MODEL
NEK6170Z

APPROVALS

ENGINEERING CODE
267DG71

APPROVED REFRIGERANT
R-134a

POWER SUPPLY
115 V 60 Hz

STANDARD CONDITIONS
ASHRAE

APPLICATION
HBP

COOLING CAPACITY
982 W (HBP)

EFFICIENCY
2.36 W/W (HBP)

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	8.39 cm³
Compressor Cooling	Fan/NotControled/115
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	115 V 60 Hz
Evaporating Temperature Range	-15 °C to 10 °C

Electrical Data

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	6.14 Ω at 25° C
Run Winding Resistance	1.24 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	10.4 Kg
Free Internal Volume	2.1 L

Electrical Components

	Description
Starting Device	Relay | MTRPH-0019*
Start Capacitor	145-175 Uf / 165 V
Motor Protection	T0060/G9

External Characteristics

Base Plate	Universal
Tray Holder	No
Height	188 mm

Connector	Internal Diameter	Shape
Suction	8.03 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	Current	Gas Flow Rate	Efficiency
54.40°C	7.20°C	982 W	416 W	4.94 A	21.75 kg/h	2.36 W/W

Test Condition: ASHRAEHBP46, Fan/NotControled/115, 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	482	243	3.84	8.89	1.98
-10	607	264	3.94	11.23	2.3
-5	757	285	4.06	14.07	2.66
0	936	307	4.2	17.47	3.05
5	1144	329	4.36	21.48	3.47
10	1386	353	4.53	26.18	3.93

Test Condition: ASHRAEHBP46, Fan/NotControled/115, 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	427	252	3.9	8.51	1.69
-10	537	281	4.06	10.75	1.91
-5	671	310	4.23	13.49	2.17
0	831	339	4.41	16.78	2.45
5	1020	368	4.6	20.71	2.77
10	1238	398	4.79	25.32	3.11

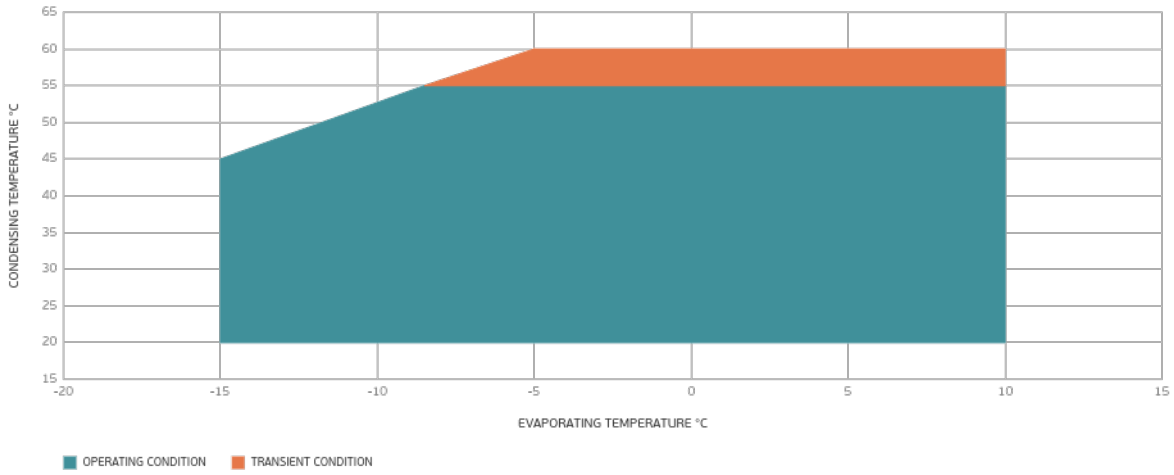
Test Condition: ASHRAEHBP46, Fan/NotControled/115, Return Gas 35°C, Ambient 35°C , Subcooling 8.3K. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 55°C

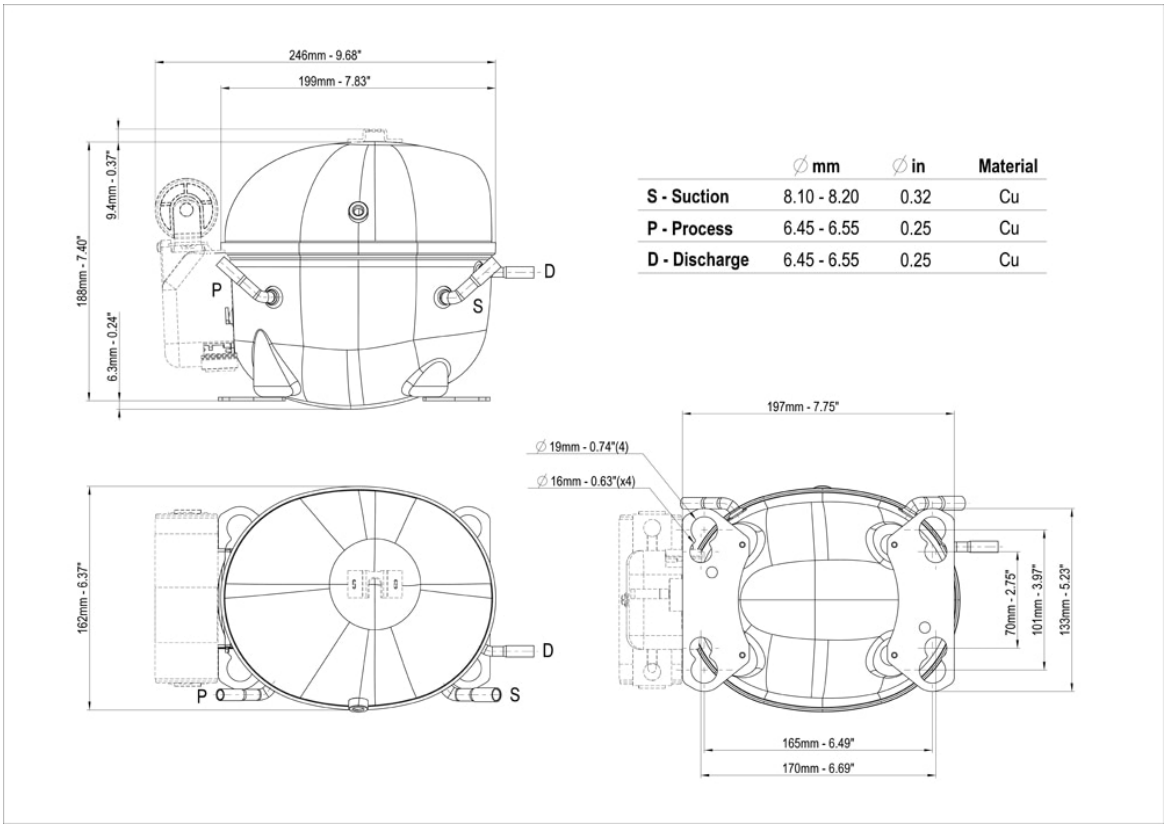
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-10	470	302	4.15	10.25	1.56
-5	586	335	4.38	12.85	1.75
0	727	369	4.61	16.02	1.97
5	893	402	4.85	19.82	2.22
10	1088	435	5.09	24.31	2.5

Test Condition: ASHRAEHBP46, Fan/NotControled/115, 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

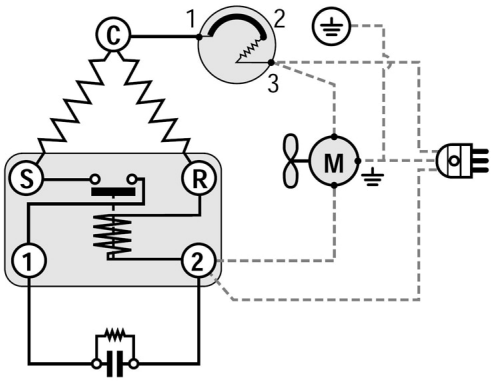


External Dimensions



	∅ mm	∅ in	Material
S - Suction	8.10 - 8.20	0.32	Cu
P - Process	6.45 - 6.55	0.25	Cu
D - Discharge	6.45 - 6.55	0.25	Cu

Wiring Diagram



Assembly Instructions