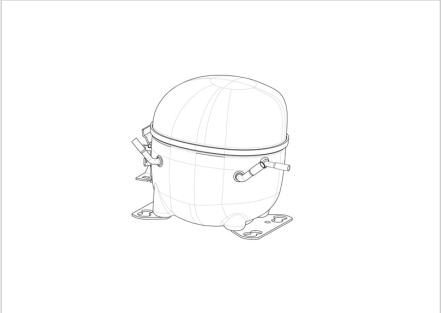
MODEL
NE2121Z

embraco



APPROVALS

ENGINEERING CODE
262BA50

APPROVED REFRIGERANT
R-134a

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
ASHRAE

APPLICATION
LBP

COOLING CAPACITY
251 W

EFFICIENCY
1.23 W/W

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	9.26 cm³
Compressor Cooling	Fan
Fan Air Flow	520 m³/h
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1/4 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	-30 °C to -5 °C

Electrical Data

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	21.1 Ω at 25° C
Run Winding Resistance	7.7 Ω at 25° C

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	10.9 Kg
Free Internal Volume	2.1 L

Electrical Components

	Description
Start Capacitor	72-88 ?F / 330V
Motor Protection	External 4TM739LFBYY-153
Starting Device	Current relay | MTRP-0027-65

External Characteristics

Base Plate	European
Tray Holder	No
Height	200 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	-23.30°C	251 W	204 W	1.68 A	4.91 kg/h	1.23 W/W

Test Condition: ASHRAE, Fan, Return Gas 32.2°C, Evaporation -23.30°C, Condensing 54.40°C, Ambient 32.2°C , Liquid 32.2°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
-30	200	166	1.58	3.88	1.2
-25	260	186	1.64	5.06	1.4
-20	338	208	1.71	6.58	1.63
-15	432	231	1.78	8.43	1.87
-10	543	255	1.85	10.63	2.13
-5	671	281	1.93	13.18	2.39

Test Condition: ASHRAE, Fan, LBP. 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
-30	183	168	1.6	3.57	1.09
-25	243	191	1.65	4.74	1.27
-20	319	216	1.72	6.23	1.48
-15	412	243	1.8	8.04	1.69
-10	520	272	1.89	10.18	1.91
-5	644	302	2	12.65	2.13

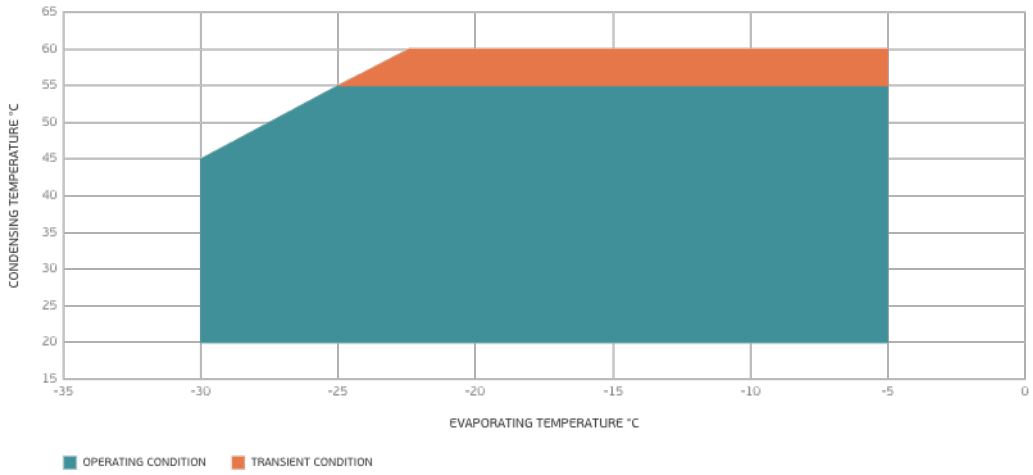
Test Condition: ASHRAE, Fan, LBP. Data in accordance to ASHRAE guideline polynomial curve.

Condensing Temperature 55°C

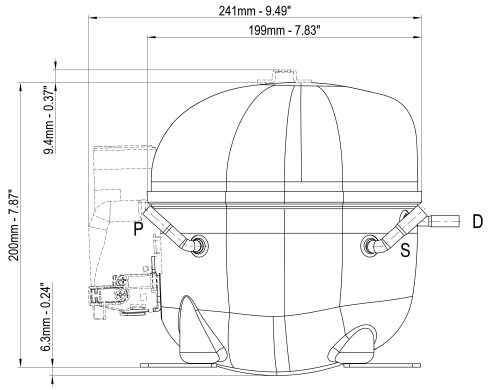
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-25	227	195	1.66	4.43	1.16
-20	302	223	1.73	5.89	1.35
-15	392	254	1.81	7.66	1.54
-10	498	287	1.93	9.74	1.73
-5	618	322	2.07	12.14	1.92

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

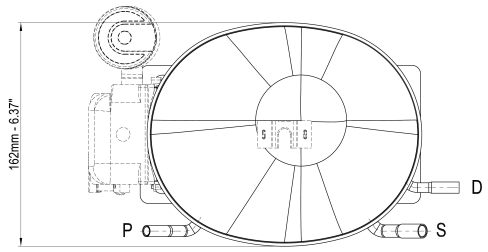
Operating Envelope

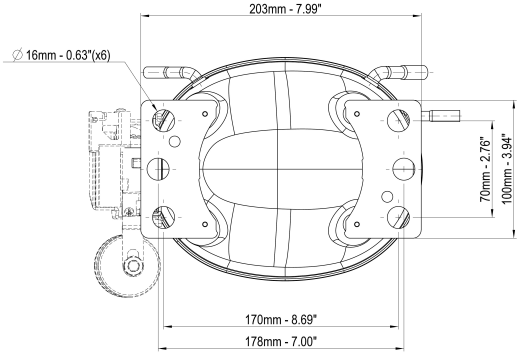


External Dimensions

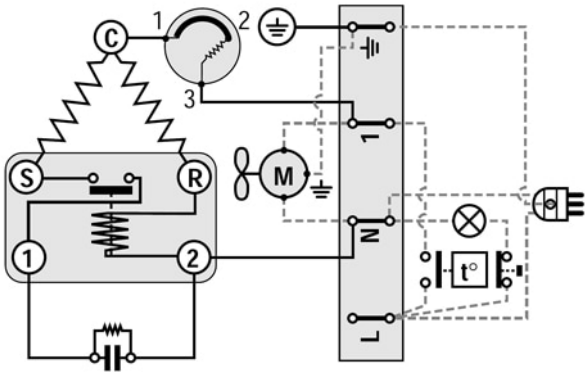


	∅ mm	∅ in	Material
S - Suction	8.10 - 8.20	0.32	Cu
P - Process	6.10 - 6.20	0.24	Cu
D - Discharge	6.10 - 6.20	0.24	Cu





Wiring Diagram



Assembly Instructions