

### COMPRESSOR DEFINITION

Designation	NE U6214Z
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	269ND71

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	208-230 / 60	[ V / Hz ]	
4 Application type	High Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-15°C to 10°C	(5°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	14.2	[kgf/cm <sup>2</sup> ] (202 psig)	/ °C - °F
9.2 Peak	15.9	[kgf/cm <sup>2</sup> ] (226 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	1/2	[hp]
2 Displacement	16.80	[cm <sup>3</sup> ] (1.025 cu.in)
2.1 Bore [mm]	31.190	
2.2 Stroke [mm]	22.000	
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)	11.5	[kg] (25.35 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### 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	RVA4AL3C-649	
3 Start capacitor	108-130(330)	[µF(VAC minimum)]
4 Run capacitor	12.5(400)	[µF(VAC minimum)]
5 Motor protection	T0843/G9	
6 Start winding resistance	10.00	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	3.00	[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	UL	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @208V60Hz			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]
6548	1650	1919	841	4.16	42.46	7.79	1.96	2.28

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @208V60Hz		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]
-15	(+5)	3166	798	928	444	2.39	17.12	7.14	1.80	2.09
-10	(+14)	4000	1008	1172	495	2.60	21.71	8.08	2.04	2.37
-5	(+23)	4992	1258	1463	556	2.87	27.19	8.97	2.26	2.63
0	(+32)	6142	1548	1800	627	3.19	33.61	9.79	2.47	2.87
+5	(+41)	7449	1877	2183	707	3.56	40.98	10.54	2.66	3.09
+10	(+50)	8914	2246	2612	797	3.98	49.35	11.19	2.82	3.28

TEST CONDITIONS: @208V60Hz		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]
-15	(+5)	2811	708	824	471	2.49	16.42	5.96	1.50	1.75
-10	(+14)	3577	902	1048	529	2.74	20.98	6.77	1.71	1.98
-5	(+23)	4488	1131	1315	595	3.03	26.42	7.55	1.90	2.21
0	(+32)	5542	1397	1624	668	3.37	32.79	8.29	2.09	2.43
+5	(+41)	6739	1698	1975	750	3.76	40.11	8.99	2.26	2.63
+10	(+50)	8080	2036	2368	839	4.19	48.42	9.62	2.42	2.82

TEST CONDITIONS: @208V60Hz		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]
-15	(+5)	2408	607	705	491	2.59	15.34	4.91	1.24	1.44
-10	(+14)	3108	783	911	559	2.88	19.88	5.56	1.40	1.63
-5	(+23)	3938	992	1154	634	3.22	25.30	6.21	1.56	1.82
0	(+32)	4897	1234	1435	715	3.60	31.63	6.85	1.73	2.01
+5	(+41)	5986	1508	1754	802	4.02	38.91	7.46	1.88	2.19
+10	(+50)	7204	1815	2111	896	4.48	47.18	8.05	2.03	2.36

### 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		