

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	CSIR		
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	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 - ELETRICAL 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	Current Relay	
2.1 Starting device	MTRPH-0055	
3 Start capacitor	108-130(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T1064	
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]
5557	1400	1628	718	4.46	45.75	7.74	1.95	2.27

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)	2612	658	765	390	3.18	16.57	6.69	1.69	1.96
-15 (+ 5)	3222	812	944	425	3.31	20.57	7.58	1.91	2.22
-10 (+14)	3959	998	1160	459	3.43	25.43	8.63	2.17	2.53
-5 (+23)	4824	1216	1414	491	3.55	31.21	9.83	2.48	2.88
0 (+32)	5816	1466	1704	521	3.66	37.95	11.16	2.81	3.27
+5 (+41)	6934	1747	2032	549	3.77	45.73	12.62	3.18	3.70
+10 (+50)	8179	2061	2397	576	3.87	54.59	14.20	3.58	4.16

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)	2218	559	650	417	3.31	15.53	5.34	1.34	1.56
-15 (+ 5)	2763	696	810	461	3.46	19.48	6.00	1.51	1.76
-10 (+14)	3415	861	1001	503	3.61	24.24	6.78	1.71	1.99
-5 (+23)	4175	1052	1223	544	3.76	29.87	7.66	1.93	2.25
0 (+32)	5042	1271	1477	583	3.91	36.43	8.64	2.18	2.53
+5 (+41)	6016	1516	1763	621	4.06	43.96	9.70	2.44	2.84
+10 (+50)	7097	1788	2080	657	4.21	52.54	10.82	2.73	3.17

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)	1826	460	535	440	3.37	14.37	4.15	1.05	1.22
-15 (+ 5)	2300	580	674	494	3.57	18.21	4.66	1.17	1.36
-10 (+14)	2861	721	838	547	3.77	22.82	5.23	1.32	1.53
-5 (+23)	3510	885	1029	598	3.98	28.26	5.87	1.48	1.72
0 (+32)	4246	1070	1244	648	4.19	34.57	6.56	1.65	1.92
+5 (+41)	5070	1278	1486	697	4.40	41.82	7.28	1.83	2.13
+10 (+50)	5981	1507	1752	745	4.61	50.06	8.02	2.02	2.35

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		