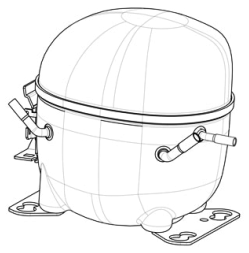
COMPRESSOR TECHNICAL DATA

NEK6181U



ENGINEERING CODE
861FA51

REFRIGERANT
R-290

POWER SUPPLY
220-240 V 50 Hz

APPLICATION
MBP

MOTOR TYPE
CSIR

STANDARD
ASHRAE

COOLING CAPACITY
576 W

EFFICIENCY
1.78 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	ESTER
Oil Viscosity	ISO22
Weight	10 Kg

ELECTRICAL COMPONENTS

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

EXTERNAL CHARACTERISTICS

Base Plate	SMALL

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	ASHRAE
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
54.4	-6.7	576	1.78	325	2.24	6.59

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	448	1.95	230	1.93	4.32
-15	545	2.21	246	1.98	5.27
-10	660	2.51	263	2.03	6.41
-5	794	2.87	277	2.06	7.74
0	951	3.32	286	2.09	9.32
5	1132	3.94	287	2.11	11.17
10	1339	4.82	278	2.12	13.32

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	394	1.55	254	1.97	4.10
-15	480	1.76	272	2.05	5.01
-10	582	1.98	293	2.11	6.11
-5	702	2.24	314	2.17	7.41
0	843	2.54	332	2.21	8.94
5	1006	2.93	344	2.25	10.75
10	1194	3.43	348	2.28	12.86

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

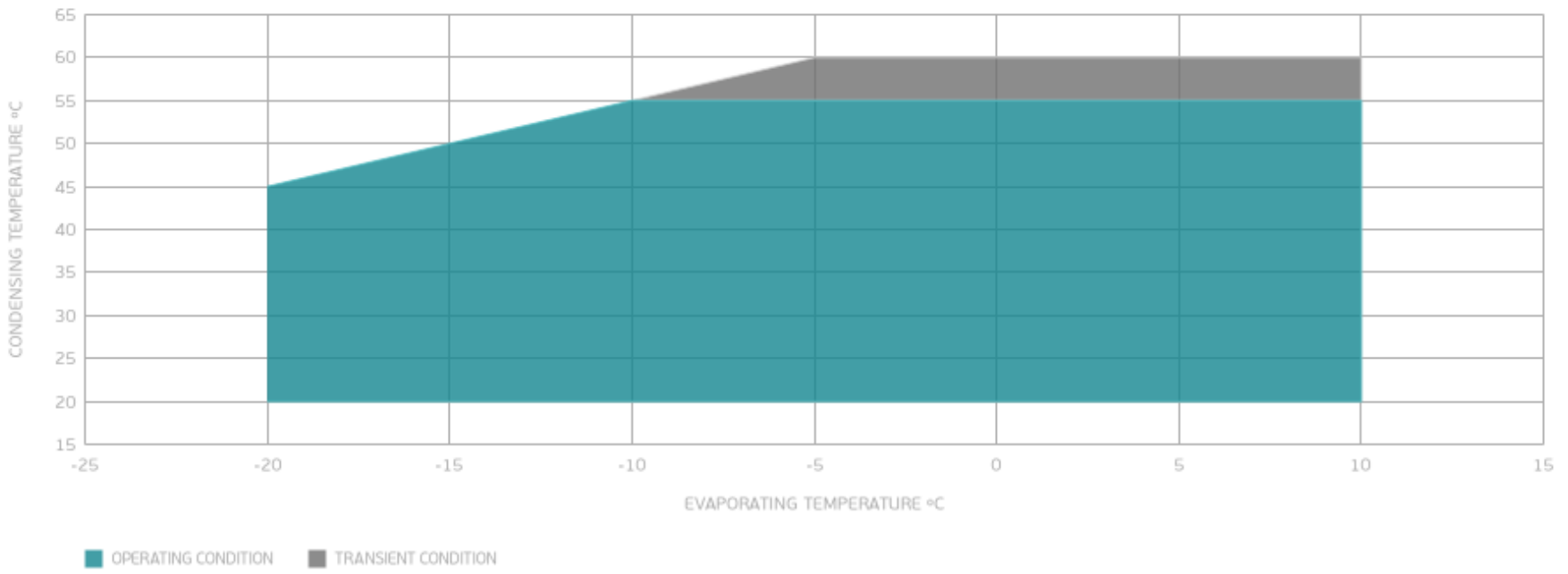
PERFORMANCE CURVE

Condensing Temperature 55ºC

Evaporating Temperature °C	Cooling Capacity W	Efficiency W/W	Power Consumption W	Current A	Gas Flow Rate kg/h
-10	503	1.63	309	2.19	5.77
-5	609	1.82	334	2.27	7.02
0	733	2.05	358	2.35	8.51
5	878	2.31	380	2.41	10.27
10	1045	2.65	395	2.47	12.33

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 DIMENSIONS