COMPRESSOR DEFINITION

Designation	**EM D40CLT**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**700LA98**

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 Expantion device	Capillary tube		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	Static	187 to 255 V	-
8.2 LBP (43ºC Ambient temperature)	Static	187 to 255 V	-
8.3 HBP (32ºC Ambient temperature)	-	-	-
8.4 HBP (43ºC Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	6.9	[kgf/cm²] (98 psig)	/ ºC - ºF
9.2 Peak	7.8	[kgf/cm²] (111 psig)	/ ºC - ºF
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	7.23	[cm³] (0.441 cu.in)
2.1 Bore [mm]	24.000	
2.2 Stroke [mm]	16.000	
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)	7.8	[kg] (17.20 lb.)
5 Nitrogen charge	-	[kgf/cm²]

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	TSD2-220V/TSD2-220V1.2	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	3(350)	[µF(VAC minimum)]
5 Motor protection	4TM166KDBYY-73	
6 Start winding resistance	25.17	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	32.50	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	3.68	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.54	[A] - Measured according to UL 984
10 FLA - Full Load Amperage HBP (50 Hz)	0.68	[A] - Measured according to UL 984
11 Approval boards certification	VDE	

D - PERFORMANCE - CHECK POINT DATA

TEST CONDITIONS: **@220V50Hz**			**CECOMAFLBP-NOFAN** **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]
297	75	87	59	0.27	1.13	5.06	1.28	1.48

E - PERFORMANCE - CURVES

TEST CONDITIONS: **CECOMAF-NOFAN** (Condensing temperature **35ºC (+95ºF))**
@220V50Hz **Static**

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)**	242	61	71	43	0.19	0.78	5.65	1.42	1.66
-30	**(-22)**	316	80	93	48	0.22	1.01	6.65	1.68	1.95
-25	**(-13)**	418	105	123	54	0.26	1.34	7.72	1.95	2.26
-20	**(- 4)**	546	138	160	62	0.30	1.75	8.84	2.23	2.59
-15	**(+ 5)**	698	176	204	70	0.33	2.25	10.00	2.52	2.93
-10	**(+14)**	871	220	255	78	0.37	2.81	11.17	2.81	3.27

TEST CONDITIONS: **CECOMAF-NOFAN** (Condensing temperature **45ºC (+113ºF))**
@220V50Hz **Static**

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)**	202	51	59	41	0.20	0.70	4.84	1.22	1.42
-30	**(-22)**	268	68	79	48	0.23	0.93	5.57	1.40	1.63
-25	**(-13)**	359	91	105	56	0.27	1.25	6.35	1.60	1.86
-20	**(- 4)**	473	119	139	66	0.31	1.65	7.19	1.81	2.11
-15	**(+ 5)**	609	153	178	76	0.35	2.13	8.05	2.03	2.36
-10	**(+14)**	763	192	224	86	0.39	2.67	8.92	2.25	2.61

TEST CONDITIONS: **CECOMAF-NOFAN** (Condensing temperature **55ºC (+131ºF))**
@220V50Hz **Static**

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	0.19	0.60	3.93	0.99	1.15
-30	**(-22)**	216	54	63	49	0.23	0.82	4.46	1.12	1.31
-25	**(-13)**	296	74	87	59	0.27	1.13	5.05	1.27	1.48
-20	**(- 4)**	396	100	116	70	0.32	1.51	5.68	1.43	1.66
-15	**(+ 5)**	514	130	151	81	0.37	1.97	6.33	1.60	1.86
-10	**(+14)**	649	164	190	93	0.42	2.49	6.98	1.76	2.05

E - PERFORMANCE - CURVES

TEST CONDITIONS: **CECOMAF-NOFAN** (Condensing temperature **65ºC (+149ºF))**
@220V50Hz **Static**

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)**	130	33	38	43	0.18	0.55	3.03	0.76	0.89
-30	**(-22)**	178	45	52	52	0.22	0.75	3.45	0.87	1.01
-25	**(-13)**	245	62	72	62	0.27	1.04	3.93	0.99	1.15
-20	**(- 4)**	330	83	97	74	0.33	1.40	4.45	1.12	1.30
-15	**(+ 5)**	431	109	126	87	0.39	1.83	4.97	1.25	1.46
-10	**(+14)**	546	138	160	100	0.45	2.33	5.49	1.38	1.61

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 42º 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 42º 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		