

COMPRESSOR DEFINITION

Designation	EM X26CLC
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	513309541

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	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 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	1/10	[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)	7.8	[kg] (17.20 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(350)	[µF(VAC minimum)]
5 Motor protection	4TM110KFBYY-73	
6 Start winding resistance	30.20	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	44.10	[Ω at 25°C (77°F)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	2.40	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.55	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	0.50	[A] - Measured according to UL 984
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]
281	71	82	49	0.23	0.88	5.72	1.44	1.68

E - PERFORMANCE - CURVES

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)	128	32	38	33	0.16	0.40	3.84	0.97	1.12
-30 (-22)	202	51	59	39	0.19	0.63	5.11	1.29	1.50
-25 (-13)	276	70	81	45	0.21	0.87	6.11	1.54	1.79
-20 (- 4)	357	90	105	51	0.23	1.12	6.99	1.76	2.05
-15 (+ 5)	452	114	133	57	0.26	1.42	7.93	2.00	2.32
-10 (+14)	571	144	167	62	0.28	1.80	9.10	2.29	2.67

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)	102	26	30	32	0.17	0.32	3.19	0.80	0.93
-30 (-22)	179	45	53	40	0.19	0.56	4.47	1.13	1.31
-25 (-13)	255	64	75	47	0.22	0.80	5.40	1.36	1.58
-20 (- 4)	336	85	98	55	0.25	1.06	6.15	1.55	1.80
-15 (+ 5)	431	109	126	62	0.28	1.36	6.90	1.74	2.02
-10 (+14)	548	138	160	70	0.31	1.73	7.80	1.97	2.29

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)	74	19	22	30	0.14	0.23	2.45	0.62	0.72
-30 (-22)	152	38	44	39	0.18	0.48	3.79	0.96	1.11
-25 (-13)	226	57	66	48	0.22	0.71	4.72	1.19	1.38
-20 (- 4)	306	77	90	57	0.26	0.96	5.41	1.36	1.58
-15 (+ 5)	397	100	116	66	0.30	1.25	6.02	1.52	1.76
-10 (+14)	510	128	149	75	0.34	1.61	6.72	1.69	1.97

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	5.1 +0.10/+0.00	[mm]	(0.201" +0.004"/+0.000")
3.2.1 Material	Copper		
3.2.2 Shape	Slanted 42° 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		