

### COMPRESSOR DEFINITION

Designation	<b>NE U6212Z</b>
Nominal Voltage/Frequency	<b>115 V 60 Hz</b>
Engineering Number	<b>269MG71</b>

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	115 / 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 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	14.28	[cm <sup>3</sup> ] (0.871 cu.in)
2.1 Bore [mm]	30.157	
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)	11.5	[kg] (25.35 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA9AD3C-121	
3 Start capacitor	189-227(250)	[µF(VAC minimum)]
4 Run capacitor	30(400)	[µF(VAC minimum)]
5 Motor protection	T0793/G9	
6 Start winding resistance	5.45	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.92	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	40.00	[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	UL	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V60Hz			ARIHBP 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]
5431	1369	1591	696	6.11	42.62	7.80	1.97	2.29

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz		ARI18 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)	2598	655	761	380	3.30	16.24	6.85	1.73	2.01
-10	(+14)	3313	835	971	421	3.67	20.83	7.86	1.98	2.30
-5	(+23)	4154	1047	1217	470	4.10	26.26	8.83	2.23	2.59
0	(+32)	5121	1291	1501	526	4.60	32.58	9.74	2.45	2.85
+5	(+41)	6216	1566	1821	588	5.15	39.84	10.57	2.66	3.10
+10	(+50)	7436	1874	2179	658	5.78	48.11	11.30	2.85	3.31

TEST CONDITIONS: @115V60Hz		ARI18 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)	2278	574	668	401	3.47	15.65	5.69	1.43	1.67
-10	(+14)	2926	737	857	449	3.90	20.19	6.52	1.64	1.91
-5	(+23)	3701	933	1084	503	4.39	25.68	7.36	1.85	2.16
0	(+32)	4603	1160	1349	562	4.92	32.16	8.19	2.06	2.40
+5	(+41)	5632	1419	1650	627	5.51	39.70	8.99	2.27	2.63
+10	(+50)	6788	1711	1989	697	6.15	48.36	9.75	2.46	2.86

TEST CONDITIONS: @115V60Hz		ARI18 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)	2042	515	598	419	3.64	15.59	4.87	1.23	1.43
-10	(+14)	2572	648	754	475	4.14	19.75	5.42	1.37	1.59
-5	(+23)	3230	814	946	536	4.68	24.97	6.03	1.52	1.77
0	(+32)	4016	1012	1177	600	5.26	31.29	6.68	1.68	1.96
+5	(+41)	4929	1242	1444	669	5.88	38.78	7.36	1.86	2.16
+10	(+50)	5970	1505	1749	742	6.54	47.49	8.05	2.03	2.36

### F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
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	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.45 +0.10/+0.00	[mm]	(0.254" +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		