COMPRESSOR DEFINITION

Designation	**NT 6222U**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**842EA04**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
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 Expantion device	Capillary tube or Expansion valve		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	-	-	-
8.2 LBP (43ºC Ambient temperature)	-	-	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	18.4	[kgf/cm²] (262 psig)	/ ºC - ºF
9.2 Peak	20.6	[kgf/cm²] (293 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1-	[hp]
2 Displacement	20.44	[cm³] (1.247 cu.in)
2.1 Bore [mm]	36.990	
2.2 Stroke [mm]	19.030	
3 Lubricant charge	450	[ml] (15.22 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	AB / ISO32	
4 Weight (with oil charge)	17	[kg] (37.48 lb.)
5 Nitrogen charge	-	[kgf/cm²]

C - ELECTRICAL 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	RVA4AL3C-560	
3 Start capacitor	43-53(330)	[µF(VAC minimum)]
4 Run capacitor	15(440)	[µF(VAC minimum)]
5 Motor protection	T0485/G9	
6 Start winding resistance	9.00	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	2.30	[Ω at 25ºC (77ºF)] +/- 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 (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
8992	2266	2635	953	4.85	30.78	9.44	2.38	2.77

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE46** (Condensing temperature **35ºC (+95ºF))**
@220V50Hz **Fan**

Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	**(- 4)**	3954	996	1159	579	3.39	1.02	6.82	1.72	2.00
-15	**(+ 5)**	4929	1242	1444	638	3.59	11.71	7.71	1.94	2.26
-10	**(+14)**	6087	1534	1784	684	3.77	18.24	8.89	2.24	2.60
-5	**(+23)**	7427	1872	2176	718	3.90	22.31	10.36	2.61	3.03
0	**(+32)**	8943	2254	2621	740	3.99	25.62	12.11	3.05	3.55
+5	**(+41)**	10635	2680	3116	753	4.05	29.87	14.14	3.56	4.14
+10	**(+50)**	12498	3149	3662	758	4.07	36.76	16.44	4.14	4.82

TEST CONDITIONS: **ASHRAE46** (Condensing temperature **45ºC (+113ºF))**
@220V50Hz **Fan**

Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	**(- 4)**	3342	842	979	600	3.47	0.66	5.61	1.41	1.64
-15	**(+ 5)**	4217	1063	1236	675	3.74	10.88	6.27	1.58	1.84
-10	**(+14)**	5264	1327	1543	736	3.97	17.08	7.14	1.80	2.09
-5	**(+23)**	6479	1633	1898	787	4.16	20.95	8.21	2.07	2.41
0	**(+32)**	7858	1980	2303	827	4.32	24.20	9.48	2.39	2.78
+5	**(+41)**	9400	2369	2754	858	4.44	28.51	10.95	2.76	3.21
+10	**(+50)**	11101	2797	3253	882	4.53	35.60	12.60	3.18	3.69

TEST CONDITIONS: **ASHRAE46** (Condensing temperature **55ºC (+131ºF))**
@220V50Hz **Fan**

Evaporating temperature		Cooling capacity (Qe) +/- 5%			Input power (We) +/- 5%	Electric current +/- 5%	Mass flow rate +/- 5%	Efficiency EER & COP +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-20	**(- 4)**	2701	681	792	607	3.51	0.48	4.43	1.12	1.30
-15	**(+ 5)**	3508	884	1028	699	3.85	10.25	5.02	1.27	1.47
-10	**(+14)**	4472	1127	1310	779	4.16	16.12	5.75	1.45	1.68
-5	**(+23)**	5592	1409	1639	849	4.43	19.80	6.59	1.66	1.93
0	**(+32)**	6864	1730	2011	909	4.67	22.98	7.55	1.90	2.21
+5	**(+41)**	8286	2088	2428	961	4.88	27.37	8.62	2.17	2.52
+10	**(+50)**	9855	2483	2888	1007	5.06	34.67	9.79	2.47	2.87

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	9.6 +0.07/+0.00	[mm]	(0.378" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Vertical		
3.2 DISCHARGE	6.42 +0.08/+0.00	[mm]	(0.253" +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		