COMPRESSOR DEFINITION

Designation	**NT 6222U**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**842OA04**

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)	30.00	[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	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS:			**EN12900MBP**		Evaporating temperature		**-10°C (14°F)**	
@220V50Hz			**Fan**		(Condensing temperature		**45°C (113°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]
4705	1186	1379	738	3.94	15.78	6.38	1.61	1.87

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**EN12900**					(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)**	3610	910	1058	592	3.46	11.70	6.09	1.53	1.78
-15	**(+ 5)**	4512	1137	1322	642	3.64	14.71	7.02	1.77	2.06
-10	**(+14)**	5590	1409	1638	688	3.81	18.33	8.12	2.05	2.38
-5	**(+23)**	6843	1725	2005	731	3.98	22.60	9.36	2.36	2.74
0	**(+32)**	8274	2085	2424	771	4.13	27.54	10.74	2.71	3.15
+5	**(+41)**	9880	2490	2895	808	4.27	33.22	12.24	3.09	3.59
+10	**(+50)**	11663	2939	3418	841	4.40	39.67	13.86	3.49	4.06

TEST CONDITIONS:		**EN12900**					(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)**	3040	766	891	629	3.60	10.81	4.86	1.22	1.42
-15	**(+ 5)**	3817	962	1118	689	3.83	13.65	5.55	1.40	1.63
-10	**(+14)**	4765	1201	1396	747	4.05	17.14	6.37	1.61	1.87
-5	**(+23)**	5884	1483	1724	803	4.26	21.33	7.32	1.84	2.14
0	**(+32)**	7174	1808	2102	856	4.47	26.25	8.37	2.11	2.45
+5	**(+41)**	8634	2176	2530	907	4.68	31.95	9.52	2.40	2.79
+10	**(+50)**	10266	2587	3008	956	4.88	38.46	10.76	2.71	3.15

TEST CONDITIONS:		**EN12900**					(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)**	2534	639	743	657	3.68	10.01	3.84	0.97	1.13
-15	**(+ 5)**	3161	797	926	729	3.95	12.59	4.34	1.09	1.27
-10	**(+14)**	3954	996	1159	799	4.22	15.86	4.96	1.25	1.45
-5	**(+23)**	4913	1238	1439	868	4.50	19.88	5.66	1.43	1.66
0	**(+32)**	6036	1521	1769	936	4.77	24.68	6.45	1.62	1.89
+5	**(+41)**	7325	1846	2147	1003	5.04	30.31	7.31	1.84	2.14
+10	**(+50)**	8780	2213	2573	1068	5.31	36.80	8.22	2.07	2.41

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		