

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	CSIR		
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	Current Relay	
2.1 Starting device	MTRPH-71-31	
3 Start capacitor	243-292(250)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0865/G9	
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			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]
7535	1899	2208	1187	11.92	62.03	6.35	1.60	1.86

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]
-20	(- 4)	3725	939	1092	572	7.11	23.64	6.51	1.64	1.91
-15	(+ 5)	4587	1156	1344	631	7.47	29.29	7.28	1.83	2.13
-10	(+14)	5588	1408	1637	699	7.95	35.89	8.00	2.02	2.34
-5	(+23)	6726	1695	1971	776	8.53	43.51	8.66	2.18	2.54
0	(+32)	8003	2017	2345	863	9.23	52.23	9.27	2.34	2.72
+5	(+41)	9418	2373	2760	960	10.04	62.11	9.81	2.47	2.88
+10	(+50)	10971	2765	3215	1066	10.95	73.23	10.29	2.59	3.02

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]
-20	(- 4)	3209	809	940	613	7.33	22.48	5.22	1.32	1.53
-15	(+ 5)	3984	1004	1168	683	7.82	28.09	5.84	1.47	1.71
-10	(+14)	4875	1229	1429	761	8.41	34.60	6.41	1.62	1.88
-5	(+23)	5882	1482	1724	846	9.09	42.08	6.96	1.75	2.04
0	(+32)	7005	1765	2053	940	9.86	50.61	7.46	1.88	2.19
+5	(+41)	8243	2077	2415	1041	10.72	60.24	7.92	2.00	2.32
+10	(+50)	9598	2419	2812	1150	11.68	71.06	8.33	2.10	2.44

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]
-20	(- 4)	2677	675	785	650	7.58	21.06	4.12	1.04	1.21
-15	(+ 5)	3361	847	985	736	8.21	26.61	4.56	1.15	1.34
-10	(+14)	4138	1043	1212	828	8.92	33.01	4.99	1.26	1.46
-5	(+23)	5008	1262	1468	926	9.70	40.32	5.41	1.36	1.58
0	(+32)	5973	1505	1750	1030	10.56	48.62	5.80	1.46	1.70
+5	(+41)	7031	1772	2060	1141	11.49	57.99	6.17	1.55	1.81
+10	(+50)	8182	2062	2398	1257	12.50	68.48	6.51	1.64	1.91

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		