

### COMPRESSOR DEFINITION

Designation	<b>NB T1114Y</b>
Nominal Voltage/Frequency	<b>220-240 V 50 Hz</b>
Engineering Number	<b>850CA02</b>

### A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
3 Nominal voltage and frequency	220-240 / 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-RSCR		
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	198 to 254 V	-
8.2 LBP (43°C Ambient temperature)	Static	198 to 254 V	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	6.9	[kgf/cm <sup>2</sup> ] (98 psig)	/ °C - °F
9.2 Peak	7.8	[kgf/cm <sup>2</sup> ] (111 psig)	/ °C - °F
10 Maximum winding temperature	130	[ °C ]	

### B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	9.99	[cm <sup>3</sup> ] (0.610 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	18.120	
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)	10.15	[kg] (22.38 lb.)
5 Nitrogen charge	-	[kgf/cm <sup>2</sup> ]

### C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	220-240 V 50 Hz 1 ~ (Single phase)	
2 Starting device type	PTC	
2.1 Starting device	2019	
3 Start capacitor	-	[μF(VAC minimum)]
4 Run capacitor	4(450)	[μF(VAC minimum)]
5 Motor protection	AD23FQ10	
6 Start winding resistance	23.40	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	15.40	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	5.10	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.46	[A]
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A]
11 Approval boards certification	VDE	

### D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			<b>CECOMAFLBP</b> Static		Evaporating temperature (Condensing temperature	<b>-25°C (-13°F)</b> <b>55°C (131°F)</b>		
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]
410	103	120	102	0.42	1.56	4.03	1.02	1.18

### E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			<b>CECOMAF</b> Static		(Condensing temperature <b>45°C (+113°F)</b> )				
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]
<b>-35 (-31)</b>	271	68	80	73	0.60	0.94	3.71	0.94	1.09
<b>-30 (-22)</b>	363	92	106	85	0.63	1.26	4.31	1.09	1.26
<b>-25 (-13)</b>	484	122	142	98	0.68	1.68	4.95	1.25	1.45
<b>-20 (- 4)</b>	632	159	185	112	0.73	2.20	5.63	1.42	1.65
<b>-15 (+ 5)</b>	805	203	236	127	0.78	2.81	6.33	1.59	1.85
<b>-10 (+14)</b>	1003	253	294	143	0.84	3.51	7.04	1.77	2.06

TEST CONDITIONS: @220V50Hz			<b>CECOMAF</b> Static		(Condensing temperature <b>55°C (+131°F)</b> )				
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]
<b>-35 (-31)</b>	213	54	62	77	0.61	0.81	2.77	0.70	0.81
<b>-30 (-22)</b>	300	76	88	89	0.65	1.14	3.38	0.85	0.99
<b>-25 (-13)</b>	411	104	120	102	0.69	1.57	4.02	1.01	1.18
<b>-20 (- 4)</b>	545	137	160	117	0.75	2.08	4.65	1.17	1.36
<b>-15 (+ 5)</b>	701	177	205	133	0.82	2.68	5.28	1.33	1.55
<b>-10 (+14)</b>	876	221	257	149	0.88	3.36	5.90	1.49	1.73

### 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	4.94 +0.08/-0.08	[mm]	(0.194" +0.003"/-0.003")
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		