

COMPRESSOR DEFINITION

Designation	NE 2134GK
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	953AD71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	208-230 / 60	[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 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	12.11	[cm ³] (0.739 cu.in)
2.1 Bore [mm]	27.775	
2.2 Stroke [mm]	20.000	
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)	11.65	[kg] (25.68 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	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	MTRPH-0012	
3 Start capacitor	53-64(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0659/G9	
6 Start winding resistance	22.19	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	3.45	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	21.70	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	3.20	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @208V60Hz			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]
1857	468	544	436	2.81	12.59	4.26	1.07	1.25

E - PERFORMANCE - CURVES

TEST CONDITIONS: @208V60Hz			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)	618	156	181	227	2.03	4.15	2.69	0.68	0.79
-35 (-31)	1220	307	358	322	2.39	8.23	3.83	0.97	1.12
-30 (-22)	1831	462	537	408	2.74	12.39	4.57	1.15	1.34
-25 (-13)	2460	620	721	482	3.05	16.72	5.10	1.28	1.49
-20 (- 4)	3116	785	913	545	3.33	21.28	5.60	1.41	1.64
-15 (+ 5)	3807	959	1115	595	3.58	26.15	6.28	1.58	1.84
-10 (+14)	4542	1144	1331	632	3.80	31.42	7.32	1.84	2.14

TEST CONDITIONS: @208V60Hz			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)	299	75	88	167	1.91	2.00	1.71	0.43	0.50
-35 (-31)	849	214	249	262	2.22	5.71	3.20	0.81	0.94
-30 (-22)	1428	360	418	354	2.55	9.64	4.15	1.05	1.22
-25 (-13)	2044	515	599	442	2.90	13.86	4.73	1.19	1.39
-20 (- 4)	2708	682	793	525	3.25	18.45	5.15	1.30	1.51
-15 (+ 5)	3426	863	1004	604	3.62	23.49	5.58	1.41	1.64
-10 (+14)	4209	1061	1233	676	4.00	29.06	6.23	1.57	1.83

TEST CONDITIONS: @208V60Hz			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)	- 5	- 1	- 2	112	1.79	- 0.04	0.11	0.03	0.03
-35 (-31)	492	124	144	204	2.05	3.30	2.11	0.53	0.62
-30 (-22)	1038	262	304	301	2.37	7.00	3.41	0.86	1.00
-25 (-13)	1643	414	481	401	2.74	11.11	4.19	1.06	1.23
-20 (- 4)	2314	583	678	505	3.17	15.74	4.66	1.17	1.37
-15 (+ 5)	3060	771	897	610	3.66	20.94	5.00	1.26	1.47
-10 (+14)	3890	980	1140	717	4.20	26.80	5.40	1.36	1.58

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		