

COMPRESSOR DEFINITION

Designation	EM YS26CLC
Nominal Voltage/Frequency	115-127 V 60 Hz
Engineering Number	513300715

A - APPLICATION / LIMIT WORKING CONDITIONS

1 Type	Hermetic reciprocating compressor		
2 Refrigerant	R-600a		
3 Nominal voltage and frequency	115-127 / 60	[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	-	-
8.2 LBP (43°C Ambient temperature)	-	-	-
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	150	[ml] (5.07 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	MINERAL / ISO5	
4 Weight (with oil charge)	8.2	[kg] (18.08 lb.)
5 Nitrogen charge	-	[kgf/cm ²]

C - ELETRICAL DATA

1 Nominal Voltage/Frequency/Number of Phases	115-127 V 60 Hz 1 ~ (Single phase)	
2 Starting device type	PTC	
2.1 Starting device	QP2-4.7	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	12(180)	[µF(VAC minimum)]
5 Motor protection	BT88-105	
6 Start winding resistance		[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance		[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50/60 Hz)	5.50	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50/60 Hz)	-	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50/60 Hz)	-	[A] - Measured according to UL 984
11 Approval boards certification		

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @115V60Hz			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]	
325	82	95	57	0.53	1.02	5.70	1.44	1.67	

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz		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)	191	48	56	39	0.41	0.60	4.86	1.23	1.42
-30	(-22)	266	67	78	46	0.44	0.83	5.81	1.46	1.70
-25	(-13)	360	91	106	52	0.49	1.13	6.88	1.73	2.01
-20	(- 4)	473	119	139	59	0.54	1.49	8.04	2.03	2.36
-15	(+ 5)	603	152	177	65	0.59	1.90	9.29	2.34	2.72
-10	(+14)	751	189	220	71	0.64	2.37	10.60	2.67	3.11
-5	(+23)	915	231	268	76	0.68	2.89	11.95	3.01	3.50

TEST CONDITIONS: @115V60Hz		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)	174	44	51	40	0.42	0.54	4.37	1.10	1.28
-30	(-22)	239	60	70	46	0.45	0.75	5.16	1.30	1.51
-25	(-13)	327	82	96	53	0.50	1.02	6.07	1.53	1.78
-20	(- 4)	435	110	128	61	0.56	1.37	7.06	1.78	2.07
-15	(+ 5)	565	142	166	69	0.63	1.78	8.13	2.05	2.38
-10	(+14)	715	180	209	78	0.69	2.26	9.25	2.33	2.71
-5	(+23)	884	223	259	85	0.76	2.80	10.39	2.62	3.04

TEST CONDITIONS: @115V60Hz		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)	159	40	47	41	0.42	0.50	3.95	1.00	1.16
-30	(-22)	212	54	62	46	0.45	0.67	4.63	1.17	1.36
-25	(-13)	291	73	85	54	0.50	0.91	5.40	1.36	1.58
-20	(- 4)	393	99	115	62	0.57	1.24	6.25	1.57	1.83
-15	(+ 5)	520	131	152	72	0.65	1.64	7.15	1.80	2.10
-10	(+14)	670	169	196	83	0.73	2.11	8.10	2.04	2.37
-5	(+23)	842	212	247	93	0.82	2.66	9.07	2.28	2.66

E - PERFORMANCE - CURVES

TEST CONDITIONS: @115V60Hz		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)	148	37	43	41	0.43	0.46	3.57	0.90	1.05
-30	(-22)	186	47	54	46	0.45	0.58	4.15	1.04	1.22
-25	(-13)	253	64	74	53	0.50	0.79	4.81	1.21	1.41
-20	(- 4)	347	87	102	63	0.57	1.09	5.54	1.40	1.62
-15	(+ 5)	468	118	137	74	0.66	1.47	6.31	1.59	1.85
-10	(+14)	615	155	180	86	0.76	1.94	7.12	1.79	2.09
-5	(+23)	788	199	231	99	0.86	2.49	7.93	2.00	2.32

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard EUEM		
2 Tray holder	Yes		
3 Connectors			
3.1 SUCTION	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-0.003")
3.1.1 Material	Copper		
3.1.2 Shape	Slanted 40° 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 0° up + 24° to Back		
3.3 PROCESS	6.5 +0.12/-0.08	[mm]	(0.256" +0.005"/-0.003")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 40° up + 45° to Back		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		