

COMPRESSOR DEFINITION

Designation	NE 2125GK
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	951IA51

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 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	1/3	[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)	10.45	[kg] (23.04 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)	29.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	2.66	[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: @220V50Hz			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature		-23.3°C (-9.94°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]
1161	293	340	314	2.26	7.87	3.70	0.93	1.08

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			ASHRAE32 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]
-40	(-40)	491	124	144	207	2.02	3.30	2.34	0.59	0.69
-35	(-31)	740	187	217	237	2.08	4.99	3.16	0.80	0.93
-30	(-22)	1034	261	303	267	2.15	6.99	3.90	0.98	1.14
-25	(-13)	1382	348	405	299	2.22	9.39	4.63	1.17	1.36
-20	(- 4)	1795	452	526	331	2.30	12.26	5.38	1.36	1.58
-15	(+ 5)	2284	576	669	365	2.40	15.69	6.22	1.57	1.82
-10	(+14)	2858	720	838	399	2.51	19.77	7.20	1.81	2.11

TEST CONDITIONS: @220V50Hz			ASHRAE32 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]
-40	(-40)	308	78	90	177	2.00	2.06	1.72	0.43	0.50
-35	(-31)	570	144	167	217	2.06	3.84	2.63	0.66	0.77
-30	(-22)	867	218	254	257	2.13	5.85	3.39	0.86	0.99
-25	(-13)	1208	304	354	298	2.22	8.19	4.07	1.03	1.19
-20	(- 4)	1604	404	470	340	2.33	10.93	4.71	1.19	1.38
-15	(+ 5)	2065	520	605	383	2.46	14.16	5.37	1.35	1.57
-10	(+14)	2602	656	763	427	2.61	17.97	6.10	1.54	1.79

TEST CONDITIONS: @220V50Hz			ASHRAE32 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]
-40	(-40)	131	33	38	149	1.97	0.87	0.93	0.23	0.27
-35	(-31)	406	102	119	198	2.04	2.73	1.99	0.50	0.58
-30	(-22)	706	178	207	247	2.12	4.76	2.83	0.71	0.83
-25	(-13)	1040	262	305	297	2.23	7.04	3.52	0.89	1.03
-20	(- 4)	1419	358	416	348	2.36	9.65	4.11	1.03	1.20
-15	(+ 5)	1854	467	543	400	2.52	12.69	4.64	1.17	1.36
-10	(+14)	2354	593	690	453	2.71	16.22	5.18	1.31	1.52

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		