

COMPRESSOR DEFINITION

Designation	NE U6212GK
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	958HE92

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	115-127 / 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	8.77	[cm ³] (0.535 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	15.920	
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)	10.7	[kg] (23.59 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	115-127 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA9AD3C-121	
3 Start capacitor	189-227(250)	[µF(VAC minimum)]
4 Run capacitor	17.5(400)	[µF(VAC minimum)]
5 Motor protection	T0928	
6 Start winding resistance	6.83	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.15	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	39.00	[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	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V60Hz			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]
5813	1465	1703	712	6.67	47.86	8.16	2.06	2.39

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz			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)	2756	695	808	380	4.05	17.48	7.26	1.83	2.13
-15	(+ 5)	3407	859	998	414	4.30	21.76	8.24	2.08	2.42
-10	(+14)	4183	1054	1226	451	4.59	26.87	9.29	2.34	2.72
-5	(+23)	5084	1281	1490	490	4.92	32.90	10.36	2.61	3.04
0	(+32)	6111	1540	1791	533	5.27	39.88	11.45	2.89	3.36
+5	(+41)	7264	1830	2128	579	5.66	47.90	12.54	3.16	3.67
+10	(+50)	8542	2153	2503	628	6.08	57.01	13.60	3.43	3.98

TEST CONDITIONS: @115V60Hz			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)	2370	597	694	401	4.22	16.61	5.89	1.49	1.73
-15	(+ 5)	2943	742	862	445	4.55	20.75	6.62	1.67	1.94
-10	(+14)	3630	915	1064	490	4.91	25.76	7.42	1.87	2.17
-5	(+23)	4430	1116	1298	536	5.29	31.69	8.27	2.08	2.42
0	(+32)	5345	1347	1566	584	5.69	38.61	9.16	2.31	2.68
+5	(+41)	6373	1606	1868	634	6.12	46.57	10.06	2.53	2.95
+10	(+50)	7516	1894	2202	686	6.57	55.65	10.95	2.76	3.21

TEST CONDITIONS: @115V60Hz			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)	1937	488	568	420	4.35	15.24	4.63	1.17	1.36
-15	(+ 5)	2420	610	709	475	4.77	19.16	5.10	1.29	1.49
-10	(+14)	3005	757	881	530	5.20	23.97	5.67	1.43	1.66
-5	(+23)	3692	930	1082	585	5.64	29.72	6.31	1.59	1.85
0	(+32)	4481	1129	1313	640	6.10	36.48	7.00	1.76	2.05
+5	(+41)	5373	1354	1574	696	6.58	44.32	7.73	1.95	2.26
+10	(+50)	6366	1604	1865	752	7.07	53.28	8.47	2.13	2.48

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		