

COMPRESSOR DEFINITION

Designation	NE U6214GK
Nominal Voltage/Frequency	200-230 V 50 Hz / 208-230 V 60 Hz
Engineering Number	959WB71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	200-230 / 50	[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	1/2	[hp]
2 Displacement	9.99	[cm ³] (0.610 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	18.120	
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	-	[kgf/cm ²]

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	200-230 V 50 Hz / 208-230 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA3H3C-108	
3 Start capacitor	108-130(330)	[µF(VAC minimum)]
4 Run capacitor	12.5(400)	[µF(VAC minimum)]
5 Motor protection	T1052/G9	
6 Start winding resistance	10.90	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	3.59	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	26.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @200V50Hz			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]
5662	1427	1659	665	3.65	46.61	8.52	2.15	2.50

E - PERFORMANCE - CURVES

TEST CONDITIONS: @200V50Hz		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)	2626	662	769	370	2.33	16.66	7.10	1.79	2.08
-15	(+ 5)	3253	820	953	401	2.47	20.77	8.11	2.04	2.38
-10	(+14)	4004	1009	1173	432	2.60	25.72	9.28	2.34	2.72
-5	(+23)	4878	1229	1429	461	2.73	31.56	10.59	2.67	3.10
0	(+32)	5875	1481	1722	489	2.86	38.34	12.02	3.03	3.52
+5	(+41)	6996	1763	2050	516	2.98	46.14	13.56	3.42	3.97
+10	(+50)	8241	2077	2415	542	3.10	55.00	15.20	3.83	4.45

TEST CONDITIONS: @200V50Hz		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)	2235	563	655	395	2.44	15.66	5.67	1.43	1.66
-15	(+ 5)	2790	703	817	434	2.61	19.67	6.43	1.62	1.88
-10	(+14)	3452	870	1012	472	2.78	24.50	7.30	1.84	2.14
-5	(+23)	4222	1064	1237	509	2.94	30.20	8.28	2.09	2.43
0	(+32)	5101	1285	1495	545	3.10	36.85	9.35	2.36	2.74
+5	(+41)	6087	1534	1784	579	3.26	44.48	10.51	2.65	3.08
+10	(+50)	7181	1810	2104	612	3.42	53.17	11.74	2.96	3.44

TEST CONDITIONS: @200V50Hz		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)	1885	475	552	412	2.51	14.83	4.58	1.15	1.34
-15	(+ 5)	2354	593	690	461	2.72	18.64	5.11	1.29	1.50
-10	(+14)	2916	735	854	509	2.94	23.26	5.73	1.44	1.68
-5	(+23)	3570	900	1046	556	3.15	28.74	6.42	1.62	1.88
0	(+32)	4316	1088	1265	601	3.36	35.14	7.19	1.81	2.11
+5	(+41)	5155	1299	1511	645	3.58	42.52	8.00	2.02	2.34
+10	(+50)	6087	1534	1784	687	3.79	50.94	8.86	2.23	2.60

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		