

COMPRESSOR DEFINITION

Designation	NE U6214Z
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	269ND92

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	CSIR		
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	14.2	[kgf/cm ²] (202 psig)	/ °C - °F
9.2 Peak	15.9	[kgf/cm ²] (226 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/2	[hp]
2 Displacement	16.80	[cm ³] (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	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-0051-31	
3 Start capacitor	108-130(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	MRA38112-3266	
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: @230V60Hz			ARIHBP 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]
6154	1551	1803	922	5.34	48.29	6.67	1.68	1.95

E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V60Hz		ARI18 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)	2967	748	869	501	4.18	18.55	5.92	1.49	1.73
-10	(+14)	3778	952	1107	558	4.29	23.76	6.77	1.71	1.98
-5	(+23)	4713	1188	1381	623	4.44	29.79	7.56	1.91	2.22
0	(+32)	5773	1455	1692	697	4.64	36.72	8.29	2.09	2.43
+5	(+41)	6958	1754	2039	779	4.87	44.60	8.94	2.25	2.62
+10	(+50)	8269	2084	2423	870	5.15	53.50	9.50	2.39	2.78

TEST CONDITIONS: @230V60Hz		ARI18 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)	2602	656	762	525	4.20	17.87	4.96	1.25	1.45
-10	(+14)	3341	842	979	590	4.34	23.06	5.67	1.43	1.66
-5	(+23)	4209	1061	1233	661	4.52	29.20	6.36	1.60	1.86
0	(+32)	5204	1311	1525	741	4.74	36.36	7.02	1.77	2.06
+5	(+41)	6327	1594	1854	828	5.01	44.60	7.64	1.93	2.24
+10	(+50)	7579	1910	2221	923	5.32	53.99	8.21	2.07	2.40

TEST CONDITIONS: @230V60Hz		ARI18 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)	2242	565	657	554	4.30	17.10	4.04	1.02	1.18
-10	(+14)	2874	724	842	627	4.45	22.07	4.59	1.16	1.34
-5	(+23)	3637	917	1066	706	4.64	28.13	5.16	1.30	1.51
0	(+32)	4532	1142	1328	791	4.89	35.32	5.73	1.44	1.68
+5	(+41)	5558	1401	1628	883	5.18	43.73	6.29	1.59	1.84
+10	(+50)	6715	1692	1968	982	5.52	53.40	6.84	1.72	2.00

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		