

COMPRESSOR DEFINITION

Designation	EM Y26CLC
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	894VA73

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-Medium Back Pressure		
4.1 Evaporating temperature range	-35°C to -5°C	(-31°F to 23°F)	
5 Motor type	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 pressures/temperature			
9.1 Operating (gauge)	7.7	[kgf/cm ²] (109 psig)	/ °C - °F
9.2 Peak (gauge)	9.8	[kgf/cm ²] (139 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	MINERAL / ISO7	
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	TSD	
2.1 Starting device	TSD-220V	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	2.5(280)/3(280)	[µF(VAC minimum)]
5 Motor protection	4TM110NFBYY-153	
6 Start winding resistance	28.50	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	43.20	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	2.25	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.70	[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]
290	73	85	55	0.24	0.91	5.27	1.33	1.54

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)	173	44	51	38	0.18	0.54	4.57	1.15	1.34
-30	(-22)	233	59	68	43	0.20	0.73	5.45	1.37	1.60
-25	(-13)	305	77	89	48	0.22	0.96	6.42	1.62	1.88
-20	(- 4)	390	98	114	52	0.24	1.23	7.50	1.89	2.20
-15	(+ 5)	492	124	144	57	0.26	1.55	8.71	2.20	2.55
-10	(+14)	612	154	179	61	0.28	1.93	10.09	2.54	2.96
-5	(+23)	754	190	221	64	0.29	2.38	11.66	2.94	3.42

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)	150	38	44	39	0.18	0.47	3.88	0.98	1.14
-30	(-22)	211	53	62	45	0.20	0.66	4.69	1.18	1.37
-25	(-13)	282	71	83	51	0.23	0.89	5.55	1.40	1.63
-20	(- 4)	367	93	108	57	0.25	1.15	6.47	1.63	1.90
-15	(+ 5)	468	118	137	62	0.28	1.47	7.50	1.89	2.20
-10	(+14)	587	148	172	68	0.31	1.85	8.64	2.18	2.53
-5	(+23)	726	183	213	73	0.33	2.30	9.93	2.50	2.91

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)	133	34	39	39	0.18	0.42	3.46	0.87	1.01
-30	(-22)	193	49	56	46	0.20	0.60	4.21	1.06	1.23
-25	(-13)	262	66	77	53	0.23	0.82	4.98	1.25	1.46
-20	(- 4)	345	87	101	60	0.26	1.09	5.77	1.45	1.69
-15	(+ 5)	443	112	130	67	0.30	1.40	6.62	1.67	1.94
-10	(+14)	559	141	164	74	0.33	1.76	7.56	1.90	2.21
-5	(+23)	695	175	204	81	0.36	2.20	8.59	2.17	2.52

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)	119	30	35	39	0.18	0.37	3.06	0.77	0.90
-30	(-22)	175	44	51	46	0.20	0.55	3.79	0.95	1.11
-25	(-13)	242	61	71	54	0.23	0.76	4.48	1.13	1.31
-20	(- 4)	321	81	94	62	0.27	1.01	5.17	1.30	1.51
-15	(+ 5)	415	104	121	71	0.31	1.31	5.87	1.48	1.72
-10	(+14)	525	132	154	79	0.35	1.66	6.61	1.67	1.94
-5	(+23)	656	165	192	88	0.39	2.07	7.42	1.87	2.17

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	4.95 +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		