

COMPRESSOR DEFINITION

Designation	NE U6214Z
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	269NA51

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	220-240 / 50	[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 pressures/temperature			
9.1 Operating (gauge)	16.2	[kgf/cm ²] (230 psig)	/ °C - °F
9.2 Peak (gauge)	20.6	[kgf/cm ²] (293 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)	11.6	[kg] (25.57 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-0048-65	
3 Start capacitor	108-130(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	MST20APK-3259	
6 Start winding resistance	14.26	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	4.25	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	22.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	4.21	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			EN12900HBP_HH Fan		Evaporating temperature (Condensing temperature		5°C (41°F) 50°C (122°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]
4978	1254	1459	688	3.71	34.03	7.24	1.82	2.12

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			EN12900HH 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)	2564	646	751	387	2.62	14.99	6.62	1.67	1.94
-10	(+14)	3233	815	947	432	2.76	18.98	7.49	1.89	2.19
-5	(+23)	4027	1015	1180	482	2.92	23.73	8.35	2.10	2.45
0	(+32)	4946	1246	1449	538	3.12	29.30	9.19	2.31	2.69
+5	(+41)	5990	1510	1755	600	3.35	35.70	9.99	2.52	2.93
+10	(+50)	7161	1805	2098	666	3.61	42.99	10.75	2.71	3.15

TEST CONDITIONS: @220V50Hz			EN12900HH 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)	2241	565	657	415	2.70	14.29	5.40	1.36	1.58
-10	(+14)	2852	719	836	467	2.87	18.25	6.11	1.54	1.79
-5	(+23)	3574	901	1047	524	3.07	22.98	6.81	1.72	2.00
0	(+32)	4408	1111	1292	587	3.30	28.50	7.50	1.89	2.20
+5	(+41)	5355	1349	1569	656	3.57	34.86	8.16	2.06	2.39
+10	(+50)	6414	1616	1880	730	3.87	42.08	8.79	2.22	2.58

TEST CONDITIONS: @220V50Hz			EN12900HH 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)	1936	488	567	438	2.76	13.62	4.42	1.11	1.30
-10	(+14)	2470	622	724	501	2.97	17.45	4.93	1.24	1.45
-5	(+23)	3103	782	909	569	3.22	22.04	5.45	1.37	1.60
0	(+32)	3835	967	1124	644	3.51	27.41	5.96	1.50	1.75
+5	(+41)	4667	1176	1367	724	3.83	33.60	6.45	1.62	1.89
+10	(+50)	5598	1411	1640	810	4.20	40.64	6.91	1.74	2.02

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
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		