

### COMPRESSOR DEFINITION

Designation	NE U6210Z
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	268HA51

### 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 <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	12.11	[cm <sup>3</sup> ] (0.739 cu.in)
2.1 Bore [mm]	27.775	
2.2 Stroke [mm]	20.000	
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)	10.6	[kg] (23.37 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### C - ELETRICAL 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	RVA4L3C-566	
3 Start capacitor	64-77(330)	[µF(VAC minimum)]
4 Run capacitor	5(400)	[µF(VAC minimum)]
5 Motor protection	T0874/G9	
6 Start winding resistance	27.64	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	5.04	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	18.50	[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)	2.64	[A] - Measured according to UL 984
11 Approval boards certification	CCC - 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]
3783	953	1109	447	2.41	25.86	8.46	2.13	2.48

### 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)	1898	478	556	271	1.86	11.10	7.01	1.77	2.05
-10	(+14)	2405	606	705	297	1.93	14.12	8.10	2.04	2.37
-5	(+23)	3011	759	882	327	2.02	17.75	9.20	2.32	2.70
0	(+32)	3718	937	1090	361	2.13	22.03	10.30	2.60	3.02
+5	(+41)	4526	1140	1326	398	2.25	26.97	11.36	2.86	3.33
+10	(+50)	5433	1369	1592	440	2.39	32.61	12.36	3.11	3.62

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)	1647	415	483	290	1.91	10.51	5.68	1.43	1.67
-10	(+14)	2107	531	618	321	2.00	13.49	6.57	1.66	1.93
-5	(+23)	2661	671	780	355	2.10	17.11	7.50	1.89	2.20
0	(+32)	3308	834	969	391	2.22	21.39	8.45	2.13	2.48
+5	(+41)	4049	1020	1186	431	2.36	26.36	9.40	2.37	2.75
+10	(+50)	4883	1231	1431	473	2.52	32.04	10.31	2.60	3.02

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)	1413	356	414	304	1.95	9.94	4.66	1.17	1.37
-10	(+14)	1810	456	530	341	2.05	12.79	5.30	1.34	1.55
-5	(+23)	2294	578	672	381	2.17	16.29	6.01	1.52	1.76
0	(+32)	2864	722	839	423	2.30	20.47	6.77	1.71	1.98
+5	(+41)	3521	887	1032	466	2.46	25.36	7.56	1.90	2.21
+10	(+50)	4265	1075	1250	512	2.64	30.97	8.33	2.10	2.44

### 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		