

COMPRESSOR DEFINITION

Designation	NT U6238GKV
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	925ED50

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	208-230 / 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	25.2	[kgf/cm ²] (358 psig)	/ °C - °F
9.2 Peak	28.3	[kgf/cm ²] (402 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1 1/2	[hp]
2 Displacement	26.21	[cm ³] (1.599 cu.in)
2.1 Bore [mm]	36.990	
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)	18.3	[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	RVA4AL3C-649	
3 Start capacitor	108-130(330)	[µF(VAC minimum)]
4 Run capacitor	30(440)	[µF(VAC minimum)]
5 Motor protection	15HM1971-247	
6 Start winding resistance	3.03	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.17	[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			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]
9226	2325	2703	1578	7.34	99.42	5.85	1.47	1.71

E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V60Hz			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)	7364	1856	2158	1180	5.64	62.02	6.24	1.57	1.83
-15	(+ 5)	9059	2283	2655	1268	5.99	78.08	7.14	1.80	2.09
-10	(+14)	10981	2767	3218	1344	6.29	94.94	8.17	2.06	2.39
-5	(+23)	13165	3318	3858	1410	6.56	114.66	9.34	2.35	2.74
0	(+32)	15650	3944	4586	1468	6.80	139.25	10.67	2.69	3.13
+5	(+41)	18473	4655	5413	1520	7.02	170.77	12.16	3.06	3.56
+10	(+50)	21672	5461	6350	1568	7.21	211.24	13.81	3.48	4.05

TEST CONDITIONS: @230V60Hz			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)	5926	1493	1736	1233	5.85	57.53	4.81	1.21	1.41
-15	(+ 5)	7324	1846	2146	1357	6.35	73.05	5.39	1.36	1.58
-10	(+14)	8943	2254	2621	1468	6.80	89.69	6.09	1.53	1.78
-5	(+23)	10822	2727	3171	1568	7.22	109.50	6.90	1.74	2.02
0	(+32)	12997	3275	3808	1657	7.59	134.49	7.84	1.98	2.30
+5	(+41)	15506	3907	4544	1740	7.94	166.72	8.91	2.25	2.61
+10	(+50)	18386	4633	5387	1817	8.27	208.22	10.13	2.55	2.97

TEST CONDITIONS: @230V60Hz			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)	4291	1081	1257	1259	5.95	49.85	3.40	0.86	1.00
-15	(+ 5)	5390	1358	1579	1420	6.60	65.07	3.80	0.96	1.11
-10	(+14)	6707	1690	1965	1566	7.21	81.73	4.29	1.08	1.26
-5	(+23)	8278	2086	2426	1699	7.77	101.86	4.88	1.23	1.43
0	(+32)	10142	2556	2972	1821	8.29	127.50	5.57	1.40	1.63
+5	(+41)	12335	3108	3614	1934	8.78	160.68	6.37	1.61	1.87
+10	(+50)	14895	3754	4365	2041	9.25	203.44	7.30	1.84	2.14

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		