

COMPRESSOR DEFINITION

Designation	NE 6210GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	951NA51

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 0°C	(-4°F to 32°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)	10.4	[kg] (22.93 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

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	MTRP-0029	
3 Start capacitor	53-64(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0660/G5	
6 Start winding resistance	31.30	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	6.60	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	14.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	3.30	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CCC - IMQ	

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]
4004	1009	1173	591	3.27	32.96	6.77	1.71	1.98

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)	1767	445	518	336	2.39	11.22	5.25	1.32	1.54
-15	(+ 5)	2280	575	668	365	2.46	14.55	6.25	1.58	1.83
-10	(+14)	2886	727	846	391	2.54	18.53	7.38	1.86	2.16
-5	(+23)	3585	903	1050	415	2.61	23.20	8.64	2.18	2.53
0	(+32)	4377	1103	1283	437	2.68	28.57	10.02	2.52	2.93
+5	(+41)	5262	1326	1542	456	2.75	34.69	11.52	2.90	3.38
+10	(+50)	6240	1573	1828	472	2.81	41.59	13.15	3.31	3.85

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)	1420	358	416	323	2.32	9.94	4.40	1.11	1.29
-15	(+ 5)	1882	474	552	366	2.45	13.27	5.14	1.29	1.51
-10	(+14)	2422	610	710	407	2.58	17.19	5.94	1.50	1.74
-5	(+23)	3037	765	890	445	2.71	21.73	6.82	1.72	2.00
0	(+32)	3729	940	1093	480	2.84	26.93	7.77	1.96	2.28
+5	(+41)	4496	1133	1318	512	2.96	32.82	8.80	2.22	2.58
+10	(+50)	5340	1346	1565	541	3.08	39.43	9.89	2.49	2.90

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)	1058	267	310	310	2.24	8.32	3.41	0.86	1.00
-15	(+ 5)	1468	370	430	368	2.43	11.62	3.99	1.00	1.17
-10	(+14)	1937	488	568	424	2.62	15.46	4.58	1.15	1.34
-5	(+23)	2466	621	723	476	2.81	19.86	5.19	1.31	1.52
0	(+32)	3054	770	895	525	3.00	24.86	5.81	1.46	1.70
+5	(+41)	3701	933	1085	571	3.19	30.50	6.46	1.63	1.89
+10	(+50)	4407	1111	1291	612	3.37	36.79	7.12	1.79	2.09

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		