

COMPRESSOR DEFINITION

Designation	NE K6213GK
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	959BG71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	115 / 60	[V / Hz]	
4 Application type	Medium Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 10°C	(-4°F to 50°F)	
5 Motor type	CSIR		
6 Starting torque	HST - High 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	1/2+	[hp]
2 Displacement	12.11	[cm ³] (0.739 cu.in)
2.1 Bore [mm]	27.775	
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	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	9660A-XX-189	
3 Start capacitor	189-227(165)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0826/G9	
6 Start winding resistance	5.20	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.67	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	51.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	13.29	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @100V50Hz			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]
5690	1434	1667	984	10.96	46.84	5.78	1.46	1.69

E - PERFORMANCE - CURVES

TEST CONDITIONS: @100V60Hz			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)	3235	815	948	600	8.96	20.55	5.38	1.36	1.58
-15	(+ 5)	3985	1004	1168	659	9.29	25.45	6.06	1.53	1.77
-10	(+14)	4879	1230	1430	723	9.67	31.33	6.76	1.70	1.98
-5	(+23)	5918	1491	1734	793	10.13	38.27	7.46	1.88	2.19
0	(+32)	7101	1789	2081	870	10.66	46.33	8.16	2.06	2.39
+5	(+41)	8428	2124	2470	955	11.29	55.58	8.82	2.22	2.59
+10	(+50)	9900	2495	2901	1049	12.03	66.09	9.44	2.38	2.77

TEST CONDITIONS: @100V60Hz			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)	2762	696	809	644	9.21	19.33	4.29	1.08	1.26
-15	(+ 5)	3428	864	1005	711	9.61	24.17	4.82	1.22	1.41
-10	(+14)	4215	1062	1235	783	10.06	29.92	5.39	1.36	1.58
-5	(+23)	5120	1290	1500	859	10.58	36.64	5.96	1.50	1.75
0	(+32)	6145	1549	1801	942	11.18	44.40	6.52	1.64	1.91
+5	(+41)	7290	1837	2136	1032	11.87	53.28	7.07	1.78	2.07
+10	(+50)	8554	2156	2507	1130	12.66	63.33	7.56	1.91	2.22

TEST CONDITIONS: @100V60Hz			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)	2373	598	695	676	9.44	18.66	3.52	0.89	1.03
-15	(+ 5)	2951	744	865	753	9.91	23.37	3.91	0.99	1.15
-10	(+14)	3624	913	1062	834	10.44	28.91	4.34	1.09	1.27
-5	(+23)	4391	1106	1287	918	11.03	35.35	4.77	1.20	1.40
0	(+32)	5252	1324	1539	1008	11.69	42.76	5.21	1.31	1.53
+5	(+41)	6208	1565	1819	1105	12.44	51.20	5.63	1.42	1.65
+10	(+50)	7259	1829	2127	1208	13.29	60.75	6.01	1.51	1.76

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.03 +0.07/+0.00	[mm]	(0.316" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.45 +0.10/+0.00	[mm]	(0.254" +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		