COMPRESSOR DEFINITION

Designation	**NE K6214Z**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**269JA51**

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 - Hight starting torque		
7 Expantion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	16.2	[kgf/cm²] (230 psig)	/ ºC - ºF
9.2 Peak (gauge)	20.6	[kgf/cm²] (293 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/2	[hp]
2 Displacement	16.80	[cm³] (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	0.2 to 0.3	[kgf/cm²](2.84 to 4.27 psig)

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-0012-65	
3 Start capacitor	72-88(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0899/G6	
6 Start winding resistance	10.63	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	3.13	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	-	[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	IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS:			**EN12900HBP**		Evaporating temperature	**5°C (41°F)**		
@220V50Hz			**Fan**		(Condensing temperature	**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]
4488	1131	1315	691	4.47	33.01	6.49	1.64	1.90

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**EN12900**					(Condensing temperature **35ºC (+95ºF))**			
@220V50Hz		**Fan**								
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)**	2229	562	653	416	3.64	13.83	5.34	1.35	1.57
-10	**(+14)**	2837	715	831	460	3.76	17.69	6.17	1.55	1.81
-5	**(+23)**	3570	900	1046	506	3.88	22.36	7.05	1.78	2.07
0	**(+32)**	4428	1116	1297	555	4.00	27.91	7.98	2.01	2.34
+5	**(+41)**	5410	1363	1585	606	4.12	34.36	8.92	2.25	2.62
+10	**(+50)**	6518	1642	1910	659	4.24	41.76	9.88	2.49	2.90

TEST CONDITIONS:		**EN12900**					(Condensing temperature **45ºC (+113ºF))**			
@220V50Hz		**Fan**								
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)**	1937	488	568	444	3.72	13.18	4.37	1.10	1.28
-10	**(+14)**	2480	625	727	493	3.85	16.95	5.04	1.27	1.48
-5	**(+23)**	3135	790	919	545	3.98	21.55	5.75	1.45	1.69
0	**(+32)**	3903	984	1144	600	4.13	27.01	6.50	1.64	1.90
+5	**(+41)**	4784	1206	1402	659	4.29	33.39	7.26	1.83	2.13
+10	**(+50)**	5779	1456	1693	720	4.46	40.73	8.03	2.02	2.35

TEST CONDITIONS:		**EN12900**					(Condensing temperature **55ºC (+131ºF))**			
@220V50Hz		**Fan**								
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)**	1667	420	489	465	3.73	12.60	3.59	0.90	1.05
-10	**(+14)**	2138	539	627	521	3.90	16.25	4.10	1.03	1.20
-5	**(+23)**	2710	683	794	582	4.09	20.72	4.65	1.17	1.36
0	**(+32)**	3383	853	991	647	4.31	26.07	5.23	1.32	1.53
+5	**(+41)**	4157	1048	1218	716	4.55	32.34	5.81	1.46	1.70
+10	**(+50)**	5033	1268	1475	789	4.81	39.57	6.38	1.61	1.87

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		