

COMPRESSOR DEFINITION

Designation	NE K2125GK
Nominal Voltage/Frequency	200-230 V 50 Hz / 208-230 V 60 Hz
Engineering Number	957EB92

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	200-230 / 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 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	1/3	[hp]
2 Displacement	6.20	[cm ³] (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	-	[kgf/cm ²]

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	200-230 V 50 Hz / 208-230 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-0025-31	
3 Start capacitor	53-64(330)	[μF(VAC minimum)]
4 Run capacitor	-	[μF(VAC minimum)]
5 Motor protection	T1026-J5	
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)	13.00	[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	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @200V50Hz			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]
1068	269	313	254	1.82	7.24	4.20	1.06	1.23

E - PERFORMANCE - CURVES

TEST CONDITIONS: @200V50Hz			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)	514	129	151	152	1.52	3.45	3.36	0.85	0.98
-35	(-31)	666	168	195	175	1.57	4.49	3.82	0.96	1.12
-30	(-22)	868	219	254	197	1.63	5.88	4.42	1.11	1.30
-25	(-13)	1121	283	329	218	1.70	7.62	5.14	1.30	1.51
-20	(- 4)	1424	359	417	239	1.77	9.72	5.95	1.50	1.74
-15	(+ 5)	1775	447	520	260	1.84	12.20	6.83	1.72	2.00
-10	(+14)	2175	548	637	280	1.92	15.05	7.76	1.96	2.27

TEST CONDITIONS: @200V50Hz			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)	444	112	130	151	1.50	2.98	2.95	0.74	0.86
-35	(-31)	594	150	174	177	1.57	4.00	3.36	0.85	0.98
-30	(-22)	791	199	232	203	1.64	5.34	3.88	0.98	1.14
-25	(-13)	1034	261	303	230	1.73	7.01	4.48	1.13	1.31
-20	(- 4)	1323	333	388	257	1.83	9.02	5.14	1.30	1.51
-15	(+ 5)	1658	418	486	284	1.93	11.37	5.84	1.47	1.71
-10	(+14)	2037	513	597	312	2.04	14.07	6.55	1.65	1.92

TEST CONDITIONS: @200V50Hz			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)	390	98	114	150	1.51	2.61	2.60	0.66	0.76
-35	(-31)	533	134	156	178	1.57	3.58	2.99	0.75	0.88
-30	(-22)	721	182	211	209	1.66	4.86	3.45	0.87	1.01
-25	(-13)	950	240	278	240	1.76	6.43	3.96	1.00	1.16
-20	(- 4)	1223	308	358	272	1.87	8.32	4.50	1.13	1.32
-15	(+ 5)	1537	387	450	305	2.00	10.52	5.04	1.27	1.48
-10	(+14)	1892	477	555	340	2.15	13.04	5.56	1.40	1.63

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		