

COMPRESSOR DEFINITION

Designation	NE U6212GK
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	958HD92

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 - 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 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)	11.5	[kg] (25.35 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	RVA4AH3C-648	
3 Start capacitor	43-53(330)	[µF(VAC minimum)]
4 Run capacitor	7.5(400)	[µF(VAC minimum)]
5 Motor protection	MRA38173-3261	
6 Start winding resistance	15.17	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	3.87	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	22.00	[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]
2895	730	848	562	3.06	31.20	5.15	1.30	1.51

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)	2185	551	640	408	2.55	18.42	5.34	1.35	1.56
-15	(+ 5)	2565	646	752	452	2.68	21.95	5.70	1.44	1.67
-10	(+14)	3174	800	930	490	2.80	27.48	6.48	1.63	1.90
-5	(+23)	4011	1011	1175	523	2.92	35.21	7.65	1.93	2.24
0	(+32)	5076	1279	1487	552	3.03	45.34	9.19	2.32	2.69
+5	(+41)	6370	1605	1867	576	3.14	58.06	11.08	2.79	3.25
+10	(+50)	7892	1989	2313	594	3.24	73.56	13.28	3.35	3.89

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)	1762	444	516	425	2.58	17.23	4.15	1.05	1.22
-15	(+ 5)	2088	526	612	476	2.75	20.64	4.40	1.11	1.29
-10	(+14)	2606	657	764	521	2.90	26.08	4.99	1.26	1.46
-5	(+23)	3316	836	972	560	3.04	33.75	5.90	1.49	1.73
0	(+32)	4216	1063	1236	594	3.16	43.84	7.09	1.79	2.08
+5	(+41)	5309	1338	1556	621	3.28	56.55	8.56	2.16	2.51
+10	(+50)	6592	1661	1932	642	3.38	72.06	10.27	2.59	3.01

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)	1364	344	400	440	2.62	16.04	3.09	0.78	0.90
-15	(+ 5)	1617	408	474	499	2.83	19.24	3.25	0.82	0.95
-10	(+14)	2025	510	593	551	3.01	24.50	3.67	0.93	1.08
-5	(+23)	2587	652	758	597	3.17	32.02	4.33	1.09	1.27
0	(+32)	3304	833	968	635	3.32	41.98	5.21	1.31	1.53
+5	(+41)	4175	1052	1223	667	3.45	54.58	6.28	1.58	1.84
+10	(+50)	5201	1311	1524	691	3.56	70.01	7.51	1.89	2.20

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	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.1 +0.10/+0.00	[mm]	(0.240" +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		