

COMPRESSOR DEFINITION

Designation	NE U2168GJ
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	959LA51

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 pressures/temperature			
9.1 Operating (gauge)	25.7	[kgf/cm ²] (365 psig)	/ °C - °F
9.2 Peak (gauge)	28.7	[kgf/cm ²] (408 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation	3/4	[hp]
2 Displacement	14.28	[cm ³] (0.871 cu.in)
2.1 Bore [mm]	30.157	
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)	11.6	[kg] (25.57 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	RVA3AN3C-575	
3 Start capacitor	88-108(330)	[µF(VAC minimum)]
4 Run capacitor	12.5(400)	[µF(VAC minimum)]
5 Motor protection	MSP30AMK-5590	
6 Start winding resistance	11.03	[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)	22.00	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	3.48	[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_HH 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]
1493	376	437	361	1.65	10.99	4.14	1.04	1.21

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			EN12900HH 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)	1214	306	356	310	1.54	8.41	3.90	0.98	1.14
-35	(-31)	1603	404	470	358	1.74	11.16	4.49	1.13	1.32
-30	(-22)	2094	528	614	407	1.95	14.63	5.15	1.30	1.51
-25	(-13)	2687	677	787	458	2.17	18.84	5.86	1.48	1.72
-20	(- 4)	3381	852	991	511	2.41	23.83	6.61	1.67	1.94
-15	(+ 5)	4177	1053	1224	566	2.65	29.63	7.38	1.86	2.16
-10	(+14)	5075	1279	1487	623	2.91	36.25	8.15	2.05	2.39

TEST CONDITIONS: @220V50Hz			EN12900HH 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)	999	252	293	320	1.58	7.79	3.12	0.79	0.92
-35	(-31)	1334	336	391	372	1.80	10.43	3.59	0.90	1.05
-30	(-22)	1756	442	514	427	2.05	13.78	4.11	1.03	1.20
-25	(-13)	2264	571	664	485	2.31	17.85	4.66	1.17	1.36
-20	(- 4)	2861	721	838	547	2.59	22.69	5.22	1.32	1.53
-15	(+ 5)	3544	893	1038	612	2.88	28.31	5.79	1.46	1.70
-10	(+14)	4314	1087	1264	681	3.19	34.75	6.34	1.60	1.86

TEST CONDITIONS: @220V50Hz			EN12900HH 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)	763	192	223	316	1.57	6.87	2.41	0.61	0.71
-35	(-31)	1047	264	307	375	1.83	9.46	2.79	0.70	0.82
-30	(-22)	1403	354	411	439	2.10	12.74	3.19	0.80	0.94
-25	(-13)	1832	462	537	507	2.41	16.73	3.61	0.91	1.06
-20	(- 4)	2334	588	684	580	2.74	21.47	4.03	1.02	1.18
-15	(+ 5)	2909	733	852	658	3.09	26.98	4.43	1.12	1.30
-10	(+14)	3557	896	1042	741	3.47	33.29	4.79	1.21	1.40

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
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	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.1 +0.10/+0.00	[mm]	(0.240" +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		