COMPRESSOR DEFINITION

Designation	**NE K6213U**
Nominal Voltage/Frequency	**115 V 60 Hz**
Engineering Number	**863CG71**

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	Medium Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-20°C to 10°C	(-4°F to 50°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	12.11	[cm³] (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	AB / ISO32	
4 Weight (with oil charge)	11.4	[kg] (25.13 lb.)
5 Nitrogen charge	-	[kgf/cm²]

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-70-31	
3 Start capacitor	189-227(250)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0865/J5	
6 Start winding resistance	0.86	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	5.50	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	44.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[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:			ASHRAEHBP46		Evaporating temperature		7.2°C (44.96°F)	
@115V60Hz			Fan		(Condensing temperature		54.4°C (129.92°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]
6282	1583	1841	864	10.10	21.50	7.27	1.83	2.13

E - PERFORMANCE - CURVES

TEST CONDITIONS:		ASHRAE46				(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]
-20	(- 4)	2914	734	854	521	8.15	0.63	5.60	1.41	1.64
-15	(+ 5)	3571	900	1046	549	8.22	8.49	6.51	1.64	1.91
-10	(+14)	4347	1096	1274	580	8.32	13.09	7.51	1.89	2.20
-5	(+23)	5244	1321	1537	612	8.45	15.77	8.57	2.16	2.51
0	(+32)	6260	1578	1834	647	8.60	17.86	9.67	2.44	2.83
+5	(+41)	7396	1864	2167	684	8.76	20.67	10.81	2.72	3.17
+10	(+50)	8652	2180	2535	724	8.94	25.55	11.96	3.01	3.50

TEST CONDITIONS:		ASHRAE46				(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]
-20	(- 4)	2586	652	758	550	8.31	0.59	4.69	1.18	1.37
-15	(+ 5)	3168	798	928	593	8.43	8.21	5.34	1.35	1.56
-10	(+14)	3862	973	1132	635	8.60	12.63	6.08	1.53	1.78
-5	(+23)	4668	1176	1368	678	8.80	15.19	6.89	1.74	2.02
0	(+32)	5587	1408	1637	720	9.04	17.19	7.77	1.96	2.28
+5	(+41)	6618	1668	1939	762	9.30	19.98	8.69	2.19	2.55
+10	(+50)	7761	1956	2274	805	9.60	24.89	9.64	2.43	2.82

TEST CONDITIONS:		ASHRAE46				(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]
-20	(- 4)	2253	568	660	570	8.33	0.46	3.97	1.00	1.16
-15	(+ 5)	2753	694	807	630	8.54	7.84	4.37	1.10	1.28
-10	(+14)	3359	846	984	688	8.80	12.06	4.87	1.23	1.43
-5	(+23)	4069	1025	1192	743	9.11	14.47	5.47	1.38	1.60
0	(+32)	4885	1231	1431	796	9.47	16.39	6.14	1.55	1.80
+5	(+41)	5806	1463	1701	847	9.87	19.14	6.86	1.73	2.01
+10	(+50)	6832	1722	2002	896	10.31	24.06	7.63	1.92	2.24

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		