

COMPRESSOR DEFINITION

Designation	NE U6217U
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	863JE71

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 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 temperature			
9.1 Operating	18.4	[kgf/cm ²] (262 psig)	/ °C - °F
9.2 Peak	20.6	[kgf/cm ²] (293 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	3/4	[hp]
2 Displacement	14.28	[cm ³] (0.871 cu.in)
2.1 Bore [mm]	30.157	
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)	11.62	[kg] (25.62 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

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	RVAH7AA3C-571	
3 Start capacitor	243-292(250)	[µF(VAC minimum)]
4 Run capacitor	30(400)	[µF(VAC minimum)]
5 Motor protection	T0736/G9	
6 Start winding resistance	3.81	[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)	45.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	9.30	[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: @115V60Hz			ARIMBP Fan		Evaporating temperature (Condensing temperature		-6.7°C (19.94°F) 48.9°C (120.02°F)		
Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP			
+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%			
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]	
4361	1099	1278	701	6.54	18.23	6.22	1.57	1.82	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz		ARI4 Fan			(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	3171	799	929	488	4.73	11.19	6.49	1.63	1.90
-15	(+ 5)	3878	977	1136	536	5.12	13.79	7.24	1.82	2.12
-10	(+14)	4728	1191	1385	582	5.51	16.96	8.12	2.05	2.38
-5	(+23)	5721	1442	1676	628	5.89	20.71	9.11	2.30	2.67
0	(+32)	6856	1728	2009	672	6.26	25.09	10.20	2.57	2.99
+5	(+41)	8133	2050	2383	716	6.63	30.12	11.36	2.86	3.33
+10	(+50)	9553	2407	2799	759	6.99	35.86	12.58	3.17	3.69

TEST CONDITIONS: @115V60Hz		ARI4 Fan			(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2706	682	793	525	5.00	10.59	5.15	1.30	1.51
-15	(+ 5)	3312	835	971	584	5.51	13.03	5.67	1.43	1.66
-10	(+14)	4071	1026	1193	640	5.99	16.14	6.37	1.61	1.87
-5	(+23)	4980	1255	1459	691	6.43	19.97	7.22	1.82	2.11
0	(+32)	6042	1522	1770	738	6.85	24.53	8.20	2.07	2.40
+5	(+41)	7254	1828	2126	781	7.23	29.88	9.30	2.34	2.72
+10	(+50)	8618	2172	2525	820	7.57	36.03	10.50	2.65	3.08

TEST CONDITIONS: @115V60Hz		ARI4 Fan			(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity (Qe)			Input power (We)	Electric current	Mass flow rate	Efficiency EER & COP		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2307	581	676	550	5.22	10.13	4.20	1.06	1.23
-15	(+ 5)	2760	696	809	626	5.87	12.22	4.42	1.11	1.29
-10	(+14)	3374	850	989	695	6.46	15.10	4.84	1.22	1.42
-5	(+23)	4148	1045	1216	756	6.99	18.81	5.47	1.38	1.60
0	(+32)	5083	1281	1489	810	7.47	23.37	6.26	1.58	1.84
+5	(+41)	6178	1557	1810	856	7.89	28.84	7.22	1.82	2.12
+10	(+50)	7433	1873	2178	894	8.25	35.23	8.32	2.10	2.44

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		