

COMPRESSOR DEFINITION

Designation	EM Y26CLC
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	897BA77

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		
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 ²] (98 psig)	/ °C - °F
9.2 Peak	7.8	[kgf/cm ²] (111 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	5.19	[cm ³] (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/cm ²]

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	-	[μF(VAC minimum)]
5 Motor protection	AE23AHNX	
6 Start winding resistance	27.30	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	38.00	[Ω at 25°C (77°F)] +/- 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)	0.35	[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	55	0.36	0.88	5.10	1.29	1.49

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz			ASHRAE32 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)	168	42	49	38	0.30	0.53	4.41	1.11	1.29
-30	(-22)	227	57	66	43	0.32	0.71	5.25	1.32	1.54
-25	(-13)	298	75	87	49	0.33	0.94	6.14	1.55	1.80
-20	(- 4)	385	97	113	54	0.35	1.21	7.12	1.79	2.09
-15	(+ 5)	488	123	143	59	0.37	1.54	8.23	2.07	2.41
-10	(+14)	611	154	179	64	0.38	1.93	9.50	2.40	2.79

TEST CONDITIONS: @220V50Hz			ASHRAE32 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)	144	36	42	38	0.30	0.45	3.76	0.95	1.10
-30	(-22)	204	52	60	45	0.32	0.64	4.59	1.16	1.35
-25	(-13)	277	70	81	51	0.34	0.87	5.40	1.36	1.58
-20	(- 4)	362	91	106	58	0.36	1.14	6.24	1.57	1.83
-15	(+ 5)	464	117	136	65	0.39	1.46	7.13	1.80	2.09
-10	(+14)	583	147	171	72	0.41	1.84	8.13	2.05	2.38

TEST CONDITIONS: @220V50Hz			ASHRAE32 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)	114	29	34	37	0.30	0.36	3.13	0.79	0.92
-30	(-22)	178	45	52	44	0.32	0.56	4.03	1.02	1.18
-25	(-13)	251	63	73	52	0.35	0.79	4.84	1.22	1.42
-20	(- 4)	336	85	98	60	0.37	1.06	5.59	1.41	1.64
-15	(+ 5)	436	110	128	69	0.40	1.37	6.34	1.60	1.86
-10	(+14)	552	139	162	77	0.44	1.74	7.12	1.80	2.09

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		ASHRAE32 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)	78	20	23	34	0.29	0.24	2.27	0.57	0.66
-30	(-22)	144	36	42	43	0.32	0.45	3.30	0.83	0.97
-25	(-13)	218	55	64	52	0.35	0.69	4.17	1.05	1.22
-20	(- 4)	304	77	89	62	0.38	0.96	4.92	1.24	1.44
-15	(+ 5)	402	101	118	72	0.41	1.27	5.59	1.41	1.64
-10	(+14)	516	130	151	83	0.45	1.63	6.23	1.57	1.83

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