COMPRESSOR DEFINITION

Designation	**NT 2210UV**
Nominal Voltage/Frequency	**115 V 60 Hz**
Engineering Number	**843CG02**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	115 / 60	[V / Hz]	
4 Application type	Low Back Pressure R290		
4.1 Evaporating temperature range	-40°C to -10°C	(-40°F to 14°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 1/4	[hp]
2 Displacement	27.80	[cm³] (1.696 cu.in)
2.1 Bore [mm]	38.100	
2.2 Stroke [mm]	24.400	
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)	17.7	[kg] (39.02 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm²] (2.84 to 4.27 psig)

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVAH2AE3C-572	
3 Start capacitor	340-408(250)	[µF(VAC minimum)]
4 Run capacitor	25(250)	[µF(VAC minimum)]
5 Motor protection	15HM1983-247	
6 Start winding resistance	1.91	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	0.39	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	67.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	13.28	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CCC - UL	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS:			**ARILBP**			Evaporating temperature		**-23.3°C (-9.94°F)**
@115V60Hz			**Fan**			(Condensing temperature		**48.9°C (120.02°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]
3614	911	1059	959	9.84	14.68	3.77	0.95	1.10

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**ARI4**					(Condensing temperature **35ºC (+95ºF))**			
@115V60Hz		**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]
-40	**(-40)**	2040	514	598	572	6.92	7.07	3.56	0.90	1.04
-35	**(-31)**	2625	662	769	659	7.53	9.14	3.99	1.00	1.17
-30	**(-22)**	3379	851	990	755	8.23	11.81	4.47	1.13	1.31
-25	**(-13)**	4301	1084	1260	859	9.03	15.10	5.00	1.26	1.47
-20	**(- 4)**	5392	1359	1580	972	9.93	19.04	5.55	1.40	1.63
-15	**(+ 5)**	6651	1676	1949	1092	10.92	23.65	6.09	1.54	1.79
-10	**(+14)**	8078	2036	2367	1221	12.01	28.96	6.62	1.67	1.94

TEST CONDITIONS:		**ARI4**					(Condensing temperature **45ºC (+113ºF))**			
@115V60Hz		**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]
-40	**(-40)**	1739	438	509	592	7.08	6.66	2.95	0.74	0.86
-35	**(-31)**	2218	559	650	679	7.66	8.53	3.28	0.83	0.96
-30	**(-22)**	2850	718	835	778	8.38	11.00	3.66	0.92	1.07
-25	**(-13)**	3635	916	1065	889	9.24	14.10	4.08	1.03	1.20
-20	**(- 4)**	4573	1152	1340	1013	10.24	17.86	4.51	1.14	1.32
-15	**(+ 5)**	5663	1427	1659	1149	11.39	22.29	4.93	1.24	1.45
-10	**(+14)**	6906	1740	2023	1297	12.67	27.42	5.32	1.34	1.56

TEST CONDITIONS:		**ARI4**					(Condensing temperature **55ºC (+131ºF))**			
@115V60Hz		**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]
-40	**(-40)**	1415	357	415	611	7.28	6.08	2.31	0.58	0.68
-35	**(-31)**	1796	453	526	698	7.81	7.75	2.57	0.65	0.75
-30	**(-22)**	2314	583	678	802	8.54	10.04	2.88	0.73	0.85
-25	**(-13)**	2968	748	870	921	9.45	12.95	3.22	0.81	0.94
-20	**(- 4)**	3759	947	1101	1057	10.54	16.52	3.56	0.90	1.04
-15	**(+ 5)**	4686	1181	1373	1208	11.82	20.78	3.89	0.98	1.14
-10	**(+14)**	5751	1449	1685	1376	13.29	25.74	4.17	1.05	1.22

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		