

COMPRESSOR DEFINITION

Designation	NE U6210GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	958IA51

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 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	1/3	[hp]
2 Displacement	7.28	[cm ³] (0.444 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	13.200	
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	[kg] (22.05 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	T1026	
6 Start winding resistance	28.84	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	6.67	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	16.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	2.69	[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 - 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]
3935	992	1153	501	2.85	32.40	7.85	1.98	2.30

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)	1851	466	542	288	2.15	11.73	6.43	1.62	1.88
-15	(+ 5)	2329	587	682	313	2.21	14.87	7.45	1.88	2.18
-10	(+14)	2890	728	847	335	2.27	18.57	8.62	2.17	2.53
-5	(+23)	3534	891	1036	356	2.33	22.87	9.94	2.50	2.91
0	(+32)	4262	1074	1249	374	2.40	27.82	11.39	2.87	3.34
+5	(+41)	5073	1278	1487	391	2.47	33.46	12.98	3.27	3.80
+10	(+50)	5969	1504	1749	406	2.54	39.83	14.69	3.70	4.31

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)	1562	394	458	305	2.20	10.95	5.12	1.29	1.50
-15	(+ 5)	1969	496	577	336	2.28	13.89	5.86	1.48	1.72
-10	(+14)	2451	618	718	366	2.36	17.39	6.69	1.69	1.96
-5	(+23)	3008	758	881	394	2.45	21.51	7.62	1.92	2.23
0	(+32)	3639	917	1066	421	2.54	26.28	8.64	2.18	2.53
+5	(+41)	4346	1095	1273	446	2.64	31.76	9.75	2.46	2.86
+10	(+50)	5127	1292	1502	469	2.74	37.97	10.95	2.76	3.21

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)	1276	321	374	317	2.21	10.04	4.02	1.01	1.18
-15	(+ 5)	1628	410	477	355	2.31	12.89	4.59	1.16	1.35
-10	(+14)	2046	516	600	392	2.43	16.32	5.22	1.32	1.53
-5	(+23)	2530	638	741	429	2.55	20.36	5.91	1.49	1.73
0	(+32)	3080	776	903	464	2.69	25.08	6.64	1.67	1.94
+5	(+41)	3697	932	1083	499	2.84	30.49	7.41	1.87	2.17
+10	(+50)	4379	1104	1283	532	3.00	36.66	8.22	2.07	2.41

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		