

COMPRESSOR DEFINITION

Designation	NE K6214Z
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	269HE92

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	115-127 / 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	CSCR		
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	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115-127 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA9AD3C-121	
3 Start capacitor	243-292(250)	[µF(VAC minimum)]
4 Run capacitor	35(440)	[µF(VAC minimum)]
5 Motor protection	T0820/G9	
6 Start winding resistance	2.68	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.68	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	48.00	[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	IMTRO - VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V60Hz			ASHRAEHBP46 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]
5960	1502	1746	853	8.70	38.64	6.99	1.76	2.05

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz			ASHRAE46 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)	2925	737	857	475	6.31	15.82	6.16	1.55	1.81
-10	(+14)	3680	927	1078	525	6.54	19.97	7.01	1.77	2.05
-5	(+23)	4590	1157	1345	585	6.87	25.00	7.85	1.98	2.30
0	(+32)	5654	1425	1657	653	7.30	30.94	8.65	2.18	2.53
+5	(+41)	6874	1732	2014	731	7.83	37.82	9.40	2.37	2.75
+10	(+50)	8247	2078	2417	819	8.47	45.66	10.08	2.54	2.95

TEST CONDITIONS: @115V60Hz			ASHRAE46 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)	2558	645	750	495	6.38	14.95	5.16	1.30	1.51
-10	(+14)	3254	820	953	553	6.68	19.08	5.89	1.48	1.73
-5	(+23)	4089	1031	1198	618	7.06	24.08	6.62	1.67	1.94
0	(+32)	5064	1276	1484	690	7.53	29.96	7.34	1.85	2.15
+5	(+41)	6179	1557	1810	770	8.09	36.77	8.03	2.02	2.35
+10	(+50)	7432	1873	2178	858	8.75	44.53	8.66	2.18	2.54

TEST CONDITIONS: @115V60Hz			ASHRAE46 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)	2181	550	639	512	6.47	13.90	4.26	1.07	1.25
-10	(+14)	2819	710	826	579	6.83	18.03	4.86	1.23	1.42
-5	(+23)	3581	902	1049	652	7.27	23.00	5.49	1.38	1.61
0	(+32)	4467	1126	1309	730	7.80	28.85	6.12	1.54	1.79
+5	(+41)	5477	1380	1605	814	8.41	35.61	6.74	1.70	1.97
+10	(+50)	6611	1666	1937	904	9.10	43.30	7.31	1.84	2.14

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.03 +0.07/+0.00	[mm]	(0.316" +0.003"/+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	8.03 +0.07/+0.00	[mm]	(0.316" +0.003"/+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		