COMPRESSOR DEFINITION

Designation	**NT X2211UV**
Nominal Voltage/Frequency	**208-230 V 60 Hz**
Engineering Number	**843KD72**

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-290		
3 Nominal voltage and frequency	208-230 / 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	-	[kgf/cm²]

C - ELECTRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	208-230 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA2AG3C-117	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	20(400)	[µF(VAC minimum)]
5 Motor protection	USP-577-84	
6 Start winding resistance	3.07	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	1.44	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	33.00	[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:			**ASHRAELBP32**			Evaporating temperature		**-23.3°C (-9.94°F)**
@208V60Hz			**Fan**			(Condensing temperature		**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]
5239	1320	1535	990	5.00	15.59	5.29	1.33	1.55

E - PERFORMANCE - CURVES

TEST CONDITIONS:		**ASHRAE32**					(Condensing temperature **35ºC (+95ºF))**			
@208V60Hz		**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)**	2654	669	778	581	2.96	7.84	4.56	1.15	1.34
-35	**(-31)**	3453	870	1012	665	3.37	10.22	5.20	1.31	1.52
-30	**(-22)**	4423	1115	1296	756	3.82	13.12	5.85	1.47	1.71
-25	**(-13)**	5565	1402	1631	856	4.32	16.55	6.50	1.64	1.91
-20	**(- 4)**	6879	1733	2016	963	4.87	20.53	7.14	1.80	2.09
-15	**(+ 5)**	8364	2108	2451	1078	5.46	25.06	7.76	1.96	2.27
-10	**(+14)**	10022	2525	2937	1201	6.10	30.16	8.34	2.10	2.44

TEST CONDITIONS:		**ASHRAE32**					(Condensing temperature **45ºC (+113ºF))**			
@208V60Hz		**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)**	2380	600	698	587	3.03	7.03	4.06	1.02	1.19
-35	**(-31)**	3157	796	925	682	3.47	9.34	4.63	1.17	1.36
-30	**(-22)**	4103	1034	1202	786	3.97	12.17	5.22	1.31	1.53
-25	**(-13)**	5218	1315	1529	899	4.53	15.52	5.79	1.46	1.70
-20	**(- 4)**	6503	1639	1906	1022	5.14	19.40	6.36	1.60	1.86
-15	**(+ 5)**	7958	2005	2332	1154	5.80	23.84	6.90	1.74	2.02
-10	**(+14)**	9582	2415	2808	1296	6.53	28.83	7.40	1.86	2.17

TEST CONDITIONS:		**ASHRAE32**					(Condensing temperature **55ºC (+131ºF))**			
@208V60Hz		**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)**	2143	540	628	585	3.01	6.32	3.66	0.92	1.07
-35	**(-31)**	2879	725	844	694	3.52	8.52	4.15	1.05	1.22
-30	**(-22)**	3782	953	1108	813	4.09	11.22	4.65	1.17	1.36
-25	**(-13)**	4853	1223	1422	942	4.73	14.43	5.15	1.30	1.51
-20	**(- 4)**	6092	1535	1785	1082	5.44	18.17	5.63	1.42	1.65
-15	**(+ 5)**	7498	1889	2197	1234	6.22	22.45	6.08	1.53	1.78
-10	**(+14)**	9072	2286	2658	1395	7.07	27.29	6.50	1.64	1.90

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		