

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			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]
2871	723	841	540	5.23	30.94	5.32	1.34	1.56

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz			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)	2207	556	647	381	4.00	18.61	5.78	1.46	1.69
-15	(+ 5)	2590	653	759	426	4.33	22.16	6.10	1.54	1.79
-10	(+14)	3196	805	936	467	4.65	27.67	6.84	1.72	2.01
-5	(+23)	4025	1014	1179	504	4.95	35.33	7.98	2.01	2.34
0	(+32)	5077	1279	1488	536	5.23	45.34	9.48	2.39	2.78
+5	(+41)	6352	1601	1861	563	5.50	57.89	11.29	2.85	3.31
+10	(+50)	7851	1978	2300	586	5.76	73.17	13.39	3.37	3.92

TEST CONDITIONS: @115V60Hz			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)	1778	448	521	402	4.14	17.40	4.43	1.12	1.30
-15	(+ 5)	2102	530	616	454	4.53	20.77	4.65	1.17	1.36
-10	(+14)	2618	660	767	501	4.91	26.19	5.22	1.32	1.53
-5	(+23)	3326	838	975	542	5.26	33.85	6.12	1.54	1.79
0	(+32)	4227	1065	1238	579	5.60	43.94	7.30	1.84	2.14
+5	(+41)	5319	1340	1559	610	5.91	56.66	8.73	2.20	2.56
+10	(+50)	6604	1664	1935	636	6.21	72.21	10.38	2.62	3.04

TEST CONDITIONS: @115V60Hz			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)	1387	349	406	417	4.27	16.30	3.32	0.84	0.97
-15	(+ 5)	1627	410	477	476	4.73	19.35	3.42	0.86	1.00
-10	(+14)	2028	511	594	531	5.17	24.55	3.82	0.96	1.12
-5	(+23)	2590	653	759	579	5.58	32.07	4.47	1.13	1.31
0	(+32)	3314	835	971	622	5.97	42.12	5.33	1.34	1.56
+5	(+41)	4198	1058	1230	660	6.33	54.88	6.38	1.61	1.87
+10	(+50)	5243	1321	1536	692	6.67	70.56	7.57	1.91	2.22

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		