

Designation	NEK6217GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	959GA51

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	Medium Back Pressure (Commercial Compressors R404A)		
4.1 Evaporating temperature range	-20°C to 10°C	(-4°F to 50°F)	
5 Motor type	CSCR		
6 Starting torque	HST - Hight starting torque		
7 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Operating voltage range		
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	25.7	[kgf/cm ²] (365 psig)	/ °C - °F
9.2 Peak (gauge)	28.7	[kgf/cm ²] (408 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	3/4	[hp]
2 Displacement	14.28	[cm ³] (0.871 cu.in)
2.1 Bore [mm]	30.157	
2.2 Stroke [mm]	20.000	
3 Lubricant charge	350	[ml] (11.84 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	11.6	[kg] (25.57 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	3ARR3B6AC3	
3 Start capacitor	72-88(330)	[µf(VAC minimum)]
4 Run capacitor	15(440)	[µf(VAC minimum)]
5 Motor protection	T0188/G9	
6 Start winding resistance	12.00	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	3.34	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	-	[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			ASHRAEHBP46 Fan		Evaporating temperature (Condensing temperature		7.2°C (44.96°F) 54.4°C (129.92°F)	
Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
7080	1784	2075	1010	4.86	58.29	7.01	1.77	2.05

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	3469	874	1016	544	2.69	22.03	6.36	1.60	1.86
-15	(+ 5)	4235	1067	1241	588	2.91	27.04	7.22	1.82	2.11
-10	(+14)	5162	1301	1513	635	3.14	33.15	8.13	2.05	2.38
-5	(+23)	6249	1575	1831	687	3.39	40.42	9.09	2.29	2.66
0	(+32)	7497	1889	2197	744	3.65	48.92	10.07	2.54	2.95
+5	(+41)	8905	2244	2609	805	3.92	58.73	11.06	2.79	3.24
+10	(+50)	10474	2640	3069	870	4.20	69.92	12.04	3.03	3.53

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2987	753	875	572	2.84	20.91	5.22	1.31	1.53
-15	(+ 5)	3670	925	1075	630	3.10	25.88	5.83	1.47	1.71
-10	(+14)	4488	1131	1315	690	3.37	31.85	6.51	1.64	1.91
-5	(+23)	5440	1371	1594	752	3.66	38.92	7.24	1.82	2.12
0	(+32)	6526	1644	1912	818	3.96	47.15	7.99	2.01	2.34
+5	(+41)	7746	1952	2270	886	4.27	56.61	8.75	2.20	2.56
+10	(+50)	9101	2293	2667	957	4.60	67.38	9.50	2.39	2.78

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2502	630	733	592	2.94	19.67	4.24	1.07	1.24
-15	(+ 5)	3104	782	910	666	3.27	24.58	4.65	1.17	1.36
-10	(+14)	3814	961	1118	742	3.61	30.43	5.13	1.29	1.50
-5	(+23)	4632	1167	1357	818	3.96	37.30	5.65	1.42	1.66
0	(+32)	5558	1401	1629	896	4.32	45.25	6.21	1.56	1.82
+5	(+41)	6591	1661	1931	974	4.69	54.36	6.78	1.71	1.99
+10	(+50)	7733	1949	2266	1054	5.07	64.71	7.34	1.85	2.15

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.1 +0.10/+0.00	[mm]	(0.319" +0.004"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		