

COMPRESSOR DEFINITION

Designation	NT 2192GKV
Nominal Voltage/Frequency	208-230 V 60 Hz
Engineering Number	923DD09

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 - High 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	[hp]
2 Displacement	22.37	[cm ³] (1.365 cu.in)
2.1 Bore [mm]	36.990	
2.2 Stroke [mm]	20.830	
3 Lubricant charge	450	[ml] (15.22 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	18	[kg] (39.68 lb.)
5 Nitrogen charge	0.2 to 0.3	[kgf/cm ²] (2.84 to 4.27 psig)

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	RVA3AN3C-647	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	15(400)	[µF(VAC minimum)]
5 Motor protection	T0590/G9	
6 Start winding resistance	5.64	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	1.29	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	40.00	[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]	
3246	818	951	909	4.31	33.60	3.57	0.90	1.05	

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)	1593	401	467	442	2.51	13.04	3.57	0.90	1.05
-35	(-31)	2320	585	680	585	3.01	19.22	4.00	1.01	1.17
-30	(-22)	3180	801	932	715	3.49	26.52	4.48	1.13	1.31
-25	(-13)	4174	1052	1223	833	3.95	35.03	5.03	1.27	1.47
-20	(- 4)	5301	1336	1553	942	4.41	44.84	5.63	1.42	1.65
-15	(+ 5)	6561	1653	1923	1043	4.86	56.05	6.27	1.58	1.84
-10	(+14)	7955	2005	2331	1139	5.32	68.75	6.97	1.76	2.04

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)	1049	264	307	465	2.58	9.97	2.27	0.57	0.67
-35	(-31)	1672	421	490	601	3.09	15.94	2.76	0.70	0.81
-30	(-22)	2416	609	708	731	3.59	23.14	3.27	0.82	0.96
-25	(-13)	3280	826	961	856	4.09	31.66	3.80	0.96	1.11
-20	(- 4)	4264	1074	1249	977	4.59	41.59	4.34	1.09	1.27
-15	(+ 5)	5368	1353	1573	1098	5.11	53.03	4.90	1.23	1.43
-10	(+14)	6593	1661	1932	1220	5.64	66.07	5.46	1.38	1.60

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)	703	177	206	487	2.67	7.99	1.43	0.36	0.42
-35	(-31)	1165	294	341	612	3.18	13.28	1.91	0.48	0.56
-30	(-22)	1734	437	508	738	3.69	19.90	2.37	0.60	0.69
-25	(-13)	2411	607	706	865	4.21	27.95	2.80	0.71	0.82
-20	(- 4)	3194	805	936	996	4.75	37.53	3.22	0.81	0.94
-15	(+ 5)	4085	1029	1197	1133	5.31	48.72	3.60	0.91	1.06
-10	(+14)	5083	1281	1490	1277	5.90	61.62	3.96	1.00	1.16

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal
2 Tray holder	No
3 Connectors	
3.1 SUCTION	12.7 +0.25/-0.25 [mm] (0.500" +0.010"/-0.010")
3.1.1 Material	Steel
3.1.2 Shape	ROTOLOCK(Ex. thr. 1"-14UNS-2A)
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