

COMPRESSOR DEFINITION

Designation	NT U6240GKV
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	925FD50

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	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)	18.3	[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]
9696	2443	2841	1673	7.81	104.49	5.80	1.46	1.70

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)	7604	1916	2228	1239	6.15	64.00	6.14	1.55	1.80
-15	(+ 5)	9395	2367	2753	1334	6.49	80.85	7.03	1.77	2.06
-10	(+14)	11391	2870	3338	1419	6.81	98.58	8.02	2.02	2.35
-5	(+23)	13755	3466	4031	1496	7.13	120.11	9.21	2.32	2.70
0	(+32)	16650	4196	4879	1563	7.43	148.35	10.67	2.69	3.13
+5	(+41)	20237	5100	5930	1622	7.72	186.24	12.48	3.15	3.66
+10	(+50)	24681	6220	7232	1672	8.00	236.70	14.74	3.72	4.32

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)	6110	1540	1790	1310	6.41	59.40	4.68	1.18	1.37
-15	(+ 5)	7587	1912	2223	1436	6.90	75.46	5.28	1.33	1.55
-10	(+14)	9198	2318	2695	1553	7.39	92.23	5.92	1.49	1.73
-5	(+23)	11105	2798	3254	1660	7.87	112.64	6.68	1.68	1.96
0	(+32)	13470	3394	3947	1757	8.34	139.61	7.65	1.93	2.24
+5	(+41)	16456	4147	4822	1844	8.81	176.06	8.91	2.25	2.61
+10	(+50)	20226	5097	5927	1922	9.27	224.91	10.55	2.66	3.09

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)	4562	1150	1337	1342	6.57	53.41	3.38	0.85	0.99
-15	(+ 5)	5768	1454	1690	1503	7.20	69.12	3.84	0.97	1.13
-10	(+14)	7036	1773	2062	1654	7.83	85.38	4.28	1.08	1.25
-5	(+23)	8527	2149	2499	1794	8.46	105.12	4.77	1.20	1.40
0	(+32)	10404	2622	3049	1923	9.09	131.26	5.40	1.36	1.58
+5	(+41)	12831	3233	3760	2042	9.72	166.72	6.26	1.58	1.84
+10	(+50)	15969	4024	4679	2150	10.36	214.42	7.43	1.87	2.18

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		