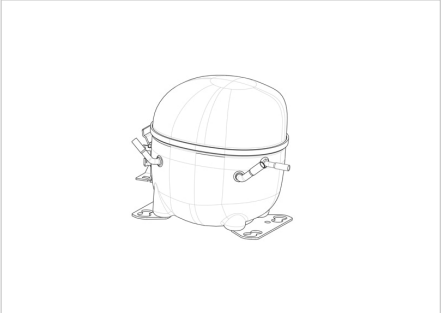
MODEL
NEK2121GK



APPROVALS

ENGINEERING CODE
957DA51

APPROVED REFRIGERANT
R-404A

POWER SUPPLY
220-240 V 50 Hz

STANDARD CONDITIONS
ASHRAE

APPLICATION
LBP

COOLING CAPACITY
283 W (LBP)

EFFICIENCY
1.29 W/W (LBP)

MOTOR TYPE
CSIR

STARTING TORQUE
HST

DATA

General Data

Type	Hermetic reciprocating
Technology Type	On-Off
Displacement	5.44 cm³
Compressor Cooling	Static/NotControled/220
Expansion Device	Capillary Tube or Expansion Valve
Horse Power	1/3 hp
Max Condensing Pressure Operating	24.71 bar
Max Condensing Pressure Peak	27.71 bar
Power Supply	220-240 V 50 Hz
Evaporating Temperature Range	-40 °C to -10 °C

Electrical Data

Motor type	CSIR
Starting Torque	HST
Start Winding Resistance	27.4 Ω at 25° C
Run Winding Resistance	7.9 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
Start Capacitor	43-53 Uf / 330 V
Starting Device	Relay | MTRP-38*
Motor Protection	T0050/G6

External Characteristics

Base Plate	European
Tray Holder	No
Height	188 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	-23.30°C	283 W	219 W	1.37 A	6.55 kg/h	1.29 W/W

Test Condition: ASHRAELBP32, Static/NotControled/220, Return Gas 32.2°C, Evaporation -23.30°C, Condensing 54.40°C, Ambient 32.2°C , Liquid 32.2°C, Subcooling 22.2K. 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
-40	145	133	1.09	3.33	1.09
-35	189	152	1.15	4.34	1.24
-30	240	171	1.21	5.55	1.41
-25	302	190	1.28	7.00	1.59
-20	375	209	1.34	8.75	1.8
-15	463	228	1.41	10.85	2.03
-10	566	249	1.47	13.37	2.28

Test Condition: ASHRAELBP32, Static/NotControled/220, Return Gas 32.2°C, Ambient 32.2°C , Liquid 32.2°C. 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
-35	171	154	1.16	3.93	1.12
-30	221	177	1.23	5.09	1.25
-25	281	201	1.31	6.51	1.4
-20	354	225	1.39	8.23	1.57
-15	442	249	1.48	10.33	1.77
-10	546	274	1.57	12.86	1.99

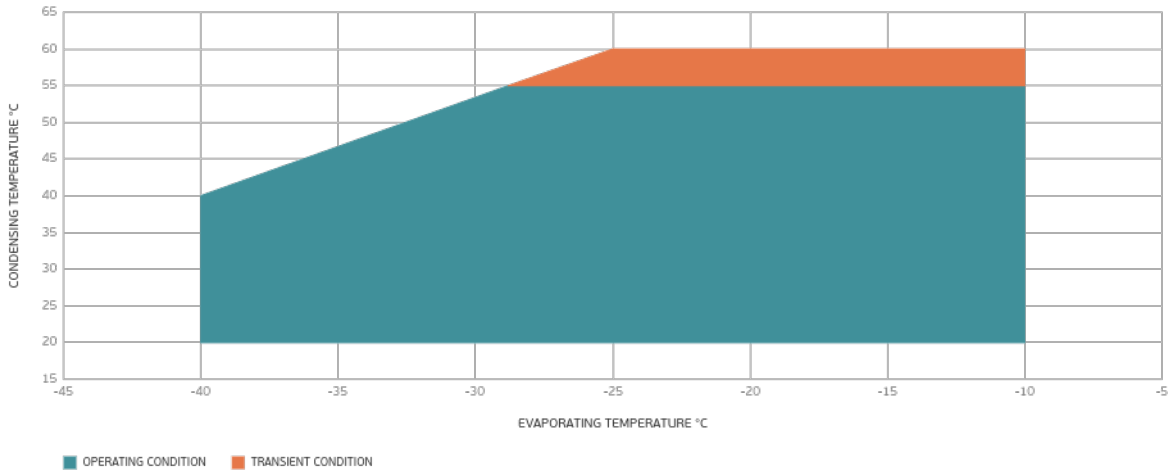
Test Condition: ASHRAELBP32, Static/NotControled/220, Return Gas 32.2°C, Ambient 32.2°C , Liquid 32.2°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Condensing Temperature 55°C

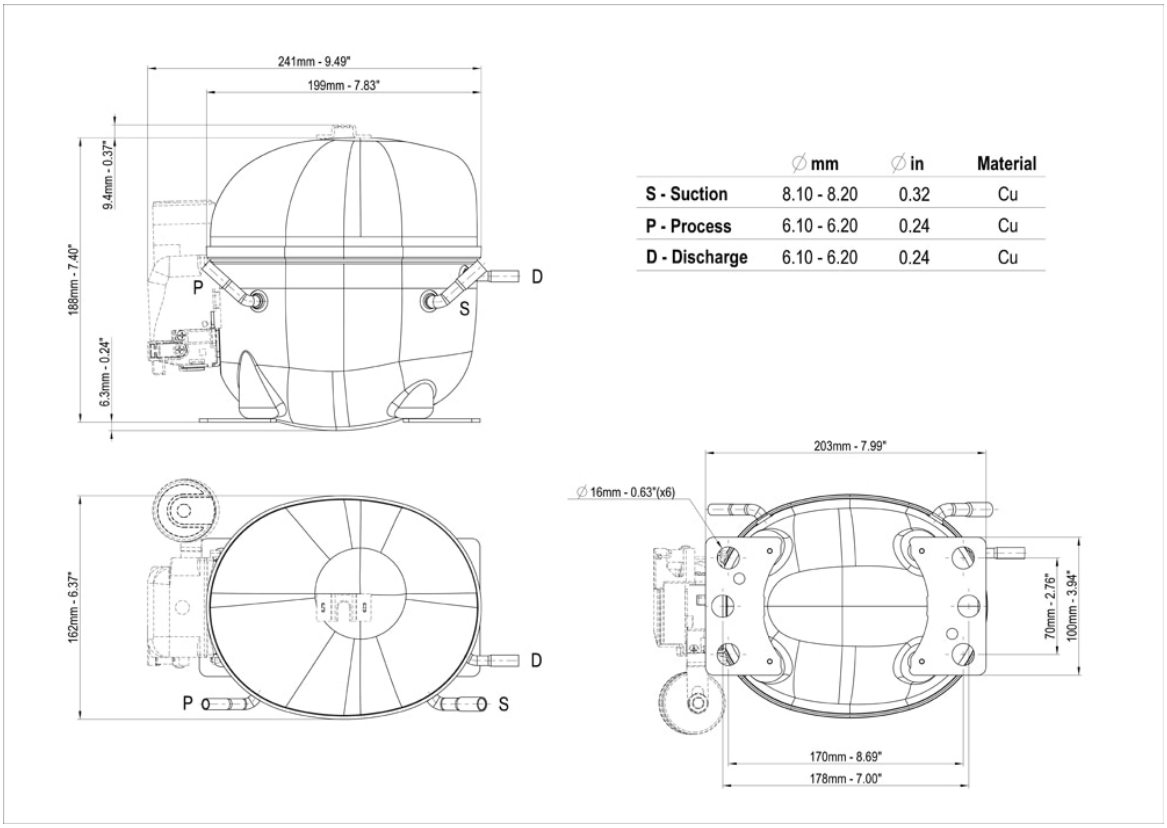
Evaporating Temperature °C	Cooling Capacity W	Power W	Current A	Gas Flow Rate kg/h	Efficiency W/W
-30	202	182	1.25	4.64	1.11
-25	260	209	1.34	6.00	1.24
-20	331	237	1.44	7.69	1.4
-15	418	264	1.55	9.76	1.58
-10	522	292	1.67	12.27	1.79

Test Condition: ASHRAELBP32, Static/NotControled/220, Return Gas 32.2°C, Ambient 32.2°C , Liquid 32.2°C. Data in accordance to EN 12900:2013 and AHRI 540:2015 polynomial equation and uncertainty guidance.

Operating Envelope

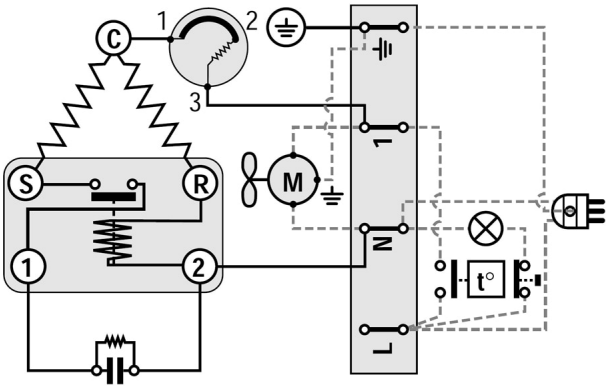


External Dimensions



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

Wiring Diagram



Assembly Instructions