COMPRESSOR DEFINITION

Designation	**NE U6214U**
Nominal Voltage/Frequency	**115 V 60 Hz**
Engineering Number	**863LG71**

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	3/4	[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)	11.5	[kg] (25.35 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	243-292(165)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0736/J5	
6 Start winding resistance	5.45	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	0.92	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	42.00	[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:			**ARIMBP**			Evaporating temperature		**-6.7°C (19.94°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]
3703	933	1085	624	6.98	15.48	5.93	1.49	1.74

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]
-20	**(- 4)**	2681	676	786	443	5.78	9.46	6.05	1.52	1.77
-15	**(+ 5)**	3305	833	969	483	6.03	11.75	6.86	1.73	2.01
-10	**(+14)**	4035	1017	1182	522	6.29	14.47	7.74	1.95	2.27
-5	**(+23)**	4871	1228	1427	561	6.56	17.63	8.68	2.19	2.54
0	**(+32)**	5813	1465	1703	601	6.83	21.28	9.67	2.44	2.83
+5	**(+41)**	6861	1729	2010	641	7.12	25.42	10.70	2.70	3.13
+10	**(+50)**	8014	2020	2348	682	7.40	30.08	11.75	2.96	3.44

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]
-20	**(- 4)**	2314	583	678	477	6.01	9.04	4.84	1.22	1.42
-15	**(+ 5)**	2854	719	836	523	6.30	11.23	5.45	1.37	1.60
-10	**(+14)**	3487	879	1022	569	6.61	13.84	6.14	1.55	1.80
-5	**(+23)**	4213	1062	1234	614	6.94	16.90	6.87	1.73	2.01
0	**(+32)**	5030	1268	1474	658	7.29	20.43	7.65	1.93	2.24
+5	**(+41)**	5940	1497	1741	703	7.64	24.46	8.45	2.13	2.48
+10	**(+50)**	6942	1749	2034	748	8.01	29.01	9.28	2.34	2.72

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]
-20	**(- 4)**	1913	482	561	500	6.16	8.41	3.84	0.97	1.13
-15	**(+ 5)**	2392	603	701	558	6.54	10.60	4.28	1.08	1.25
-10	**(+14)**	2950	744	865	616	6.94	13.20	4.78	1.21	1.40
-5	**(+23)**	3587	904	1051	673	7.37	16.25	5.33	1.34	1.56
0	**(+32)**	4303	1084	1261	728	7.83	19.77	5.91	1.49	1.73
+5	**(+41)**	5097	1284	1494	784	8.30	23.79	6.51	1.64	1.91
+10	**(+50)**	5970	1504	1749	838	8.79	28.32	7.12	1.79	2.09

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		