

COMPRESSOR DEFINITION

Designation	NE U6214Z
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	269SA23

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	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 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	15.71	[cm ³] (0.959 cu.in)
2.1 Bore [mm]	30.157	
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)	10.3	[kg] (22.71 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA3AN3C-647	
3 Start capacitor	88-108(330)	[μF(VAC minimum)]
4 Run capacitor	15(400)	[μF(VAC minimum)]
5 Motor protection	MRA38171-3261	
6 Start winding resistance	18.83	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	5.14	[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)	-	[A] - Measured according to UL 984
11 Approval boards certification	IRAM - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			ASHRAEHBP46 Fan		Evaporating temperature (Condensing temperature		7.2°C (44.96°F) 54.4°C (129.92°F)	
Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
5630	1419	1650	678	3.23	36.50	8.30	2.09	2.43

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+5)	2748	693	805	401	1.94	14.86	6.85	1.73	2.01
-10	(+14)	3495	881	1024	434	2.11	18.97	8.06	2.03	2.36
-5	(+23)	4395	1107	1288	467	2.27	23.94	9.41	2.37	2.76
0	(+32)	5446	1372	1596	501	2.43	29.80	10.88	2.74	3.19
+5	(+41)	6648	1675	1948	535	2.60	36.57	12.43	3.13	3.64
+10	(+50)	8002	2017	2345	569	2.79	44.30	14.05	3.54	4.12

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+5)	2438	614	714	422	2.09	14.25	5.79	1.46	1.70
-10	(+14)	3098	781	908	461	2.28	18.16	6.72	1.69	1.97
-5	(+23)	3908	985	1145	502	2.45	23.00	7.78	1.96	2.28
0	(+32)	4867	1226	1426	543	2.63	28.79	8.95	2.25	2.62
+5	(+41)	5975	1506	1751	586	2.81	35.56	10.19	2.57	2.99
+10	(+50)	7233	1823	2119	631	3.01	43.35	11.48	2.89	3.36

TEST CONDITIONS: @220V50Hz			ASHRAE46 Fan		(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-15	(+5)	2164	545	634	445	2.21	13.79	4.86	1.22	1.42
-10	(+14)	2730	688	800	490	2.43	17.46	5.58	1.41	1.63
-5	(+23)	3443	868	1009	537	2.64	22.12	6.42	1.62	1.88
0	(+32)	4303	1084	1261	586	2.84	27.79	7.35	1.85	2.15
+5	(+41)	5309	1338	1556	637	3.06	34.52	8.34	2.10	2.44
+10	(+50)	6463	1629	1894	690	3.29	42.32	9.36	2.36	2.74

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		