

COMPRESSOR DEFINITION

Designation	EM C26CLT
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	701FA90

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	187 to 255 V	-
8.2 LBP (43°C Ambient temperature)	Static	187 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	150	[ml] (5.07 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	ALQUILB / ISO5	
4 Weight (with oil charge)	7.6	[kg] (16.75 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	M.I.E-START 2021	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	2(350)/2.5(350)	[µF(VAC minimum)]
5 Motor protection	AE23AHNX	
6 Start winding resistance	33.40	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	57.00	[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)	0.34	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	0.41	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: @220V50Hz			ASHRAE LBP-NOFAN 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]
273	69	80	45	0.21	0.86	6.08	1.53	1.78

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		ASHRAE32-NOFAN 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)	159	40	47	29	0.14	0.50	5.49	1.38	1.61
-30 (-22)	222	56	65	34	0.16	0.69	6.47	1.63	1.90
-25 (-13)	298	75	87	40	0.19	0.93	7.46	1.88	2.19
-20 (- 4)	389	98	114	46	0.21	1.22	8.53	2.15	2.50
-15 (+ 5)	496	125	145	51	0.23	1.56	9.72	2.45	2.85
-10 (+14)	621	156	182	56	0.25	1.96	11.10	2.80	3.25

TEST CONDITIONS: @220V50Hz		ASHRAE32-NOFAN 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)	134	34	39	29	0.14	0.42	4.63	1.17	1.36
-30 (-22)	195	49	57	34	0.16	0.61	5.63	1.42	1.65
-25 (-13)	271	68	79	41	0.19	0.85	6.56	1.65	1.92
-20 (- 4)	360	91	106	48	0.22	1.13	7.48	1.89	2.19
-15 (+ 5)	466	117	137	55	0.25	1.47	8.45	2.13	2.48
-10 (+14)	588	148	172	62	0.28	1.86	9.52	2.40	2.79

TEST CONDITIONS: @220V50Hz		ASHRAE32-NOFAN 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)	111	28	33	30	0.15	0.35	3.81	0.96	1.12
-30 (-22)	170	43	50	35	0.17	0.53	4.89	1.23	1.43
-25 (-13)	242	61	71	41	0.20	0.76	5.82	1.47	1.70
-20 (- 4)	329	83	96	49	0.23	1.03	6.65	1.68	1.95
-15 (+ 5)	431	109	126	58	0.27	1.36	7.44	1.88	2.18
-10 (+14)	550	138	161	66	0.31	1.73	8.26	2.08	2.42

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz		ASHRAE32-NOFAN 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)	94	24	27	31	0.14	0.29	3.03	0.76	0.89
-30	(-22)	148	37	43	35	0.16	0.46	4.24	1.07	1.24
-25	(-13)	215	54	63	42	0.19	0.68	5.22	1.32	1.53
-20	(- 4)	297	75	87	50	0.23	0.93	6.02	1.52	1.76
-15	(+ 5)	394	99	115	59	0.27	1.24	6.70	1.69	1.96
-10	(+14)	507	128	149	69	0.32	1.60	7.31	1.84	2.14

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° up + 45° to Back		
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	Slanted 0° up + 45° 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		