

COMPRESSOR DEFINITION

Designation	NT 6217UV
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	842HG04

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	CSCR		
6 Starting torque	HST - High 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	1/2	[hp]
2 Displacement	14.50	[cm ³] (0.885 cu.in)
2.1 Bore [mm]	34.120	
2.2 Stroke [mm]	15.870	
3 Lubricant charge	450	[ml] (15.22 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	16.2	[kg] (35.71 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (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	Voltage Relay	
2.1 Starting device	RVA7AC3C-115	
3 Start capacitor	189-227(250)	[µF(VAC minimum)]
4 Run capacitor	30(400)	[µF(VAC minimum)]
5 Motor protection	T0873/G9	
6 Start winding resistance	2.62	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.51	[Ω at 25°C (77°F)] +/- 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)	6.65	[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 +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
3661	923	1073	598	5.81	15.30	6.12	1.54	1.79

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz			ARI4 Fan		(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	2660	670	780	452	4.77	9.40	5.84	1.47	1.71
-15	(+ 5)	3283	827	962	486	4.98	11.69	6.74	1.70	1.98
-10	(+14)	4053	1021	1188	516	5.21	14.54	7.86	1.98	2.30
-5	(+23)	4979	1255	1459	542	5.44	18.01	9.19	2.32	2.69
0	(+32)	6069	1529	1778	568	5.68	22.18	10.69	2.69	3.13
+5	(+41)	7329	1847	2148	594	5.93	27.14	12.35	3.11	3.62
+10	(+50)	8769	2210	2569	621	6.19	32.94	14.15	3.57	4.15

TEST CONDITIONS: @115V60Hz			ARI4 Fan		(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	1970	496	577	447	4.70	7.70	4.52	1.14	1.32
-15	(+ 5)	2573	648	754	503	5.12	10.12	5.16	1.30	1.51
-10	(+14)	3335	840	977	553	5.52	13.23	6.01	1.51	1.76
-5	(+23)	4266	1075	1250	600	5.91	17.10	7.06	1.78	2.07
0	(+32)	5372	1354	1574	645	6.29	21.81	8.27	2.08	2.42
+5	(+41)	6661	1679	1952	689	6.65	27.44	9.64	2.43	2.82
+10	(+50)	8142	2052	2386	734	6.99	34.05	11.12	2.80	3.26

TEST CONDITIONS: @115V60Hz			ARI4 Fan		(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	(- 4)	1694	427	496	476	4.91	7.42	3.47	0.87	1.02
-15	(+ 5)	2110	532	618	536	5.40	9.34	3.94	0.99	1.15
-10	(+14)	2698	680	790	590	5.84	12.09	4.60	1.16	1.35
-5	(+23)	3466	873	1016	640	6.25	15.73	5.46	1.38	1.60
0	(+32)	4422	1114	1296	687	6.62	20.35	6.47	1.63	1.90
+5	(+41)	5573	1404	1633	732	6.95	26.02	7.62	1.92	2.23
+10	(+50)	6928	1746	2030	778	7.25	32.81	8.88	2.24	2.60

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	9.6 +0.07/+0.00	[mm]	(0.378" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Vertical		
3.2 DISCHARGE	6.42 +0.08/+0.00	[mm]	(0.253" +0.003"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Vertical		
3.3 PROCESS	6.42 +0.08/+0.00	[mm]	(0.253" +0.003"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Vertical		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		