

**COMPRESSOR DEFINITION**

Designation	<b>NEK2134GK</b>
Nominal Voltage/Frequency	<b>220-240 V 50 Hz</b>
Engineering Number	<b>958AA51</b>


**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	1/2	[hp]
2 Displacement	8.77	[cm³]
2.1 Bore	26.5	
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)	T0168/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)	16.1	[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: <b>@220V50Hz</b>		<b>EN12900LBP HH</b> <b>Fan cooled</b>		Evap. Temp <b>-35°C</b> Return Gas <b>+32°C</b> Cond. Temp <b>+40°C</b> Liquid Subcooling <b>0 K</b>	
Cooling capacity +/- 5%		Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%
	[W]	[W]	[A]	[Kg/h]	[W/W]
	253	253	2.13	6.35	1.00

**E - PERFORMANCE - CURVES**

TEST CONDITIONS: <b>@220V50Hz</b>		<b>EN12900 HH</b> <b>Fan cooled</b>		Condensing temperature <b>35°C</b>	
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]
<b>-40</b>	208	218	2.01	4.91	0.95
<b>-35</b>	277	249	2.05	6.57	1.11
<b>-30</b>	366	281	2.12	8.71	1.30
<b>-25</b>	473	313	2.20	11.31	1.51
<b>-20</b>	597	345	2.30	14.34	1.73
<b>-15</b>	735	379	2.41	17.78	1.94
<b>-10</b>	887	414	2.53	21.61	2.15

TEST CONDITIONS: <b>@220V50Hz</b>		<b>EN12900 HH</b> <b>Fan cooled</b>		Condensing temperature <b>45°C</b>	
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]
<b>-40</b>	170	222	1.98	4.52	0.77
<b>-35</b>	227	256	2.05	6.06	0.89
<b>-30</b>	302	292	2.14	8.10	1.04
<b>-25</b>	394	328	2.25	10.60	1.20
<b>-20</b>	501	366	2.38	13.55	1.37
<b>-15</b>	621	406	2.52	16.92	1.53
<b>-10</b>	753	447	2.67	20.68	1.68

TEST CONDITIONS: <b>@220V50Hz</b>		<b>EN12900 HH</b> <b>Fan cooled</b>		Condensing temperature <b>55°C</b>	
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]
<b>-40</b>	-	-	-	-	-
<b>-35</b>	179	260	2.05	5.49	0.69
<b>-30</b>	239	301	2.17	7.39	0.79
<b>-25</b>	313	344	2.31	9.76	0.91
<b>-20</b>	401	389	2.46	12.58	1.03
<b>-15</b>	501	436	2.63	15.83	1.15
<b>-10</b>	611	486	2.81	19.49	1.26

**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	