

### COMPRESSOR DEFINITION

Designation	<b>NT U6240GKV</b>
Nominal Voltage/Frequency	<b>220-240 V 50 Hz</b>
Engineering Number	<b>925FA80</b>

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	220-240 / 50	[ 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	25.2	[kgf/cm <sup>2</sup> ] (358 psig)	/ °C - °F
9.2 Peak	28.3	[kgf/cm <sup>2</sup> ] (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 <sup>3</sup> ] (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 <sup>2</sup> ] (2.84 to 4.27 psig)

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	3ARR3B10AS3	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	30(440)	[µF(VAC minimum)]
5 Motor protection	15HM1963-247	
6 Start winding resistance	3.95	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.47	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CCC - VDE	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			ASHRAEHBP46 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]
15215	3834	4458	1676	7.98	125.26	9.08	2.29	2.66

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			ASHRAE46 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)	7198	1814	2109	970	4.69	45.68	7.41	1.87	2.17
-15	(+ 5)	8845	2229	2592	1043	5.01	56.48	8.48	2.14	2.48
-10	(+14)	10886	2743	3190	1110	5.32	69.93	9.81	2.47	2.87
-5	(+23)	13323	3357	3904	1172	5.62	86.18	11.38	2.87	3.33
0	(+32)	16154	4071	4733	1227	5.88	105.42	13.18	3.32	3.86
+5	(+41)	19379	4884	5678	1277	6.11	127.80	15.19	3.83	4.45
+10	(+50)	22999	5796	6739	1321	6.29	153.50	17.39	4.38	5.10

TEST CONDITIONS: @220V50Hz			ASHRAE46 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)	6227	1569	1825	1058	5.21	43.62	5.92	1.49	1.73
-15	(+ 5)	7612	1918	2230	1144	5.53	53.67	6.66	1.68	1.95
-10	(+14)	9341	2354	2737	1228	5.88	66.29	7.59	1.91	2.22
-5	(+23)	11414	2876	3345	1310	6.24	81.65	8.68	2.19	2.54
0	(+32)	13831	3486	4053	1390	6.61	99.92	9.93	2.50	2.91
+5	(+41)	16593	4181	4862	1467	6.98	121.26	11.31	2.85	3.31
+10	(+50)	19698	4964	5772	1543	7.34	145.85	12.80	3.23	3.75

TEST CONDITIONS: @220V50Hz			ASHRAE46 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)	5317	1340	1558	1138	5.67	41.81	4.65	1.17	1.36
-15	(+ 5)	6443	1624	1888	1241	6.01	51.02	5.20	1.31	1.52
-10	(+14)	7863	1982	2304	1346	6.41	62.73	5.85	1.48	1.72
-5	(+23)	9578	2414	2807	1453	6.86	77.11	6.60	1.66	1.93
0	(+32)	11586	2920	3395	1562	7.35	94.33	7.42	1.87	2.18
+5	(+41)	13887	3500	4069	1672	7.88	114.55	8.30	2.09	2.43
+10	(+50)	16483	4154	4830	1784	8.43	137.94	9.23	2.33	2.70

### 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	Slanted		
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		