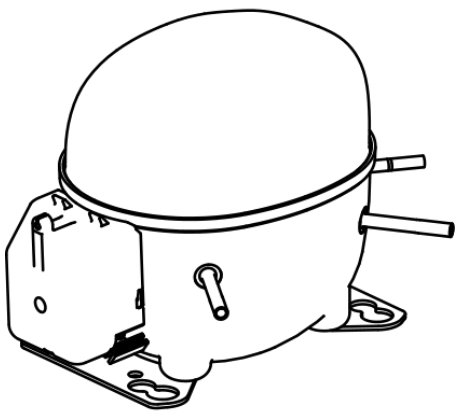
COMPRESSOR TECHNICAL DATA

NEK6181U



ENGINEERING CODE
861FA58

REFRIGERANT
R-290

POWER SUPPLY
220-240 V 50 Hz

APPLICATION
MBP

MOTOR TYPE
CSIR

STANDARD
EN12900

COOLING CAPACITY
482 W

EFFICIENCY
1.68 W/W

DATA

GENERAL DATA

Model	NEK6181U
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	28.2 Ω at 25°C
Run Winding Resistance	6.1 Ω at 25°C
Locked Rotor Amperage (LRA) 50Hz	12 A

MECHANICAL DATA

Displacement	7.28 cm^3
Oil Charge	350 ml
Oil Type	AB
Oil Viscosity	ISO32
Weight	10 Kg

ELECTRICAL COMPONENTS

Start Capacitor	43-53 µf/330 V
CSR CSIR BOX	No
Starting Device Type	RELAY
Starting Device Description	MTRP-0029*
Overload Protection	T0186/G6

EXTERNAL CHARACTERISTICS

Base Plate	SMALL
Tray Holder	YES

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

PERFORMANCE

TESTED CONDITIONS

Tested Refrigerant	R-290
Tested Application	MBP
Tested Standard	EN12900
Tested Cooling	Fan
Tested Voltage	220 V
Tested Frequency	50 Hz
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
45	-10	482	1.68	287	2.1	5.94

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE

Condensing Temperature 35°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-20	368	1.61	228	1.95	4.08
-15	459	1.88	245	2.00	5.12
-10	568	2.18	260	2.04	6.36
-5	696	2.56	272	2.07	7.84
0	844	3.02	279	2.09	9.58
5	1014	3.64	279	2.11	11.61
10	1206	4.50	268	2.12	13.95

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

PERFORMANCE CURVE

Condensing Temperature 45°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-20	310	1.26	247	1.96	3.77
-15	388	1.46	266	2.03	4.75
-10	482	1.68	287	2.10	5.94
-5	593	1.93	307	2.15	7.35
0	722	2.23	324	2.20	9.02
5	870	2.59	336	2.25	10.98
10	1038	3.04	341	2.28	13.24

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

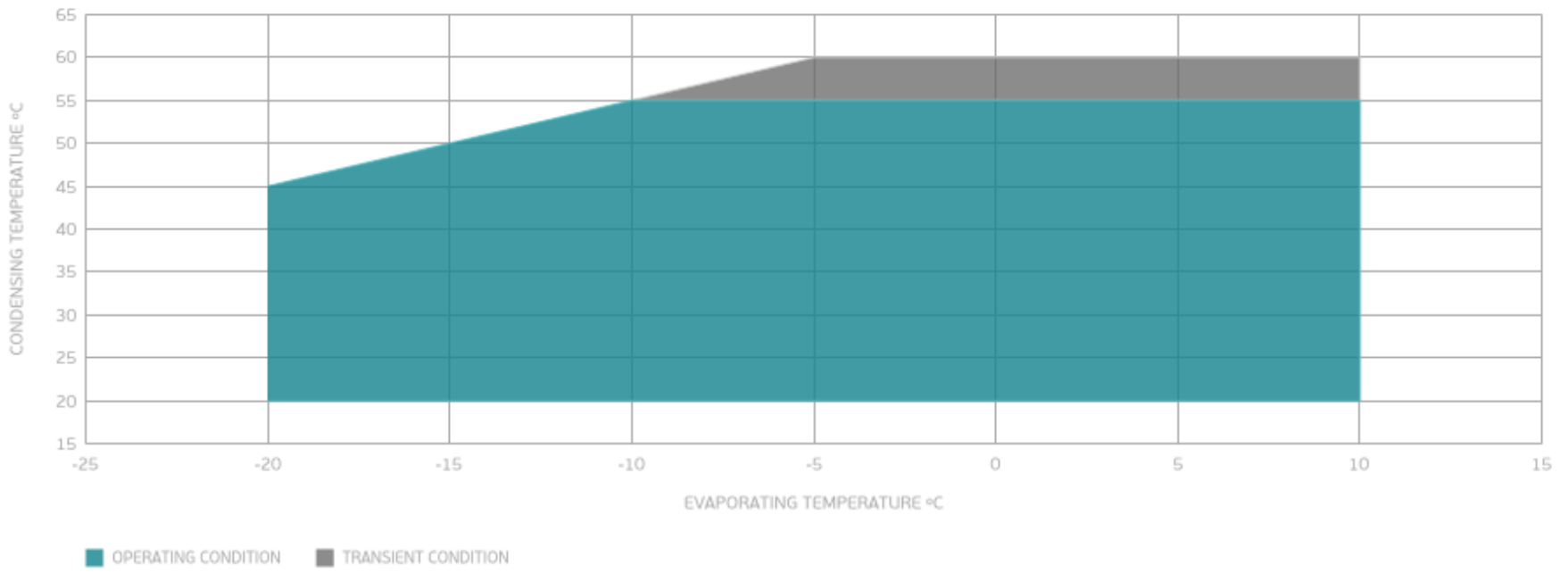
PERFORMANCE CURVE

Condensing Temperature 55°C

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-10	394	1.30	303	2.18	5.41
-5	488	1.49	328	2.26	6.75
0	597	1.69	353	2.33	8.35
5	723	1.92	376	2.40	10.21
10	867	2.20	393	2.46	12.38

Test Condition: Subcooling 0 K, Return Gas 20 °C. Data generated in accordance to EN 12900:2013 polynomial equation and tolerance guidelines.

ENVELOPE



EXTERNAL DIMENSIONS

