COMPRESSOR TECHNICAL DATA

COMPRESSOR DEFINITION

Designation	**NE K2134GK**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**958AA51**

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	Low Back Pressure R404A		
4.1 Evaporating temperature range	-40°C to -10°C	(-40°F to 14°F)	
5 Motor type	CSIR		
6 Starting torque	HST - Hight starting torque		
7 Expantion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	25.7	[kgf/cm²] (365 psig)	/ ºC - ºF
9.2 Peak (gauge)	28.7	[kgf/cm²] (408 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/2	[hp]
2 Displacement	8.77	[cm³] (0.535 cu.in)
2.1 Bore	26.497	
2.2 Stroke	7.960	
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/cm²] (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		
3 Start capacitor	53-64(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection (external)	T0168/G5	
6 Start winding resistance	31.70	[at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	5.18	[at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	16.10	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	IMQ	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS:			**ASHRAELBP32**			Evaporating temperature		**-23.3°C (-9.94°F)**
@220V50Hz			**Fan**			(Condensing temperature		**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]
1584	399	464	358	2.35	10.74	4.42	1.11	1.30

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**ASHRAE32**						(Condensing temperature **35ºC (+95ºF)**)		
@220V50Hz		**Fan**								
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]
-40	**(-40)**	768	194	225	224	2.01	5.16	3.42	0.86	1.00
-35	**(-31)**	998	252	293	255	2.05	6.73	3.92	0.99	1.15
-30	**(-22)**	1296	327	380	285	2.12	8.77	4.54	1.15	1.33
-25	**(-13)**	1661	418	487	316	2.20	11.28	5.26	1.33	1.54
-20	**(- 4)**	2092	527	613	346	2.30	14.29	6.05	1.52	1.77
-15	**(+ 5)**	2591	653	759	376	2.41	17.81	6.89	1.74	2.02
-10	**(+14)**	3158	796	925	406	2.53	21.84	7.77	1.96	2.28

TEST CONDITIONS:		**ASHRAE32**						(Condensing temperature **45ºC (+113ºF)**)		
@220V50Hz		**Fan**								
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]
-40	**(-40)**	694	175	203	222	1.98	4.66	3.13	0.79	0.92
-35	**(-31)**	918	231	269	257	2.05	6.18	3.58	0.90	1.05
-30	**(-22)**	1206	304	353	293	2.14	8.14	4.11	1.04	1.21
-25	**(-13)**	1558	393	457	329	2.25	10.57	4.72	1.19	1.38
-20	**(- 4)**	1975	498	579	367	2.38	13.46	5.38	1.36	1.58
-15	**(+ 5)**	2455	619	719	405	2.52	16.84	6.07	1.53	1.78
-10	**(+14)**	3000	756	879	444	2.67	20.71	6.76	1.70	1.98

TEST CONDITIONS:		**ASHRAE32**						(Condensing temperature **55ºC (+131ºF)**)		
@220V50Hz		**Fan**								
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]
-40	**(-40)**	620	156	182	220	1.95	4.15	2.82	0.71	0.83
-35	**(-31)**	837	211	245	259	2.05	5.63	3.23	0.81	0.95
-30	**(-22)**	1116	281	327	300	2.17	7.52	3.72	0.94	1.09
-25	**(-13)**	1456	367	427	343	2.31	9.85	4.24	1.07	1.24
-20	**(- 4)**	1857	468	544	388	2.46	12.63	4.79	1.21	1.40
-15	**(+ 5)**	2319	584	679	434	2.63	15.87	5.35	1.35	1.57
-10	**(+14)**	2842	716	833	482	2.81	19.58	5.89	1.48	1.73

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		