

COMPRESSOR DEFINITION

Designation	NE U6220GK
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	959TE92

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	115-127 / 60	[V / Hz]	
4 Application type	Medium Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 10°C	(-4°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	25.2	[kgf/cm ²] (358 psig)	/ °C - °F
9.2 Peak	28.3	[kgf/cm ²] (402 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	3/4	[hp]
2 Displacement	14.28	[cm ³] (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)	11.6	[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	RVAH9AD3C-555	
3 Start capacitor	243-292(250)	[µF(VAC minimum)]
4 Run capacitor	25(400)	[µF(VAC minimum)]
5 Motor protection	MST00AFW-3262	
6 Start winding resistance	5.69	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.73	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	57.00	[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			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°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]
4573	1152	1340	943	9.14	49.28	4.85	1.22	1.42

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz			ARI4 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]
-20	(- 4)	3520	887	1031	647	6.81	29.72	5.43	1.37	1.59
-15	(+ 5)	4218	1063	1236	721	7.37	36.07	5.86	1.48	1.72
-10	(+14)	5144	1296	1507	801	8.01	44.51	6.43	1.62	1.88
-5	(+23)	6297	1587	1845	888	8.72	55.27	7.09	1.79	2.08
0	(+32)	7678	1935	2250	982	9.51	68.57	7.81	1.97	2.29
+5	(+41)	9286	2340	2721	1082	10.37	84.63	8.58	2.16	2.51
+10	(+50)	11121	2803	3259	1189	11.31	103.66	9.36	2.36	2.74

TEST CONDITIONS: @115V60Hz			ARI4 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]
-20	(- 4)	2903	732	851	684	7.10	28.38	4.24	1.07	1.24
-15	(+ 5)	3502	883	1026	767	7.73	34.60	4.57	1.15	1.34
-10	(+14)	4292	1081	1258	855	8.43	42.95	5.02	1.27	1.47
-5	(+23)	5271	1328	1545	946	9.18	53.67	5.57	1.40	1.63
0	(+32)	6441	1623	1887	1041	10.00	66.98	6.19	1.56	1.81
+5	(+41)	7800	1966	2286	1141	10.88	83.08	6.84	1.72	2.00
+10	(+50)	9350	2356	2740	1244	11.82	102.21	7.50	1.89	2.20

TEST CONDITIONS: @115V60Hz			ARI4 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]
-20	(- 4)	2279	574	668	712	7.30	26.78	3.21	0.81	0.94
-15	(+ 5)	2754	694	807	810	8.07	32.78	3.40	0.86	1.00
-10	(+14)	3383	853	991	911	8.89	40.97	3.70	0.93	1.09
-5	(+23)	4165	1050	1220	1013	9.74	51.56	4.11	1.03	1.20
0	(+32)	5099	1285	1494	1116	10.65	64.78	4.57	1.15	1.34
+5	(+41)	6187	1559	1813	1221	11.60	80.85	5.08	1.28	1.49
+10	(+50)	7427	1872	2176	1328	12.59	99.99	5.59	1.41	1.64

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		