COMPRESSOR DEFINITION

Designation	**NB U1115Y**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**815BA47**

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	RSCR		
6 Starting torque	LST - Low Starting Torque		
7 Expantion device	Capillary tube		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	Static	198 to 254 V	-
8.2 LBP (43ºC Ambient temperature)	Static	198 to 254 V	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	7.7	[kgf/cm²] (109 psig)	/ ºC - ºF
9.2 Peak (gauge)	9.8	[kgf/cm²] (139 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	11.02	[cm³] (0.672 cu.in)
2.1 Bore [mm]	26.497	
2.2 Stroke [mm]	20.000	
3 Lubricant charge	280	[ml] (9.47 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO5	
4 Weight (with oil charge)	10.73	[kg] (23.66 lb.)
5 Nitrogen charge	-	[kgf/cm²]

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	MSDA3	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	4(450)	[µF(VAC minimum)]
5 Motor protection	T0521/07	
6 Start winding resistance	20.90	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	18.70	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	-	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	-	[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: **@220V50Hz**			**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]
488	123	143	108	0.52	1.86	4.52	1.14	1.32

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz**		**CECOMAF** **Static**				(Condensing temperature **35ºC (+95ºF))**				
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)**	431	109	126	80	0.37	1.38	5.39	1.36	1.58
-30	**(-22)**	506	127	148	89	0.42	1.62	5.73	1.44	1.68
-25	**(-13)**	613	154	180	97	0.46	1.97	6.33	1.59	1.85
-20	**(- 4)**	762	192	223	106	0.50	2.45	7.17	1.81	2.10
-15	**(+ 5)**	964	243	282	117	0.55	3.10	8.23	2.07	2.41
-10	**(+14)**	1228	310	360	129	0.60	3.96	9.50	2.39	2.78

TEST CONDITIONS: **@220V50Hz**		**CECOMAF** **Static**				(Condensing temperature **45ºC (+113ºF))**				
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)**	378	95	111	84	0.40	1.31	4.48	1.13	1.31
-30	**(-22)**	454	114	133	94	0.45	1.58	4.81	1.21	1.41
-25	**(-13)**	554	140	162	104	0.49	1.93	5.31	1.34	1.56
-20	**(- 4)**	686	173	201	115	0.54	2.39	5.98	1.51	1.75
-15	**(+ 5)**	860	217	252	127	0.59	3.01	6.79	1.71	1.99
-10	**(+14)**	1088	274	319	141	0.66	3.81	7.71	1.94	2.26

TEST CONDITIONS: **@220V50Hz**		**CECOMAF** **Static**				(Condensing temperature **55ºC (+131ºF))**				
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)**	307	77	90	85	0.41	1.17	3.63	0.92	1.06
-30	**(-22)**	395	100	116	98	0.47	1.50	4.00	1.01	1.17
-25	**(-13)**	497	125	146	110	0.53	1.89	4.47	1.13	1.31
-20	**(- 4)**	621	157	182	124	0.59	2.37	5.01	1.26	1.47
-15	**(+ 5)**	779	196	228	140	0.66	2.98	5.61	1.41	1.64
-10	**(+14)**	979	247	287	157	0.74	3.76	6.25	1.57	1.83

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		