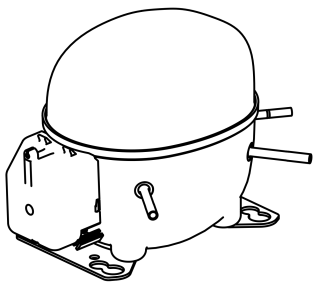
COMPRESSOR TECHNICAL DATA

NEK6181GK



ENGINEERING CODE
957MA51

REFRIGERANT
R-404A

POWER SUPPLY
220-240 V 50 Hz

APPLICATION
MBP

MOTOR TYPE
CSIR

STANDARD
ASHRAE

COOLING CAPACITY
648 W

EFFICIENCY
1.6 W/W

DATA

GENERAL DATA

Model	NEK6181GK
Type	Hermetic Reciprocating
Technology	ON/OFF
Compressor Application	MBP
Expansion Device	Capillary Tube or Expansion Valve
Compressor Cooling	Fan/220
HP	1/3+
Starting Torque	HST
Plant	SLOVAKIA

ELECTRICAL DATA

Start Winding Resistance	null
Run Winding Resistance	null

MECHANICAL DATA

Displacement	7.28 cm^3
Oil Charge	350 ml
Oil Type	ESTER
Oil Viscosity	ISO22
Weight	10.4 Kg

ELECTRICAL COMPONENTS

Start Capacitor	43-53 µf/330 V
CSR CSIR BOX	No
Starting Device Type	RELAY
Starting Device Description	MTRP-41*
Overload Protection	T0874/G6

PERFORMANCE

TESTED CONDITIONS

Tested Refrigerant	R-404A
Tested Application	MBP
Tested Standard	ASHRAE
Tested Cooling	Fan
Tested Voltage	220 V
Refrigerant Temperature	Dew

RATED POINTS

Condensing Temperature °C	Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
54.4	-6.7	648	1.6	404	2.58	17.69

Test Condition: Subcooling 8.3 K, Return Gas 35 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE

Condensing Temperature 35ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-20	529	1.89	281	2.12	11.49
-15	650	2.15	302	2.18	14.20
-10	794	2.43	327	2.24	17.46
-5	965	2.74	352	2.33	21.35
0	1163	3.09	376	2.43	25.97
5	1392	3.54	394	2.55	31.41
10	1653	4.10	403	2.68	37.77

Test Condition: Subcooling 8.3 K, Return Gas 35 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 45ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-20	452	1.45	312	2.15	10.85
-15	553	1.65	335	2.25	13.36
-10	676	1.85	365	2.36	16.43
-5	823	2.06	399	2.48	20.15
0	996	2.29	434	2.60	24.62
5	1196	2.56	467	2.74	29.92
10	1426	2.88	494	2.88	36.15

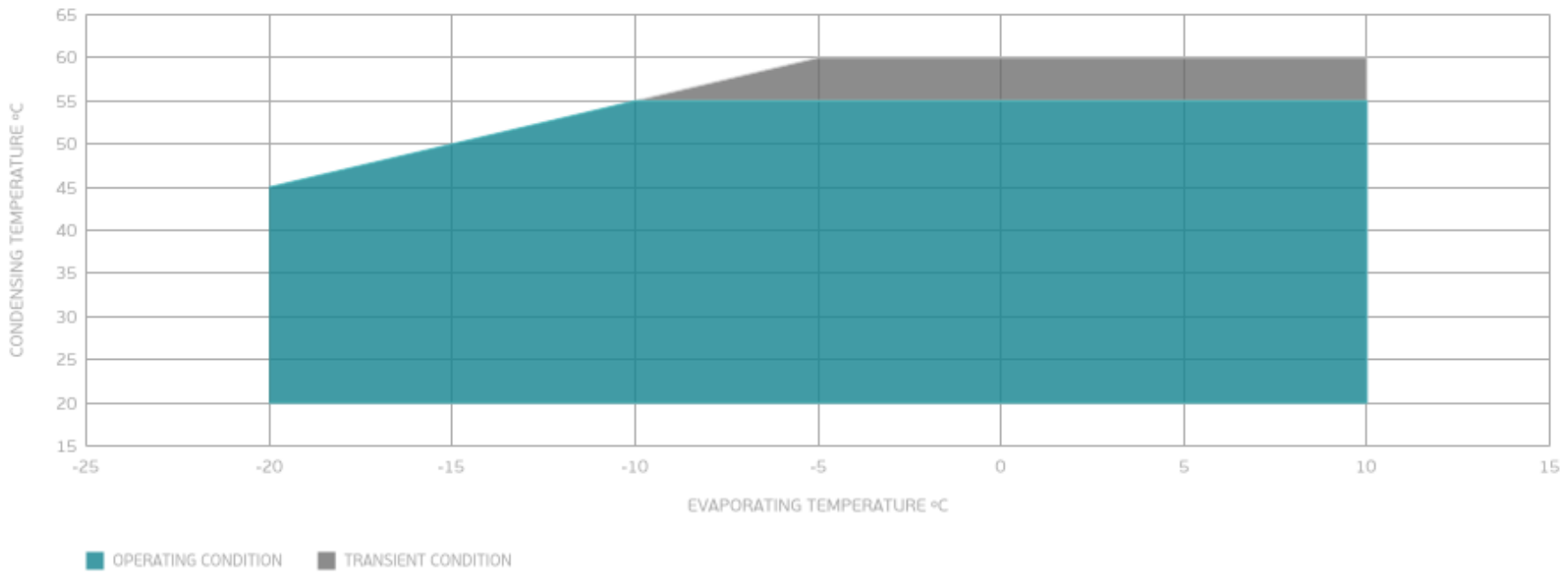
Test Condition: Subcooling 8.3 K, Return Gas 35 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE — Condensing Temperature 55ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-10	563	1.48	379	2.49	15.39
-5	684	1.63	419	2.63	18.88
0	829	1.79	462	2.78	23.13
5	999	1.97	507	2.92	28.23
10	1196	2.18	549	3.07	34.27

Test Condition: Subcooling 8.3 K, Return Gas 35 ºC. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

ENVELOPE



External

EXTERNAL CHARACTERISTICS

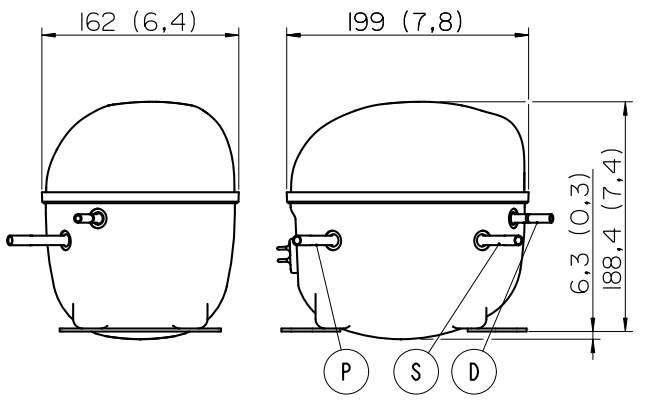
Base Plate	SMALL
Tray Holder	NO

Connector	Internal Diameter	Shape	Material
Suction	8.1 mm	SLANTED 42°	COPPER
Discharge	6.1 mm	STRAIGHT	COPPER

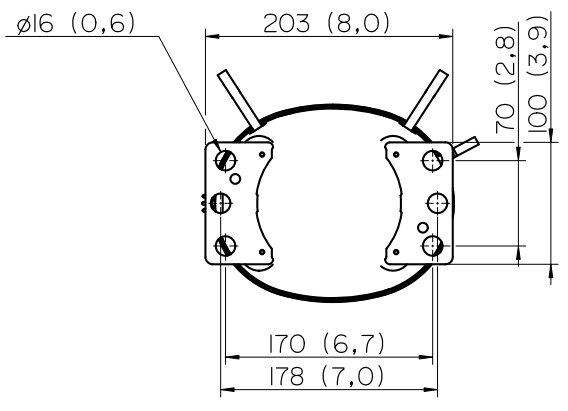
Process	6.1 mm	SLANTED 42°	COPPER

EXTERNAL DIMENSIONS

SHELL



BASE



FENCE