

COMPRESSOR DEFINITION

Designation	NJ 2192GK
Nominal Voltage/Frequency	115 V 60 Hz
Engineering Number	943AG01

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-404A		
3 Nominal voltage and frequency	115 / 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 1/4	[hp]
2 Displacement	26.11	[cm ³] (1.593 cu.in)
2.1 Bore [mm]	41.770	
2.2 Stroke [mm]	19.066	
3 Lubricant charge	750	[ml] (25.36 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	21.7	[kg] (47.84 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	115 V 60 Hz 1~ (Single phase)	
2 Starting device type	Voltage Relay	
2.1 Starting device	RVA2AE3C-105	
3 Start capacitor	400-480(125)	[µF(VAC minimum)]
4 Run capacitor	20(440)	[µF(VAC minimum)]
5 Motor protection	15HM2442-168	
6 Start winding resistance	2.31	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	0.32	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (60 Hz)	98.00	[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: @115V60Hz			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]	
4500	1134	1319	1012	12.40	30.51	4.45	1.12	1.30	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz		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)	1294	326	379	635	9.42	8.70	2.04	0.51	0.60
-35	(-31)	2521	635	739	730	10.19	17.00	3.42	0.86	1.00
-30	(-22)	3789	955	1110	830	11.00	25.64	4.56	1.15	1.34
-25	(-13)	5127	1292	1502	937	11.84	34.83	5.49	1.38	1.61
-20	(- 4)	6563	1654	1923	1051	12.73	44.82	6.27	1.58	1.84
-15	(+ 5)	8125	2048	2381	1173	13.66	55.82	6.93	1.75	2.03
-10	(+14)	9841	2480	2884	1304	14.63	68.08	7.52	1.90	2.20

TEST CONDITIONS: @115V60Hz		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)	1312	331	385	531	8.97	8.80	2.51	0.63	0.74
-35	(-31)	2310	582	677	664	9.85	15.55	3.45	0.87	1.01
-30	(-22)	3400	857	996	801	10.81	22.96	4.23	1.07	1.24
-25	(-13)	4609	1161	1351	943	11.86	31.25	4.88	1.23	1.43
-20	(- 4)	5965	1503	1748	1090	12.98	40.66	5.47	1.38	1.60
-15	(+ 5)	7497	1889	2197	1244	14.18	51.41	6.02	1.52	1.76
-10	(+14)	9233	2327	2705	1405	15.46	63.74	6.59	1.66	1.93

TEST CONDITIONS: @115V60Hz		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)	1334	336	391	426	8.67	8.93	3.06	0.77	0.90
-35	(-31)	2108	531	618	597	9.64	14.16	3.56	0.90	1.04
-30	(-22)	3022	762	886	771	10.73	20.36	3.97	1.00	1.16
-25	(-13)	4106	1035	1203	948	11.94	27.78	4.36	1.10	1.28
-20	(- 4)	5388	1358	1579	1129	13.27	36.65	4.75	1.20	1.39
-15	(+ 5)	6894	1737	2020	1315	14.72	47.18	5.20	1.31	1.53
-10	(+14)	8653	2181	2536	1507	16.29	59.62	5.76	1.45	1.69

F - EXTERNAL CHARACTERISTICS

1 Base plate	American Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	12.77 +0.08/+0.00	[mm]	(0.503" +0.003"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Vertical		
3.2 DISCHARGE	8 +0.07/+0.00	[mm]	(0.315" +0.003"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted J		
3.3 PROCESS	9.6 +0.07/+0.00	[mm]	(0.378" +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		