

COMPRESSOR DEFINITION

Designation	NT 2212GKV
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	925CD02

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	208-230 / 60	[V / Hz]	
4 Application type	Low Back Pressure R404A		
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 Expansion device	Capillary tube or Expansion valve		
8 Compressor cooling	Operating voltage range		
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	-	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	25.2	[kgf/cm ²] (358 psig)	/ °C - °F
9.2 Peak	28.3	[kgf/cm ²] (402 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	1 1/2	[hp]
2 Displacement	27.80	[cm ³] (1.696 cu.in)
2.1 Bore [mm]	38.100	
2.2 Stroke [mm]	24.400	
3 Lubricant charge	650	[ml] (21.98 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	18.3	[kg] (40.34 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL 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	RVA2AM3C-104	
3 Start capacitor	130-156(330)	[µF(VAC minimum)]
4 Run capacitor	25(440)	[µF(VAC minimum)]
5 Motor protection	15HM1962-240	
6 Start winding resistance	3.30	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.35	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	45.00	[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 +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
4198	1058	1230	1193	5.56	43.46	3.52	0.89	1.03

E - PERFORMANCE - CURVES

TEST CONDITIONS: @230V60Hz		ARI4 Fan			(Condensing temperature 35°C (+95°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	2325	586	681	713	3.62	19.09	3.25	0.82	0.95
-35	(-31)	3150	794	923	836	4.09	26.10	3.78	0.95	1.11
-30	(-22)	4148	1045	1215	960	4.58	34.57	4.33	1.09	1.27
-25	(-13)	5318	1340	1558	1084	5.08	44.61	4.91	1.24	1.44
-20	(- 4)	6661	1679	1952	1209	5.60	56.33	5.51	1.39	1.62
-15	(+ 5)	8177	2060	2396	1334	6.13	69.85	6.13	1.54	1.80
-10	(+14)	9864	2486	2890	1460	6.68	85.27	6.74	1.70	1.98

TEST CONDITIONS: @230V60Hz		ARI4 Fan			(Condensing temperature 45°C (+113°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	1645	414	482	706	3.59	15.60	2.34	0.59	0.69
-35	(-31)	2366	596	693	842	4.12	22.55	2.80	0.71	0.82
-30	(-22)	3238	816	949	981	4.68	31.03	3.28	0.83	0.96
-25	(-13)	4261	1074	1249	1123	5.25	41.15	3.78	0.95	1.11
-20	(- 4)	5434	1369	1592	1268	5.86	53.02	4.28	1.08	1.25
-15	(+ 5)	6758	1703	1980	1416	6.49	66.76	4.78	1.20	1.40
-10	(+14)	8232	2074	2412	1567	7.15	82.48	5.28	1.33	1.55

TEST CONDITIONS: @230V60Hz		ARI4 Fan			(Condensing temperature 55°C (+131°F))					
Evaporating temperature		Cooling capacity +/- 5%			Power consumption +/- 5%	Current consumption +/- 5%	Gas flow rate +/- 5%	EFFICIENCY RATE +/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-40	(-40)	1238	312	363	706	3.59	14.05	1.75	0.44	0.51
-35	(-31)	1788	451	524	851	4.16	20.39	2.10	0.53	0.62
-30	(-22)	2466	621	723	1002	4.77	28.32	2.47	0.62	0.72
-25	(-13)	3273	825	959	1159	5.41	37.97	2.83	0.71	0.83
-20	(- 4)	4208	1060	1233	1321	6.09	49.44	3.19	0.80	0.93
-15	(+ 5)	5271	1328	1545	1489	6.81	62.85	3.54	0.89	1.04
-10	(+14)	6463	1629	1894	1663	7.57	78.31	3.88	0.98	1.14

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		