

COMPRESSOR DEFINITION

Designation	NT 2192GKAV
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	923NA09

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	220-240 / 50	[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 1/4	[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)	16.8	[kg] (37.04 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA3N3C-122	
3 Start capacitor	130-156(330)	[µF(VAC minimum)]
4 Run capacitor	15(400)	[µF(VAC minimum)]
5 Motor protection	MST26AHK-3261	
6 Start winding resistance	6.96	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	2.87	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	32.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			ASHRAELBP32 Fan		Evaporating temperature (Condensing temperature		-23.3°C (-9.94°F) 54.4°C (129.92°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]
3716	936	1089	772	3.93	25.19	4.82	1.21	1.41

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			ASHRAE32 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)	1685	425	494	440	2.53	11.33	3.81	0.96	1.12
-35	(-31)	2263	570	663	516	2.84	15.26	4.39	1.11	1.29
-30	(-22)	3003	757	880	592	3.16	20.32	5.07	1.28	1.49
-25	(-13)	3906	984	1144	670	3.48	26.53	5.83	1.47	1.71
-20	(- 4)	4971	1253	1457	749	3.81	33.95	6.64	1.67	1.95
-15	(+ 5)	6199	1562	1817	829	4.15	42.60	7.49	1.89	2.19
-10	(+14)	7590	1913	2224	909	4.50	52.51	8.35	2.10	2.45

TEST CONDITIONS: @220V50Hz			ASHRAE32 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)	1452	366	426	437	2.52	9.74	3.34	0.84	0.98
-35	(-31)	2018	508	591	522	2.87	13.58	3.88	0.98	1.14
-30	(-22)	2742	691	803	609	3.24	18.51	4.50	1.13	1.32
-25	(-13)	3623	913	1062	698	3.62	24.57	5.18	1.30	1.52
-20	(- 4)	4664	1175	1367	790	4.01	31.79	5.89	1.49	1.73
-15	(+ 5)	5862	1477	1718	885	4.43	40.20	6.63	1.67	1.94
-10	(+14)	7218	1819	2115	981	4.86	49.83	7.35	1.85	2.15

TEST CONDITIONS: @220V50Hz			ASHRAE32 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)	1226	309	359	420	2.46	8.21	2.91	0.73	0.85
-35	(-31)	1754	442	514	516	2.85	11.78	3.40	0.86	1.00
-30	(-22)	2435	614	713	617	3.27	16.41	3.95	0.99	1.16
-25	(-13)	3269	824	958	721	3.71	22.12	4.53	1.14	1.33
-20	(- 4)	4258	1073	1248	829	4.18	28.96	5.14	1.30	1.51
-15	(+ 5)	5400	1361	1582	941	4.68	36.95	5.75	1.45	1.68
-10	(+14)	6695	1687	1962	1056	5.20	46.13	6.33	1.60	1.86

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