

NEK6181U



ENGINEERING CODE
861FA58



REFRIGERANT
R-290



POWER SUPPLY
220-240 V 50 Hz



APPLICATION
MBP



MOTOR TYPE
CSIR



STANDARD
EN12900



COOLING CAPACITY
483 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	483	1.68	287	2.1	5.95

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 35°C**

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-20	367	1.61	227	1.95	4.07
-15	457	1.87	244	2.00	5.10
-10	567	2.18	260	2.04	6.35
-5	696	2.56	272	2.07	7.84
0	845	3.03	279	2.09	9.59
5	1016	3.66	278	2.11	11.63
10	1208	4.53	267	2.12	13.98

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	311	1.26	247	1.96	3.78
-15	389	1.46	266	2.03	4.76
-10	483	1.68	287	2.10	5.95
-5	594	1.93	307	2.15	7.37
0	723	2.23	324	2.20	9.04
5	871	2.59	336	2.25	10.99
10	1038	3.06	339	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	304	2.18	5.41
-5	488	1.48	329	2.26	6.76
0	597	1.69	354	2.33	8.34
5	722	1.92	375	2.40	10.20
10	863	2.21	391	2.46	12.34

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

