

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		
2.1 Max Refrigerant Charge	350 [g]		
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)	
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	T0964/G6	
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	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			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]
4906	1236	1438	645	3,77	40,39	7,60	1,92	2,23

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			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)	2327	586	682	357	2,87	14,77	6,51	1,64	1,91
-15	(+ 5)	2886	727	846	387	2,94	18,43	7,46	1,88	2,19
-10	(+14)	3543	893	1038	416	3,02	22,76	8,52	2,15	2,50
-5	(+23)	4298	1083	1259	444	3,10	27,81	9,69	2,44	2,84
0	(+32)	5152	1298	1510	470	3,19	33,62	10,96	2,76	3,21
+5	(+41)	6103	1538	1788	495	3,29	40,25	12,33	3,11	3,61
+10	(+50)	7153	1802	2096	518	3,40	47,74	13,80	3,48	4,04

TEST CONDITIONS: @220V50Hz			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)	1952	492	572	378	2,94	13,67	5,17	1,30	1,52
-15	(+ 5)	2453	618	719	416	3,03	17,30	5,90	1,49	1,73
-10	(+14)	3038	765	890	452	3,13	21,56	6,71	1,69	1,97
-5	(+23)	3705	934	1086	488	3,23	26,51	7,58	1,91	2,22
0	(+32)	4455	1123	1305	522	3,35	32,19	8,52	2,15	2,50
+5	(+41)	5288	1333	1550	556	3,47	38,65	9,52	2,40	2,79
+10	(+50)	6205	1564	1818	588	3,61	45,94	10,57	2,66	3,10

TEST CONDITIONS: @220V50Hz			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)	1589	400	466	404	3,01	12,50	3,93	0,99	1,15
-15	(+ 5)	2029	511	595	449	3,12	16,07	4,52	1,14	1,33
-10	(+14)	2537	639	743	493	3,25	20,24	5,15	1,30	1,51
-5	(+23)	3112	784	912	536	3,39	25,06	5,81	1,46	1,70
0	(+32)	3756	946	1100	579	3,54	30,57	6,50	1,64	1,90
+5	(+41)	4467	1126	1309	620	3,70	36,84	7,20	1,82	2,11
+10	(+50)	5245	1322	1537	661	3,87	43,90	7,93	2,00	2,32

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		