

COMPRESSOR DEFINITION

Designation	NEK2130GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	958BA51


A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	220-240 / 50	[V / Hz]	
4 Application type	Low Back Pressure		
4.1 Evaporating temperature range	-40°C to -10°C		
5 Motor type	CSIR		
6 Starting torque	HST - High starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Fan cooled	Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
	-	-	-
	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	24.7	[bar]	
9.2 Peak (gauge)	27.7	[bar]	
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/3+	[hp]
2 Displacement	7.37	[cm ³]
2.1 Bore	24.3	
2.2 Stroke	15.94	
3 Lubricant charge	350	[ml]
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight(with oil charge)	10.4	[kg]
5 Nitrogen charge	0.2 to 0.3	[bar]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRP-0029	
3 Start capacitor	53-64 (330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection (external)	T0056/G6	
6 Start winding resistance	31.70	[ohm at 25°C] +/- 8%
7 Run winding resistance	5.18	[ohm at 25°C] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	16	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz		EN12900LBP HH Fan cooled		Evap. Temp -35°C Return Gas +32°C Cond. Temp +40°C Liquid Subcooling 0 K	
Cooling capacity +/- 5%		Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%
	[W]	[W]	[A]	[Kg/h]	[W/W]
	210	212	1.96	5.29	0.99

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		EN12900 HH Fan cooled		Condensing temperature 35°C	
Evaporating temperature	Cooling capacity +/- 5%	Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%
°C	[W]	[W]	[A]	[Kg/h]	[W/W]
-40	170	184	1.88	4.01	0.92
-35	234	208	1.96	5.58	1.13
-30	312	235	2.04	7.44	1.33
-25	404	264	2.11	9.63	1.53
-20	509	292	2.19	12.20	1.74
-15	628	319	2.26	15.17	1.97
-10	763	345	2.34	18.60	2.21

TEST CONDITIONS: @220V50Hz		EN12900 HH Fan cooled		Condensing temperature 45°C	
Evaporating temperature	Cooling capacity +/- 5%	Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%
°C	[W]	[W]	[A]	[Kg/h]	[W/W]
-40	132	184	1.87	3.48	0.72
-35	187	213	1.95	5.01	0.88
-30	254	245	2.04	6.82	1.03
-25	332	279	2.13	8.94	1.19
-20	422	313	2.23	11.41	1.35
-15	524	347	2.33	14.27	1.51
-10	640	379	2.44	17.56	1.69

TEST CONDITIONS: @220V50Hz		EN12900 HH Fan cooled		Condensing temperature 55°C	
Evaporating temperature	Cooling capacity +/- 5%	Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%
°C	[W]	[W]	[A]	[Kg/h]	[W/W]
-40	-	-	-	-	-
-35	149	216	1.95	4.50	0.69
-30	203	252	2.05	6.26	0.81
-25	267	289	2.15	8.32	0.92
-20	341	328	2.27	10.70	1.04
-15	426	368	2.40	13.46	1.16
-10	522	406	2.54	16.63	1.28

F - EXTERNAL CHARACTERISTICS

1 Base plate	European	
2 Tray holder	No	
3 Connectors		
3.1 SUCTION	8.1 +0.10/+0.00	[mm]
3.1.1 Material	Copper	
3.1.2 Shape	Slanted 42°	
3.2 DISCHARGE	6.1 +0.10/+0.00	[mm]
3.2.1 Material	Copper	
3.2.2 Shape	Straight	
3.3 PROCESS	6.1 +0.10/+0.00	[mm]
3.3.1 Material	Copper	
3.3.2 Shape	Slanted 42°	
3.4 Oil cooler (Copper)	No	[mm]
3.5 Connector sealing	Rubber Plugs	