

COMPRESSOR DEFINITION

Designation	NT U6222ZV
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	215AD50

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-134a		
3 Nominal voltage and frequency	208-230 / 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 - 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	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	[hp]
2 Displacement	23.74	[cm ³] (1.449 cu.in)
2.1 Bore [mm]	38.100	
2.2 Stroke [mm]	20.830	
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)	18.3	[kg] (40.34 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	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA4AI3C-646	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	20(440)	[µF(VAC minimum)]
5 Motor protection	15HM1952-247	
6 Start winding resistance	3.99	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.63	[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: @230V60Hz			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]
9770	2462	2863	1017	4.50	76.67	9.61	2.42	2.82

E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V60Hz		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)	4711	1187	1380	591	2.79	29.47	7.99	2.01	2.34
-10	(+14)	6319	1592	1852	675	3.12	39.66	9.27	2.34	2.72
-5	(+23)	8125	2047	2381	752	3.43	51.36	10.72	2.70	3.14
0	(+32)	9951	2508	2916	798	3.61	63.38	12.58	3.17	3.69
+5	(+41)	11618	2928	3404	787	3.57	74.54	15.06	3.79	4.41
+10	(+50)	12948	3263	3794	695	3.19	83.68	18.39	4.63	5.39

TEST CONDITIONS: @230V60Hz		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)	3708	934	1086	589	2.78	25.55	6.43	1.62	1.88
-10	(+14)	5133	1294	1504	680	3.13	35.39	7.58	1.91	2.22
-5	(+23)	6881	1734	2016	784	3.55	47.68	8.65	2.18	2.53
0	(+32)	8774	2211	2571	874	3.91	61.26	9.86	2.48	2.89
+5	(+41)	10631	2679	3115	926	4.12	74.93	11.44	2.88	3.35
+10	(+50)	12275	3093	3597	915	4.07	87.52	13.60	3.43	3.98

TEST CONDITIONS: @230V60Hz		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)	2895	730	848	594	2.80	22.00	4.68	1.18	1.37
-10	(+14)	3967	1000	1162	679	3.13	30.54	6.03	1.52	1.77
-5	(+23)	5486	1382	1608	794	3.59	42.49	7.04	1.77	2.06
0	(+32)	7273	1833	2131	913	4.08	56.67	7.93	2.00	2.33
+5	(+41)	9149	2306	2681	1013	4.49	71.90	8.93	2.25	2.62
+10	(+50)	10936	2756	3205	1068	4.71	87.01	10.25	2.58	3.00

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		