COMPRESSOR DEFINITION

Designation	**NE U6214U**
Nominal Voltage/Frequency	**115-127 V 60 Hz**
Engineering Number	**863LE71**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	115-127 / 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	CSCR		
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	115-127 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA9AD3C-121	
3 Start capacitor	243-292(165)	[µF(VAC minimum)]
4 Run capacitor	20(400)	[µF(VAC minimum)]
5 Motor protection	T0728/G9	
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	CCC - UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@115V60Hz**			**ASHRAEHBP46** **Fan**		Evaporating temperature (Condensing temperature	**7.2°C (44.96°F)** **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]
6896	1738	2021	755	7.12	23.60	9.13	2.30	2.68

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)**	3143	792	921	416	4.41	8.86	7.55	1.90	2.21
-15	**(+ 5)**	3899	983	1143	452	4.66	11.05	8.63	2.17	2.53
-10	**(+14)**	4760	1200	1395	487	4.92	13.55	9.76	2.46	2.86
-5	**(+23)**	5726	1443	1678	522	5.20	16.37	10.96	2.76	3.21
0	**(+32)**	6797	1713	1992	557	5.48	19.54	12.19	3.07	3.57
+5	**(+41)**	7972	2009	2336	592	5.78	23.06	13.47	3.40	3.95
+10	**(+50)**	9253	2332	2711	626	6.09	26.96	14.79	3.73	4.33

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)**	2842	716	833	454	4.72	8.68	6.24	1.57	1.83
-15	**(+ 5)**	3501	882	1026	497	5.02	10.73	7.05	1.78	2.07
-10	**(+14)**	4260	1074	1248	538	5.33	13.11	7.92	2.00	2.32
-5	**(+23)**	5120	1290	1500	579	5.66	15.83	8.85	2.23	2.59
0	**(+32)**	6079	1532	1781	619	6.00	18.91	9.83	2.48	2.88
+5	**(+41)**	7139	1799	2092	658	6.34	22.37	10.85	2.73	3.18
+10	**(+50)**	8299	2091	2432	697	6.70	26.22	11.90	3.00	3.49

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)**	2424	611	710	478	4.90	8.08	5.08	1.28	1.49
-15	**(+ 5)**	3031	764	888	531	5.25	10.14	5.71	1.44	1.67
-10	**(+14)**	3732	941	1094	583	5.61	12.55	6.40	1.61	1.88
-5	**(+23)**	4530	1141	1327	633	5.98	15.31	7.15	1.80	2.09
0	**(+32)**	5422	1366	1589	683	6.37	18.46	7.94	2.00	2.33
+5	**(+41)**	6411	1615	1878	731	6.76	21.99	8.77	2.21	2.57
+10	**(+50)**	7495	1889	2196	778	7.17	25.93	9.64	2.43	2.83

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		