

COMPRESSOR DEFINITION

Designation	NT U6238GKV
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	925EA50

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 - 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 pressures/temperature			
9.1 Operating (gauge)	25.7	[kgf/cm ²] (365 psig)	/ °C - °F
9.2 Peak (gauge)	28.7	[kgf/cm ²] (408 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)	18.1	[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	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			EN12900MBP Fan		Evaporating temperature (Condensing temperature		-10°C (14°F) 45°C (113°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]
7813	1969	2289	1149	5.61	68.77	6.80	1.71	1.99

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			EN12900 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)	6206	1564	1819	897	4.52	47.20	6.89	1.74	2.02
-15	(+ 5)	7531	1898	2207	959	4.79	57.67	7.86	1.98	2.30
-10	(+14)	9255	2332	2712	1015	5.03	71.45	9.13	2.30	2.67
-5	(+23)	11331	2856	3320	1065	5.25	88.42	10.64	2.68	3.12
0	(+32)	13716	3457	4019	1110	5.44	108.44	12.36	3.12	3.62
+5	(+41)	16365	4124	4795	1150	5.62	131.40	14.24	3.59	4.17
+10	(+50)	19231	4846	5635	1185	5.77	157.14	16.21	4.09	4.75

TEST CONDITIONS: @220V50Hz			EN12900 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)	5198	1310	1523	977	4.87	44.85	5.35	1.35	1.57
-15	(+ 5)	6328	1595	1854	1059	5.23	55.16	5.98	1.51	1.75
-10	(+14)	7789	1963	2282	1135	5.57	68.57	6.84	1.72	2.01
-5	(+23)	9535	2403	2794	1206	5.88	84.94	7.87	1.98	2.31
0	(+32)	11523	2904	3376	1273	6.18	104.15	9.03	2.28	2.65
+5	(+41)	13706	3454	4016	1336	6.45	126.05	10.27	2.59	3.01
+10	(+50)	16039	4042	4700	1395	6.72	150.53	11.53	2.91	3.38

TEST CONDITIONS: @220V50Hz			EN12900 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)	4154	1047	1217	1037	5.13	42.15	3.99	1.01	1.17
-15	(+ 5)	5061	1275	1483	1143	5.60	52.04	4.43	1.12	1.30
-10	(+14)	6233	1571	1826	1245	6.05	64.79	5.01	1.26	1.47
-5	(+23)	7622	1921	2233	1342	6.49	80.28	5.69	1.43	1.67
0	(+32)	9184	2314	2691	1436	6.91	98.38	6.41	1.62	1.88
+5	(+41)	10874	2740	3186	1527	7.32	118.95	7.13	1.80	2.09
+10	(+50)	12647	3187	3706	1615	7.73	141.87	7.81	1.97	2.29

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		