

COMPRESSOR DEFINITION

Designation	NT U6224ZV
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	215BG50

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	115 / 60	[V / Hz]	
4 Application type	High Back Pressure (Commercial Compressors)		
4.1 Evaporating temperature range	-15°C to 10°C	(5°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	14.2	[kgf/cm ²] (202 psig)	/ °C - °F
9.2 Peak	15.9	[kgf/cm ²] (226 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1 1/4	[hp]
2 Displacement	27.80	[cm ³] (1.696 cu.in)
2.1 Bore [mm]	38.100	
2.2 Stroke [mm]	24.400	
3 Lubricant charge	650	[ml] (21.98 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	18.1	[kg] (39.90 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

C - ELETRICAL 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	3ARR3B2L3	
3 Start capacitor	340-408(250)	[µF(VAC minimum)]
4 Run capacitor	40(440)	[µF(VAC minimum)]
5 Motor protection	15HM1969-247	
6 Start winding resistance	1.01	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.35	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	-	[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: @115V60Hz			ARIHBP Fan		Evaporating temperature (Condensing temperature		7.2°C (44.96°F) 54.4°C (129.92°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]	
11489	2895	3367	1263	12.74	90.16	9.10	2.29	2.67	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz		ARI18 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]
-15	(+5)	5600	1411	1641	717	8.80	35.03	7.81	1.97	2.29
-10	(+14)	7246	1826	2123	803	9.28	45.55	9.02	2.27	2.64
-5	(+23)	9181	2314	2690	884	9.77	58.02	10.38	2.62	3.04
0	(+32)	11388	2870	3337	953	10.20	72.43	11.97	3.02	3.51
+5	(+41)	13850	3490	4058	1002	10.51	88.78	13.86	3.49	4.06
+10	(+50)	16549	4170	4849	1024	10.63	107.07	16.13	4.06	4.73

TEST CONDITIONS: @115V60Hz		ARI18 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]
-15	(+5)	4718	1189	1383	742	8.95	32.37	6.38	1.61	1.87
-10	(+14)	6231	1570	1826	848	9.59	43.00	7.35	1.85	2.15
-5	(+23)	7995	2015	2343	951	10.27	55.50	8.39	2.11	2.46
0	(+32)	9993	2518	2928	1043	10.92	69.85	9.55	2.41	2.80
+5	(+41)	12208	3076	3577	1117	11.49	86.07	10.92	2.75	3.20
+10	(+50)	14623	3685	4285	1166	11.89	104.14	12.57	3.17	3.68

TEST CONDITIONS: @115V60Hz		ARI18 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]
-15	(+5)	3922	988	1149	765	9.07	29.94	5.10	1.28	1.49
-10	(+14)	5263	1326	1542	892	9.89	40.43	5.93	1.49	1.74
-5	(+23)	6818	1718	1998	1017	10.78	52.70	6.72	1.69	1.97
0	(+32)	8569	2159	2511	1134	11.68	66.76	7.55	1.90	2.21
+5	(+41)	10500	2646	3077	1234	12.52	82.59	8.49	2.14	2.49
+10	(+50)	12594	3174	3690	1310	13.23	100.20	9.61	2.42	2.82

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	12.77 +0.08/+0.00	[mm]	(0.503" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Vertical		
3.2 DISCHARGE	9.6 +0.07/+0.00	[mm]	(0.378" +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		