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: **@230V60Hz**			**ARILBP** **Fan**		Evaporating temperature (Condensing temperature		**-23.3°C (-9.94°F)** **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]
4344	1095	1273	984	4.62	17.64	4.42	1.11	1.30

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ARI4** (Condensing temperature **35ºC (+95ºF))**
@230V60Hz **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)**	2464	621	722	612	3.09	8.54	4.01	1.01	1.18
-35	**(-31)**	3141	791	920	695	3.44	10.93	4.53	1.14	1.33
-30	**(-22)**	4004	1009	1173	787	3.82	13.99	5.09	1.28	1.49
-25	**(-13)**	5053	1273	1481	889	4.23	17.74	5.69	1.43	1.67
-20	**(- 4)**	6289	1585	1843	999	4.66	22.21	6.29	1.58	1.84
-15	**(+ 5)**	7710	1943	2259	1119	5.12	27.42	6.89	1.74	2.02
-10	**(+14)**	9318	2348	2730	1249	5.61	33.40	7.46	1.88	2.19

TEST CONDITIONS: **ARI4** (Condensing temperature **45ºC (+113ºF))**
@230V60Hz **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)**	1978	498	579	620	3.06	7.57	3.18	0.80	0.93
-35	**(-31)**	2583	651	757	713	3.46	9.93	3.63	0.91	1.06
-30	**(-22)**	3348	844	981	814	3.91	12.92	4.11	1.03	1.20
-25	**(-13)**	4271	1076	1252	925	4.40	16.57	4.61	1.16	1.35
-20	**(- 4)**	5353	1349	1569	1045	4.92	20.91	5.12	1.29	1.50
-15	**(+ 5)**	6595	1662	1932	1174	5.49	25.95	5.62	1.42	1.65
-10	**(+14)**	7995	2015	2343	1312	6.10	31.73	6.10	1.54	1.79

TEST CONDITIONS: **ARI4** (Condensing temperature **55ºC (+131ºF))**
@230V60Hz **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)**	1579	398	463	618	3.09	6.79	2.56	0.65	0.75
-35	**(-31)**	2105	531	617	723	3.51	9.09	2.91	0.73	0.85
-30	**(-22)**	2764	696	810	838	3.98	11.98	3.29	0.83	0.96
-25	**(-13)**	3554	896	1041	961	4.51	15.50	3.69	0.93	1.08
-20	**(- 4)**	4476	1128	1312	1094	5.10	19.67	4.10	1.03	1.20
-15	**(+ 5)**	5530	1393	1620	1235	5.74	24.52	4.49	1.13	1.31
-10	**(+14)**	6715	1692	1968	1385	6.43	30.06	4.84	1.22	1.42

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		