COMPRESSOR DEFINITION

Designation	**NT X2211UV**
Nominal Voltage/Frequency	**115-127 V 60 Hz**
Engineering Number	**843KE72**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	115-127 / 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		[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	-	[kgf/cm²]

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115-127 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	40(400)	[µF(VAC minimum)]
5 Motor protection	UP14NC5245-T	
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)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	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]
4353	1097	1275	1008	9.89	17.68	4.32	1.09	1.27

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)**	2249	567	659	588	6.34	7.79	3.83	0.96	1.12
-35	**(-31)**	2983	752	874	685	7.05	10.38	4.36	1.10	1.28
-30	**(-22)**	3874	976	1135	784	7.82	13.54	4.95	1.25	1.45
-25	**(-13)**	4925	1241	1443	885	8.63	17.30	5.57	1.40	1.63
-20	**(- 4)**	6133	1546	1797	987	9.47	21.66	6.21	1.57	1.82
-15	**(+ 5)**	7501	1890	2198	1091	10.34	26.67	6.87	1.73	2.01
-10	**(+14)**	9027	2275	2645	1198	11.22	32.35	7.53	1.90	2.21

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)**	1866	470	547	602	6.37	7.15	3.10	0.78	0.91
-35	**(-31)**	2489	627	729	706	7.14	9.57	3.53	0.89	1.03
-30	**(-22)**	3255	820	954	814	7.99	12.56	3.99	1.01	1.17
-25	**(-13)**	4164	1049	1220	927	8.92	16.15	4.48	1.13	1.31
-20	**(- 4)**	5215	1314	1528	1045	9.92	20.36	4.99	1.26	1.46
-15	**(+ 5)**	6410	1615	1878	1167	10.97	25.23	5.50	1.38	1.61
-10	**(+14)**	7748	1952	2270	1294	12.06	30.76	5.99	1.51	1.76

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)**	1475	372	432	606	6.53	6.34	2.44	0.61	0.71
-35	**(-31)**	2004	505	587	719	7.32	8.65	2.79	0.70	0.82
-30	**(-22)**	2661	671	780	838	8.24	11.54	3.17	0.80	0.93
-25	**(-13)**	3445	868	1009	965	9.26	15.02	3.57	0.90	1.05
-20	**(- 4)**	4356	1098	1276	1099	10.38	19.14	3.96	1.00	1.16
-15	**(+ 5)**	5394	1359	1581	1241	11.59	23.92	4.35	1.10	1.27
-10	**(+14)**	6560	1653	1922	1390	12.88	29.37	4.72	1.19	1.38

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		