



## COMPRESSOR TECHNICAL DATA

### COMPRESSOR DEFINITION

Designation	<b>NE K2125GK</b>
Nominal Voltage/Frequency	<b>220-240 V 50 Hz</b>
Engineering Number	<b>957EA51</b>

### 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 - 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 <sup>2</sup> ] (365 psig)	/ °C - °F
9.2 Peak (gauge)	28.7	[kgf/cm <sup>2</sup> ] (408 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation	1/3+	[hp]
2 Displacement	6.20	[cm <sup>3</sup> ] (0.378 cu.in)
2.1 Bore [mm]	20.873	
2.2 Stroke [mm]	18.120	
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)	10.4	[kg] (22.93 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm <sup>2</sup> ] (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	T0186/G6	
6 Start winding resistance	27.70	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	6.00	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	12.40	[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	



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### 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]
1163	293	341	279	2.04	7.88	4.17	1.05	1.22

### 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)	624	157	183	180	1.81	4.19	3.46	0.87	1.01
-35	(-31)	757	191	222	202	1.86	5.10	3.77	0.95	1.10
-30	(-22)	945	238	277	223	1.91	6.39	4.24	1.07	1.24
-25	(-13)	1188	299	348	245	1.96	8.07	4.85	1.22	1.42
-20	(- 4)	1486	374	435	266	2.01	10.15	5.59	1.41	1.64
-15	(+ 5)	1839	463	539	287	2.07	12.64	6.41	1.62	1.88
-10	(+14)	2247	566	659	307	2.13	15.55	7.32	1.84	2.14

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)	539	136	158	179	1.81	3.62	3.02	0.76	0.88
-35	(-31)	689	174	202	205	1.86	4.64	3.36	0.85	0.98
-30	(-22)	887	224	260	232	1.92	5.99	3.82	0.96	1.12
-25	(-13)	1134	286	332	258	1.98	7.69	4.38	1.10	1.28
-20	(- 4)	1430	360	419	285	2.05	9.74	5.01	1.26	1.47
-15	(+ 5)	1774	447	520	312	2.13	12.16	5.70	1.44	1.67
-10	(+14)	2167	546	635	339	2.21	14.96	6.41	1.62	1.88

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)	471	119	138	177	1.83	3.16	2.67	0.67	0.78
-35	(-31)	630	159	185	207	1.88	4.23	3.05	0.77	0.89
-30	(-22)	830	209	243	237	1.94	5.60	3.50	0.88	1.02
-25	(-13)	1073	270	315	268	2.01	7.26	4.00	1.01	1.17
-20	(- 4)	1359	342	398	300	2.09	9.24	4.54	1.14	1.33
-15	(+ 5)	1687	425	494	332	2.19	11.54	5.08	1.28	1.49
-10	(+14)	2058	518	603	365	2.30	14.18	5.61	1.41	1.65



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### 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		