

COMPRESSOR DEFINITION

Designation	NE 9213GK
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	953EG71

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 0°C	(-4°F to 32°F)	
5 Motor type	CSCR		
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	3/4	[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)	11.3	[kg] (24.91 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	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA4AI3C-646	
3 Start capacitor	72-88(330)	[µF(VAC minimum)]
4 Run capacitor	20(440)	[µF(VAC minimum)]
5 Motor protection	T0736/G9	
6 Start winding resistance	[Ω at 25°C (77°F)] +/- 8%	
7 Run winding resistance	[Ω at 25°C (77°F)] +/- 8%	
8 LRA - Locked rotor amperage (60 Hz)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	8.95	[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

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 35°C (+95°F))					
@100V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	3104	782	909	540	4.76	19.69	5.75	1.45	1.68
-15	(+ 5)	3975	1002	1165	603	5.32	25.38	6.59	1.66	1.93
-10	(+14)	4969	1252	1456	668	5.89	31.92	7.45	1.88	2.18
-5	(+23)	6122	1543	1794	734	6.49	39.60	8.34	2.10	2.44
0	(+32)	7470	1882	2189	804	7.13	48.76	9.29	2.34	2.72
+5	(+41)	9049	2280	2652	877	7.82	59.69	10.32	2.60	3.02
+10	(+50)	10895	2745	3192	954	8.58	72.73	11.47	2.89	3.36

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 45°C (+113°F))					
@100V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2611	658	765	544	4.76	18.30	4.80	1.21	1.41
-15	(+ 5)	3349	844	981	613	5.40	23.60	5.46	1.38	1.60
-10	(+14)	4204	1059	1232	686	6.06	29.82	6.13	1.54	1.80
-5	(+23)	5210	1313	1527	763	6.77	37.28	6.83	1.72	2.00
0	(+32)	6405	1614	1877	845	7.54	46.28	7.58	1.91	2.22
+5	(+41)	7824	1972	2293	932	8.38	57.14	8.42	2.12	2.47
+10	(+50)	9503	2395	2785	1025	9.30	70.17	9.37	2.36	2.75

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 55°C (+131°F))					
@100V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2118	534	621	548	4.76	16.66	3.86	0.97	1.13
-15	(+ 5)	2724	686	798	623	5.47	21.55	4.37	1.10	1.28
-10	(+14)	3439	867	1008	704	6.23	27.44	4.88	1.23	1.43
-5	(+23)	4299	1083	1260	792	7.05	34.64	5.43	1.37	1.59
0	(+32)	5340	1346	1565	886	7.95	43.46	6.03	1.52	1.77
+5	(+41)	6599	1663	1934	987	8.94	54.22	6.71	1.69	1.97
+10	(+50)	8111	2044	2377	1096	10.03	67.24	7.49	1.89	2.20

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		