

COMPRESSOR DEFINITION

Designation	NE 2134GK
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	952AG71

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	115 / 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)	11.45	[kg] (25.24 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	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Current Relay	
2.1 Starting device	9660A-XX-183	
3 Start capacitor	189-227(165)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0625/G8	
6 Start winding resistance	6.10	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.96	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	33.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	6.40	[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

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 35°C (+95°F))					
@100V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	866	218	254	273	4.59	5.82	3.18	0.80	0.93
-35	(-31)	1257	317	368	338	4.92	8.48	3.73	0.94	1.09
-30	(-22)	1734	437	508	403	5.27	11.73	4.31	1.09	1.26
-25	(-13)	2296	579	673	467	5.66	15.60	4.92	1.24	1.44
-20	(- 4)	2944	742	863	529	6.07	20.10	5.56	1.40	1.63
-15	(+ 5)	3677	927	1077	591	6.51	25.26	6.21	1.57	1.82
-10	(+14)	4494	1132	1317	652	6.97	31.09	6.88	1.73	2.02

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 45°C (+113°F))					
@100V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	615	155	180	228	4.31	4.13	2.66	0.67	0.78
-35	(-31)	990	249	290	307	4.70	6.66	3.20	0.81	0.94
-30	(-22)	1453	366	426	386	5.14	9.81	3.75	0.94	1.10
-25	(-13)	2006	505	588	466	5.63	13.60	4.30	1.08	1.26
-20	(- 4)	2646	667	775	547	6.17	18.03	4.85	1.22	1.42
-15	(+ 5)	3375	850	989	628	6.77	23.14	5.39	1.36	1.58
-10	(+14)	4190	1056	1228	709	7.41	28.93	5.92	1.49	1.74

TEST CONDITIONS:		ASHRAE32			(Condensing temperature 55°C (+131°F))					
@100V60Hz		Fan								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	390	98	114	190	4.22	2.61	2.11	0.53	0.62
-35	(-31)	745	188	218	277	4.61	5.01	2.68	0.68	0.79
-30	(-22)	1192	300	349	367	5.08	8.03	3.24	0.82	0.95
-25	(-13)	1730	436	507	458	5.62	11.70	3.77	0.95	1.11
-20	(- 4)	2359	594	691	552	6.24	16.04	4.28	1.08	1.25
-15	(+ 5)	3079	776	902	648	6.94	21.07	4.76	1.20	1.39
-10	(+14)	3889	980	1140	746	7.71	26.80	5.20	1.31	1.52

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		