

COMPRESSOR DEFINITION

Designation	NE U6215GK
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	959NE71

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 - 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	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	12.11	[cm ³] (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)	11.61	[kg] (25.60 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

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	RVAH7AA3C-571	
3 Start capacitor	189-227(250)	[µF(VAC minimum)]
4 Run capacitor	30(400)	[µF(VAC minimum)]
5 Motor protection	T0865/J5	
6 Start winding resistance	3.87	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.90	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	47.00	[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]
3958	997	1160	781	7.43	42.65	5.07	1.28	1.49

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)	3042	766	891	544	5.66	25.68	5.58	1.41	1.63
-15	(+ 5)	3606	909	1057	606	6.12	30.83	5.98	1.51	1.75
-10	(+14)	4417	1113	1294	672	6.64	38.21	6.58	1.66	1.93
-5	(+23)	5474	1379	1604	742	7.23	48.05	7.36	1.85	2.16
0	(+32)	6777	1708	1986	817	7.87	60.54	8.27	2.08	2.42
+5	(+41)	8326	2098	2440	896	8.57	75.89	9.28	2.34	2.72
+10	(+50)	10121	2551	2966	979	9.33	94.33	10.35	2.61	3.03

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)	2526	636	740	577	5.89	24.67	4.36	1.10	1.28
-15	(+ 5)	3006	758	881	648	6.44	29.70	4.64	1.17	1.36
-10	(+14)	3680	927	1078	721	7.04	36.85	5.11	1.29	1.50
-5	(+23)	4547	1146	1332	796	7.67	46.33	5.71	1.44	1.67
0	(+32)	5608	1413	1643	873	8.34	58.33	6.43	1.62	1.88
+5	(+41)	6862	1729	2011	953	9.04	73.08	7.21	1.82	2.11
+10	(+50)	8309	2094	2435	1035	9.78	90.78	8.02	2.02	2.35

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)	1980	499	580	603	6.10	23.31	3.30	0.83	0.97
-15	(+ 5)	2390	602	700	686	6.77	28.45	3.48	0.88	1.02
-10	(+14)	2940	741	862	768	7.46	35.58	3.81	0.96	1.12
-5	(+23)	3631	915	1064	851	8.16	44.91	4.26	1.07	1.25
0	(+32)	4462	1124	1307	934	8.88	56.65	4.79	1.21	1.40
+5	(+41)	5433	1369	1592	1017	9.61	71.00	5.36	1.35	1.57
+10	(+50)	6545	1649	1918	1100	10.36	88.18	5.93	1.49	1.74

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		