COMPRESSOR DEFINITION

Designation	**NE K2134U**
Nominal Voltage/Frequency	**115 V 60 Hz**
Engineering Number	**862AG92**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	115 / 60	[V / Hz]	
4 Application type	Low Back Pressure R290		
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 Expantion device	Capillary tube or Expansion valve		

8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-

9 Maximum condensing temperature			
9.1 Operating	18.4	[kgf/cm²] (262 psig)	/ ºC - ºF
9.2 Peak	20.6	[kgf/cm²] (293 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1/2	[hp]
2 Displacement	9.99	[cm³] (0.610 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	18.120	
3 Lubricant charge	350	[ml] (11.84 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	AB / ISO32	
4 Weight (with oil charge)	10.7	[kg] (23.59 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm²] (2.84 to 4.27 psig)

C - ELECTRICAL 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	MTRPH-0049-31	
3 Start capacitor	189-227(250)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0590/J5	
6 Start winding resistance	9.00	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	1.30	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	28.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	5.66	[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:			**ARILBP**			Evaporating temperature		**-23.3°C (-9.94°F)**
@115V60Hz			**Fan**			(Condensing temperature		**48.9°C (120.02°F))**
Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
1416	357	415	379	4.46	5.75	3.74	0.94	1.10

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**ARI4**					(Condensing temperature **35ºC (+95ºF))**			
@115V60Hz		**Fan**								
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	**(-40)**	797	201	233	237	3.46	2.76	3.35	0.85	0.98
-35	**(-31)**	1017	256	298	269	3.66	3.54	3.79	0.96	1.11
-30	**(-22)**	1302	328	381	301	3.88	4.55	4.33	1.09	1.27
-25	**(-13)**	1651	416	484	333	4.11	5.80	4.96	1.25	1.45
-20	**(- 4)**	2065	520	605	365	4.36	7.29	5.65	1.42	1.66
-15	**(+ 5)**	2542	641	745	397	4.61	9.04	6.40	1.61	1.88
-10	**(+14)**	3084	777	904	429	4.88	11.06	7.19	1.81	2.11

TEST CONDITIONS:		**ARI4**					(Condensing temperature **45ºC (+113ºF))**			
@115V60Hz		**Fan**								
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	**(-40)**	661	166	194	242	3.48	2.53	2.73	0.69	0.80
-35	**(-31)**	858	216	251	279	3.74	3.30	3.08	0.78	0.90
-30	**(-22)**	1110	280	325	316	4.01	4.29	3.50	0.88	1.03
-25	**(-13)**	1417	357	415	355	4.31	5.50	3.98	1.00	1.17
-20	**(- 4)**	1778	448	521	395	4.61	6.94	4.50	1.13	1.32
-15	**(+ 5)**	2193	553	643	435	4.93	8.63	5.04	1.27	1.48
-10	**(+14)**	2663	671	780	477	5.26	10.57	5.60	1.41	1.64

TEST CONDITIONS:		**ARI4**					(Condensing temperature **55ºC (+131ºF))**			
@115V60Hz		**Fan**								
Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	**(°F)**	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	**(-40)**	531	134	155	245	3.52	2.28	2.17	0.55	0.64
-35	**(-31)**	700	176	205	285	3.83	3.02	2.45	0.62	0.72
-30	**(-22)**	915	230	268	328	4.17	3.97	2.78	0.70	0.82
-25	**(-13)**	1174	296	344	374	4.52	5.12	3.14	0.79	0.92
-20	**(- 4)**	1477	372	433	421	4.89	6.49	3.52	0.89	1.03
-15	**(+ 5)**	1826	460	535	471	5.27	8.09	3.89	0.98	1.14
-10	**(+14)**	2219	559	650	522	5.66	9.93	4.24	1.07	1.24

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		