

COMPRESSOR DEFINITION

Designation	NE K6210GK
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	958CG71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	115 / 60	[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	1/2	[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)	11	[kg] (24.25 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	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-0016	
3 Start capacitor	189-227(165)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0625/G8	
6 Start winding resistance	6.10	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.96	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	38.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	5.70	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V60Hz			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]
5355	1349	1569	756	8.18	44.09	7.08	1.78	2.07

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz			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)	2485	626	728	419	5.60	15.75	5.93	1.49	1.74
-15	(+ 5)	3084	777	904	446	5.76	19.70	6.93	1.75	2.03
-10	(+14)	3811	960	1117	477	5.98	24.49	7.99	2.01	2.34
-5	(+23)	4667	1176	1368	513	6.24	30.21	9.10	2.29	2.67
0	(+32)	5652	1424	1656	554	6.56	36.89	10.20	2.57	2.99
+5	(+41)	6766	1705	1983	600	6.93	44.62	11.27	2.84	3.30
+10	(+50)	8008	2018	2347	653	7.36	53.44	12.27	3.09	3.60

TEST CONDITIONS: @115V60Hz			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)	2224	560	652	434	5.68	15.59	5.09	1.28	1.49
-15	(+ 5)	2705	682	793	477	5.97	19.07	5.67	1.43	1.66
-10	(+14)	3307	833	969	520	6.29	23.46	6.36	1.60	1.86
-5	(+23)	4030	1016	1181	565	6.63	28.81	7.15	1.80	2.09
0	(+32)	4874	1228	1428	612	7.00	35.20	7.98	2.01	2.34
+5	(+41)	5838	1471	1711	662	7.41	42.66	8.83	2.23	2.59
+10	(+50)	6924	1745	2029	714	7.85	51.28	9.67	2.44	2.83

TEST CONDITIONS: @115V60Hz			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)	1957	493	573	444	5.71	15.39	4.43	1.12	1.30
-15	(+ 5)	2329	587	683	504	6.15	18.44	4.62	1.16	1.35
-10	(+14)	2815	709	825	563	6.60	22.45	4.99	1.26	1.46
-5	(+23)	3413	860	1000	620	7.05	27.48	5.49	1.38	1.61
0	(+32)	4124	1039	1209	676	7.51	33.58	6.10	1.54	1.79
+5	(+41)	4949	1247	1450	731	7.97	40.82	6.78	1.71	1.99
+10	(+50)	5886	1483	1725	786	8.44	49.26	7.49	1.89	2.20

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		