

### COMPRESSOR DEFINITION

Designation	<b>NB M1119Y</b>
Nominal Voltage/Frequency	<b>200-240 V 50 Hz / 230 V 60 Hz</b>
Engineering Number	<b>818FN55</b>

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
3 Nominal voltage and frequency	200-240 / 50	[ V / Hz ]	
4 Application type	Low Back Pressure		
4.1 Evaporating temperature range	-35°C to -10°C	(-31°F to 14°F)	
5 Motor type	RSIR		
6 Starting torque	LST - Low Starting Torque		
7 Expansion device	Capillary tube		
8 Compressor cooling	Operating voltage range		
		50 Hz	60 Hz
8.1 LBP (32°C Ambient temperature)	Static	180 to 254 V	-
8.2 LBP (43°C Ambient temperature)	Static	180 to 254 V	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	7.7	[kgf/cm <sup>2</sup> ] (109 psig)	/ °C - °F
9.2 Peak (gauge)	9.8	[kgf/cm <sup>2</sup> ] (139 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	14.28	[cm <sup>3</sup> ] (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	ALQUILB / ISO5	
4 Weight (with oil charge)	10.75	[kg] (23.70 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	200-240 V 50 Hz / 230 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	PTC	
2.1 Starting device	V230	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	T0864/07	
6 Start winding resistance	34.70	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	8.60	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	11.10	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	1.20	[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: @200V50Hz			CECOMAFLBP Static		Evaporating temperature (Condensing temperature		-25°C (-13°F) 55°C (131°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]
629	159	184	160	1.20	2.40	3.94	0.99	1.15

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @200V50Hz		CECOMAF Static			(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]
-35	(-31)	477	120	140	114	1.08	1.53	4.17	1.05	1.22
-30	(-22)	617	155	181	129	1.12	1.98	4.80	1.21	1.41
-25	(-13)	803	202	235	145	1.17	2.58	5.57	1.40	1.63
-20	(- 4)	1036	261	304	161	1.22	3.33	6.45	1.63	1.89
-15	(+ 5)	1316	332	386	177	1.27	4.24	7.42	1.87	2.17
-10	(+14)	1645	414	482	194	1.33	5.31	8.45	2.13	2.48

TEST CONDITIONS: @200V50Hz		CECOMAF Static			(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]
-35	(-31)	421	106	123	117	1.08	1.46	3.60	0.91	1.06
-30	(-22)	555	140	163	135	1.13	1.93	4.12	1.04	1.21
-25	(-13)	728	184	213	153	1.19	2.54	4.74	1.19	1.39
-20	(- 4)	943	238	276	173	1.25	3.29	5.44	1.37	1.59
-15	(+ 5)	1198	302	351	193	1.33	4.19	6.19	1.56	1.81
-10	(+14)	1495	377	438	214	1.41	5.23	6.97	1.76	2.04

TEST CONDITIONS: @200V50Hz		CECOMAF Static			(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]
-35	(-31)	341	86	100	116	1.09	1.30	2.95	0.74	0.86
-30	(-22)	467	118	137	138	1.14	1.78	3.40	0.86	1.00
-25	(-13)	627	158	184	160	1.21	2.39	3.92	0.99	1.15
-20	(- 4)	822	207	241	183	1.29	3.14	4.49	1.13	1.31
-15	(+ 5)	1052	265	308	207	1.38	4.03	5.07	1.28	1.49
-10	(+14)	1316	332	386	233	1.49	5.05	5.65	1.42	1.66

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @200V50Hz		CECOMAF Static			(Condensing temperature 65°C (+149°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]
-35	(-31)	259	65	76	113	1.08	1.09	2.29	0.58	0.67
-30	(-22)	377	95	111	137	1.14	1.59	2.73	0.69	0.80
-25	(-13)	523	132	153	163	1.22	2.21	3.19	0.80	0.94
-20	(- 4)	698	176	205	190	1.31	2.96	3.67	0.93	1.08
-15	(+ 5)	901	227	264	219	1.42	3.83	4.13	1.04	1.21
-10	(+14)	1133	286	332	250	1.55	4.83	4.56	1.15	1.34

### F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
3 Connectors			
3.1 SUCTION	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 42°		
3.2 DISCHARGE	5.1 +0.10/+0.00	[mm]	(0.201" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted parallel to Base Plate		
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		