

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 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)	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

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46			(Condensing temperature 35°C (+95°F))					
@100V60Hz		Fan								
Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE			
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 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:		ASHRAE46			(Condensing temperature 45°C (+113°F))					
@100V60Hz		Fan								
Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE			
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 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:		ASHRAE46			(Condensing temperature 55°C (+131°F))					
@100V60Hz		Fan								
Evaporating temperature	Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE			
	+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 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	8.03 +0.07/+0.00	[mm]	(0.316" +0.003"/+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		