COMPRESSOR DEFINITION

Designation	**EM Y26CLC**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**897BA83**

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 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	5.19	[cm³] (0.317 cu.in)
2.1 Bore [mm]	21.000	
2.2 Stroke [mm]	15.000	
3 Lubricant charge	180	[ml] (6.09 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO5	
4 Weight (with oil charge)	7.7	[kg] (16.98 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	V230	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	2.5(440)	[µF(VAC minimum)]
5 Motor protection	T0882/07	
6 Start winding resistance	27.30	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	38.00	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	2.70	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.25	[A]
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A]
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V50Hz**			**ASHRAELBP32** **Static**		Evaporating temperature (Condensing temperature	**-23.3°C (-9.94°F)** **54.4°C (129.92°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]
280	71	82	53	0.26	0.88	5.26	1.33	1.54

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **35ºC (+95ºF))**
@220V50Hz **Static**

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)**	168	42	49	36	0.20	0.53	4.62	1.16	1.35
-30	**(-22)**	227	57	67	42	0.22	0.71	5.45	1.37	1.60
-25	**(-13)**	299	75	87	47	0.23	0.94	6.36	1.60	1.86
-20	**(- 4)**	385	97	113	52	0.25	1.21	7.36	1.86	2.16
-15	**(+ 5)**	488	123	143	57	0.26	1.54	8.50	2.14	2.49
-10	**(+14)**	611	154	179	62	0.28	1.93	9.79	2.47	2.87

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **45ºC (+113ºF))**
@220V50Hz **Static**

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)**	144	36	42	36	0.20	0.45	3.94	0.99	1.16
-30	**(-22)**	205	52	60	43	0.22	0.64	4.75	1.20	1.39
-25	**(-13)**	277	70	81	50	0.24	0.87	5.57	1.40	1.63
-20	**(- 4)**	362	91	106	56	0.26	1.14	6.42	1.62	1.88
-15	**(+ 5)**	463	117	136	63	0.28	1.46	7.34	1.85	2.15
-10	**(+14)**	583	147	171	70	0.31	1.84	8.34	2.10	2.44

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **55ºC (+131ºF))**
@220V50Hz **Static**

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)**	115	29	34	35	0.20	0.36	3.29	0.83	0.96
-30	**(-22)**	178	45	52	43	0.22	0.56	4.15	1.05	1.22
-25	**(-13)**	251	63	74	51	0.25	0.79	4.96	1.25	1.45
-20	**(- 4)**	336	85	99	59	0.27	1.06	5.73	1.44	1.68
-15	**(+ 5)**	436	110	128	67	0.30	1.37	6.50	1.64	1.91
-10	**(+14)**	552	139	162	76	0.33	1.74	7.30	1.84	2.14

E - PERFORMANCE - CURVES

TEST CONDITIONS: **ASHRAE32** (Condensing temperature **65ºC (+149ºF))**
@220V50Hz **Static**

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)**	78	20	23	33	0.19	0.24	2.37	0.60	0.69
-30	**(-22)**	144	36	42	42	0.22	0.45	3.36	0.85	0.98
-25	**(-13)**	219	55	64	51	0.25	0.69	4.22	1.06	1.24
-20	**(- 4)**	304	77	89	61	0.28	0.96	4.99	1.26	1.46
-15	**(+ 5)**	402	101	118	71	0.31	1.27	5.70	1.44	1.67
-10	**(+14)**	516	130	151	81	0.35	1.63	6.36	1.60	1.86

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	Yes		
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	4.95 +0.05/+0.05	[mm]	(0.195" +0.002"/+0.002")
3.2.1 Material	Copper		
3.2.2 Shape	Vertical		
3.3 PROCESS	6 +0.08/-0.08	[mm]	(0.236" +0.003"/-0.003")
3.3.1 Material	Copper(OD)		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		