

COMPRESSOR DEFINITION

Designation	NE U2168GKA
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	955AA76

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	CSIR		
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	3/4	[hp]
2 Displacement	13.54	[cm ³] (0.826 cu.in)
2.1 Bore [mm]	29.362	
2.2 Stroke [mm]	20.000	
3 Lubricant charge	350	[ml] (11.84 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ESTER / ISO22	
4 Weight (with oil charge)	11.05	[kg] (24.36 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	Current Relay	
2.1 Starting device	213515047	
3 Start capacitor	108-130(330)	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	USP-M1E-83	
6 Start winding resistance	12.02	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	5.15	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	24.80	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	3.60	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			EN12900LBP Fan		Evaporating temperature (Condensing temperature		-35°C (-31°F) 40°C (104°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]
1317	332	386	379	2.76	10.45	3.47	0.87	1.02

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			EN12900 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)	1067	269	313	319	2.61	7.95	3.33	0.84	0.98
-35	(-31)	1437	362	421	370	2.74	10.75	3.89	0.98	1.14
-30	(-22)	1906	480	558	422	2.88	14.31	4.52	1.14	1.32
-25	(-13)	2473	623	725	474	3.04	18.67	5.22	1.31	1.53
-20	(- 4)	3140	791	920	527	3.21	23.85	5.96	1.50	1.75
-15	(+ 5)	3905	984	1144	580	3.40	29.90	6.73	1.70	1.97
-10	(+14)	4769	1202	1397	633	3.61	36.84	7.53	1.90	2.21

TEST CONDITIONS: @220V50Hz			EN12900 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)	824	208	241	316	2.56	6.96	2.62	0.66	0.77
-35	(-31)	1142	288	335	376	2.72	9.69	3.04	0.77	0.89
-30	(-22)	1542	389	452	438	2.90	13.15	3.51	0.89	1.03
-25	(-13)	2024	510	593	502	3.11	17.36	4.02	1.01	1.18
-20	(- 4)	2589	652	759	567	3.34	22.36	4.56	1.15	1.34
-15	(+ 5)	3235	815	948	634	3.60	28.19	5.10	1.29	1.50
-10	(+14)	3963	999	1161	702	3.88	34.88	5.65	1.42	1.65

TEST CONDITIONS: @220V50Hz			EN12900 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)	598	151	175	304	2.54	5.91	1.96	0.49	0.57
-35	(-31)	862	217	252	375	2.72	8.57	2.29	0.58	0.67
-30	(-22)	1191	300	349	448	2.94	11.91	2.65	0.67	0.78
-25	(-13)	1586	400	465	524	3.19	15.98	3.03	0.76	0.89
-20	(- 4)	2046	516	599	603	3.47	20.79	3.40	0.86	1.00
-15	(+ 5)	2571	648	753	685	3.79	26.40	3.76	0.95	1.10
-10	(+14)	3161	797	926	769	4.14	32.83	4.10	1.03	1.20

F - EXTERNAL CHARACTERISTICS

1 Base plate	Universal		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	8.1 +0.10/+0.00	[mm]	(0.319" +0.004"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.45 +0.10/+0.00	[mm]	(0.254" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		