COMPRESSOR DEFINITION

Designation	**NT 6220U**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**842DA04**

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	CSIR		
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	3/4	[hp]
2 Displacement	17.39	[cm³] (1.061 cu.in)
2.1 Bore [mm]	34.120	
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	Current Relay	
2.1 Starting device	MTRPH-0019-65	
3 Start capacitor	53-64(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0558/G6	
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)	29.00	[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: **@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]
7515	1894	2202	900	5.80	25.72	8.35	2.10	2.45

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)**	3454	870	1012	556	4.85	0.94	6.19	1.56	1.81
-15	**(+ 5)**	4213	1062	1235	592	4.93	9.93	7.12	1.79	2.09
-10	**(+14)**	5166	1302	1514	624	5.01	15.45	8.29	2.09	2.43
-5	**(+23)**	6313	1591	1850	651	5.08	18.97	9.70	2.44	2.84
0	**(+32)**	7654	1929	2243	675	5.15	21.94	11.34	2.86	3.32
+5	**(+41)**	9188	2315	2692	695	5.21	25.83	13.22	3.33	3.87
+10	**(+50)**	10916	2751	3199	712	5.27	32.09	15.34	3.86	4.49

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)**	2818	710	826	577	4.87	0.48	4.91	1.24	1.44
-15	**(+ 5)**	3557	896	1042	630	5.00	9.19	5.66	1.43	1.66
-10	**(+14)**	4449	1121	1304	676	5.12	14.48	6.57	1.66	1.93
-5	**(+23)**	5494	1384	1610	717	5.24	17.80	7.64	1.93	2.24
0	**(+32)**	6691	1686	1961	753	5.34	20.61	8.87	2.23	2.60
+5	**(+41)**	8040	2026	2356	784	5.44	24.38	10.25	2.58	3.00
+10	**(+50)**	9542	2405	2796	809	5.53	30.57	11.80	2.97	3.46

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)**	2274	573	666	607	4.93	0.42	3.74	0.94	1.09
-15	**(+ 5)**	2971	749	871	676	5.12	8.72	4.39	1.11	1.29
-10	**(+14)**	3780	953	1108	739	5.30	13.63	5.11	1.29	1.50
-5	**(+23)**	4700	1184	1377	794	5.46	16.63	5.92	1.49	1.74
0	**(+32)**	5732	1444	1680	843	5.62	19.15	6.81	1.72	2.00
+5	**(+41)**	6875	1732	2014	885	5.76	22.67	7.78	1.96	2.28
+10	**(+50)**	8129	2048	2382	920	5.89	28.65	8.83	2.22	2.59

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		