711	415	2.68	14.19	1.72
-10	904	467	2.85	18.10	1.94
-5	1134	524	3.06	22.78	2.16
0	1400	588	3.3	28.26	2.38
5	1702	656	3.57	34.57	2.6
10	2042	730	3.88	41.74	2.8

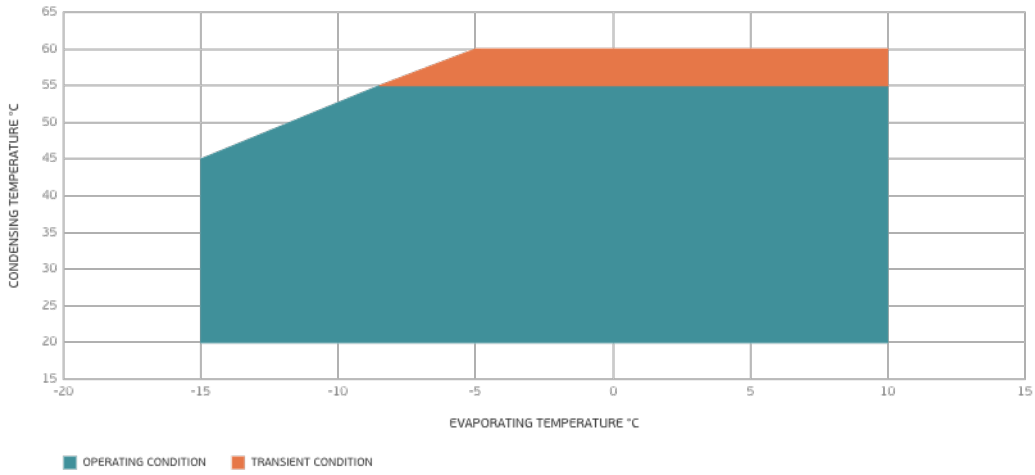
Test Condition: ASHRAE, Fan, HBP. Data in accordance to ASHRAE guideline polynomial curve.

Condensing Temperature 55°C

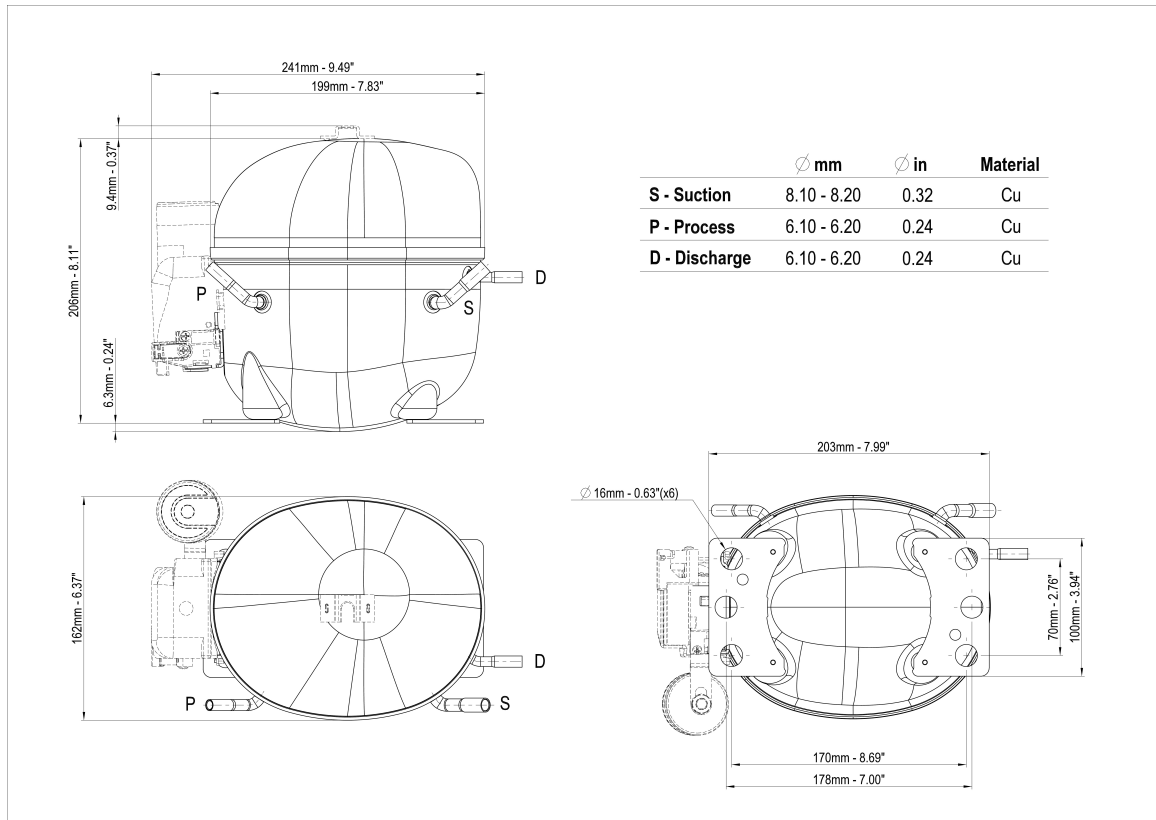
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-10	789	501	2.97	17.22	1.57
-5	992	571	3.22	21.75	1.74
0	1228	646	3.51	27.06	1.9
5	1496	727	3.85	33.18	2.06
10	1797	812	4.22	40.15	2.21

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

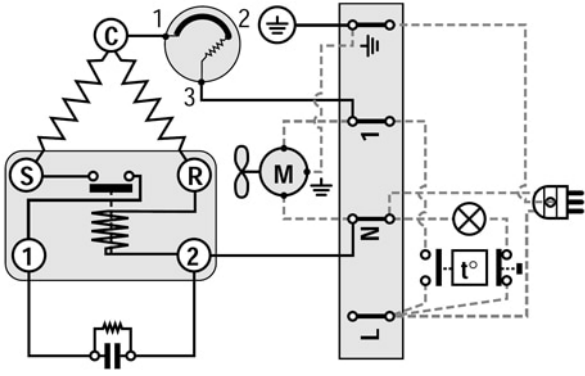
Operating Envelope



External Dimensions



Wiring Diagram



Assembly Instructions

