

COMPRESSOR DEFINITION

Designation	NE U6212GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	958HA51

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	220-240 / 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 - 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 pressures/temperature			
9.1 Operating (gauge)	25.7	[kgf/cm ²] (365 psig)	/ °C - °F
9.2 Peak (gauge)	28.7	[kgf/cm ²] (408 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/2	[hp]
2 Displacement	8.77	[cm ³] (0.535 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	15.920	
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)	10.6	[kg] (23.37 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-0055-65	
3 Start capacitor	53-64(330)	[μF(VAC minimum)]
4 Run capacitor	-	[μF(VAC minimum)]
5 Motor protection	T1019/G9	
6 Start winding resistance	27.40	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	4.87	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	19.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	3.54	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			EN12900MBP_HH Fan		Evaporating temperature (Condensing temperature		-10°C (14°F) 45°C (113°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]
2702	681	792	454	3.14	21.76	5.95	1.50	1.74

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			EN12900HH 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)	2088	526	612	359	2.88	14.71	5.80	1.46	1.70
-15	(+ 5)	2601	655	762	389	2.94	18.46	6.69	1.69	1.96
-10	(+14)	3199	806	937	417	3.01	22.86	7.67	1.93	2.25
-5	(+23)	3881	978	1137	445	3.09	27.96	8.73	2.20	2.56
0	(+32)	4649	1172	1362	471	3.17	33.82	9.87	2.49	2.89
+5	(+41)	5501	1386	1612	497	3.26	40.51	11.08	2.79	3.25
+10	(+50)	6438	1622	1887	521	3.35	48.09	12.34	3.11	3.62

TEST CONDITIONS: @220V50Hz			EN12900HH 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)	1724	434	505	380	2.91	13.68	4.55	1.15	1.33
-15	(+ 5)	2179	549	638	417	3.01	17.41	5.23	1.32	1.53
-10	(+14)	2708	682	793	453	3.12	21.80	5.97	1.50	1.75
-5	(+23)	3312	835	970	488	3.24	26.92	6.77	1.71	1.98
0	(+32)	3990	1005	1169	523	3.36	32.81	7.62	1.92	2.23
+5	(+41)	4742	1195	1390	557	3.49	39.54	8.51	2.14	2.49
+10	(+50)	5569	1403	1632	590	3.63	47.17	9.44	2.38	2.77

TEST CONDITIONS: @220V50Hz			EN12900HH 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)	1395	352	409	399	2.97	12.82	3.48	0.88	1.02
-15	(+ 5)	1762	444	516	444	3.08	16.34	3.97	1.00	1.16
-10	(+14)	2193	553	643	489	3.21	20.53	4.49	1.13	1.32
-5	(+23)	2688	677	788	533	3.35	25.45	5.05	1.27	1.48
0	(+32)	3248	818	952	577	3.50	31.16	5.64	1.42	1.65
+5	(+41)	3871	975	1134	620	3.66	37.72	6.25	1.57	1.83
+10	(+50)	4558	1149	1336	663	3.83	45.20	6.87	1.73	2.01

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
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	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.1 +0.10/+0.00	[mm]	(0.240" +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		