

COMPRESSOR DEFINITION

Designation	NE K6213GK
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	959JD71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	208-230 / 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	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 temperature			
9.1 Operating	25.2	[kgf/cm ²] (358 psig)	/ °C - °F
9.2 Peak	28.3	[kgf/cm ²] (402 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)	11.9	[kg] (26.23 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA4M3C-109	
3 Start capacitor	64-77(330)	[µF(VAC minimum)]
4 Run capacitor	7(400)	[µF(VAC minimum)]
5 Motor protection	T0485/G9	
6 Start winding resistance	19.98	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	2.13	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	30.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CCC - UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @230V60Hz			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°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]
3567	899	1045	802	4.71	38.44	4.45	1.12	1.30

E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V60Hz			ARI4 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)	2644	666	775	582	4.01	22.33	4.54	1.14	1.33
-15	(+ 5)	3296	831	966	638	4.17	28.17	5.17	1.30	1.52
-10	(+14)	4060	1023	1190	700	4.36	35.13	5.81	1.46	1.70
-5	(+23)	4936	1244	1446	766	4.59	43.34	6.44	1.62	1.89
0	(+32)	5925	1493	1736	838	4.85	52.93	7.07	1.78	2.07
+5	(+41)	7026	1771	2059	915	5.15	64.04	7.68	1.94	2.25
+10	(+50)	8240	2076	2414	997	5.48	76.80	8.27	2.08	2.42

TEST CONDITIONS: @230V60Hz			ARI4 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)	2163	545	634	610	4.09	21.15	3.55	0.89	1.04
-15	(+ 5)	2721	686	797	671	4.27	26.87	4.06	1.02	1.19
-10	(+14)	3374	850	989	736	4.47	33.77	4.58	1.15	1.34
-5	(+23)	4122	1039	1208	805	4.71	41.98	5.12	1.29	1.50
0	(+32)	4964	1251	1455	879	4.98	51.63	5.65	1.42	1.66
+5	(+41)	5902	1487	1729	956	5.28	62.86	6.18	1.56	1.81
+10	(+50)	6934	1747	2032	1037	5.61	75.79	6.69	1.68	1.96

TEST CONDITIONS: @230V60Hz			ARI4 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)	1691	426	495	631	4.14	19.88	2.68	0.68	0.79
-15	(+ 5)	2130	537	624	700	4.35	25.35	3.04	0.77	0.89
-10	(+14)	2647	667	776	773	4.59	32.05	3.42	0.86	1.00
-5	(+23)	3241	817	950	848	4.86	40.13	3.82	0.96	1.12
0	(+32)	3913	986	1147	927	5.16	49.70	4.22	1.06	1.24
+5	(+41)	4662	1175	1366	1008	5.48	60.91	4.63	1.17	1.36
+10	(+50)	5488	1383	1608	1092	5.84	73.90	5.03	1.27	1.47

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
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	6.45 +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		