

COMPRESSOR DEFINITION

Designation	EM Y26CLC
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	513306528

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 255 V	-
8.2 LBP (43°C Ambient temperature)	Static	198 to 255 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	2019X	
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] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification	CE - UKCA - 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]
212	53	62	53	0.35	0.81	4.04	1.02	1.18

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		CECOMAF 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)	167	42	49	38	0.30	0.53	4.38	1.10	1.28
-30	(-22)	226	57	66	43	0.32	0.73	5.23	1.32	1.53
-25	(-13)	295	74	87	49	0.33	0.95	6.09	1.54	1.79
-20	(- 4)	379	95	111	54	0.35	1.22	7.03	1.77	2.06
-15	(+ 5)	479	121	140	59	0.37	1.54	8.09	2.04	2.37
-10	(+14)	599	151	175	64	0.38	1.93	9.32	2.35	2.73

TEST CONDITIONS: @220V50Hz		CECOMAF 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)	135	34	40	38	0.30	0.47	3.54	0.89	1.04
-30	(-22)	191	48	56	45	0.32	0.67	4.28	1.08	1.25
-25	(-13)	256	64	75	51	0.34	0.89	4.99	1.26	1.46
-20	(- 4)	331	83	97	58	0.36	1.16	5.71	1.44	1.67
-15	(+ 5)	421	106	123	65	0.39	1.47	6.48	1.63	1.90
-10	(+14)	528	133	155	71	0.41	1.85	7.37	1.86	2.16

TEST CONDITIONS: @220V50Hz		CECOMAF 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)	98	25	29	37	0.30	0.37	2.69	0.68	0.79
-30	(-22)	152	38	44	44	0.32	0.58	3.41	0.86	1.00
-25	(-13)	212	53	62	52	0.35	0.81	4.04	1.02	1.18
-20	(- 4)	280	71	82	61	0.37	1.07	4.62	1.17	1.35
-15	(+ 5)	360	91	105	69	0.40	1.38	5.21	1.31	1.53
-10	(+14)	454	115	133	77	0.44	1.75	5.84	1.47	1.71

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		CECOMAF 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)	59	15	17	34	0.29	0.25	1.71	0.43	0.50
-30	(-22)	111	28	33	43	0.32	0.47	2.50	0.63	0.73
-25	(-13)	167	42	49	53	0.35	0.70	3.14	0.79	0.92
-20	(- 4)	229	58	67	63	0.38	0.97	3.67	0.92	1.08
-15	(+ 5)	300	76	88	73	0.41	1.28	4.14	1.04	1.21
-10	(+14)	383	97	112	84	0.45	1.64	4.60	1.16	1.35

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard EUEM		
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° up + 45° to Back		
3.2 DISCHARGE	4.9 +0.10/-0.05	[mm]	(0.193" +0.004"/-0.002")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted 90° up + 24° to Back		
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 43° up + 45° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		