COMPRESSOR DEFINITION

Designation	**EM Y46CLP**
Nominal Voltage/Frequency	**220-240 V 50 Hz**
Engineering Number	**894RA75**

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-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 Expantion device	Capillary tube		
8 Compressor cooling		Operating voltage range	
		50 Hz	60 Hz
8.1 LBP (32ºC Ambient temperature)	Static	198 to 254 V	-
8.2 LBP (43ºC Ambient temperature)	Static	198 to 254 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	7.96	[cm³] (0.486 cu.in)
2.1 Bore [mm]	24.000	
2.2 Stroke [mm]	17.600	
3 Lubricant charge	180	[ml] (6.09 fl.oz.)
3.1 Lubricants approved		
3.2 Lubricants type/viscosity	MINERAL / ISO7	
4 Weight (with oil charge)	7.7	[kg] (16.98 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	TSD-220V	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	4(450)	[µF(VAC minimum)]
5 Motor protection	4TM158MFBYY-73	
6 Start winding resistance	22.10	[Ω at 25ºC (77ºF)] +/- 8%
7 Run winding resistance	25.90	[Ω at 25ºC (77ºF)] +/- 8%
8 LRA - Locked rotor amperage (50 Hz)	3.70	[A] - Measured according to UL 984
9 FLA - Full load amperage L/MBP (50 Hz)	0.38	[A]
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A]
11 Approval boards certification	IRAM - 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]
348	88	102	81	0.37	1.33	4.30	1.08	1.26

E - PERFORMANCE - CURVES

TEST CONDITIONS: **@220V50Hz**		**CECOMAF** **Static**			(Condensing temperature **35ºC (+95ºF))**				
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)**	270	68	79	57	0.27	0.86	4.75	1.20	1.39
-30	**(-22)**	357	90	105	66	0.30	1.15	5.46	1.37	1.60
-25	**(-13)**	464	117	136	74	0.34	1.49	6.31	1.59	1.85
-20	**(- 4)**	592	149	174	81	0.38	1.90	7.28	1.83	2.13
-15	**(+ 5)**	744	187	218	89	0.42	2.39	8.29	2.09	2.43
-10	**(+14)**	922	232	270	99	0.46	2.97	9.31	2.35	2.73
-5	**(+23)**	1129	285	331	110	0.50	3.65	10.28	2.59	3.01

TEST CONDITIONS: **@220V50Hz**		**CECOMAF** **Static**			(Condensing temperature **45ºC (+113ºF))**				
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)**	232	58	68	58	0.28	0.81	3.97	1.00	1.16
-30	**(-22)**	312	79	91	69	0.32	1.08	4.54	1.15	1.33
-25	**(-13)**	407	103	119	78	0.36	1.42	5.25	1.32	1.54
-20	**(- 4)**	522	132	153	86	0.40	1.82	6.05	1.52	1.77
-15	**(+ 5)**	658	166	193	95	0.45	2.30	6.87	1.73	2.01
-10	**(+14)**	817	206	239	106	0.50	2.86	7.68	1.94	2.25
-5	**(+23)**	1003	253	294	119	0.55	3.52	8.43	2.12	2.47

TEST CONDITIONS: **@220V50Hz**		**CECOMAF** **Static**			(Condensing temperature **55ºC (+131ºF))**				
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)**	190	48	56	59	0.28	0.72	3.26	0.82	0.95
-30	**(-22)**	262	66	77	70	0.32	1.00	3.73	0.94	1.09
-25	**(-13)**	347	87	102	80	0.37	1.32	4.31	1.09	1.26
-20	**(- 4)**	448	113	131	90	0.42	1.71	4.96	1.25	1.45
-15	**(+ 5)**	568	143	166	101	0.48	2.18	5.62	1.42	1.65
-10	**(+14)**	709	179	208	114	0.54	2.72	6.25	1.57	1.83
-5	**(+23)**	874	220	256	129	0.60	3.36	6.79	1.71	1.99

E - PERFORMANCE - CURVES

TEST CONDITIONS: **CECOMAF** (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)**	150	38	44	58	0.29	0.63	2.59	0.65	0.76
-30	**(-22)**	213	54	62	71	0.33	0.90	2.98	0.75	0.87
-25	**(-13)**	288	73	84	83	0.38	1.22	3.46	0.87	1.01
-20	**(- 4)**	376	95	110	95	0.44	1.59	3.98	1.00	1.17
-15	**(+ 5)**	480	121	141	108	0.50	2.04	4.51	1.14	1.32
-10	**(+14)**	603	152	177	122	0.57	2.57	4.97	1.25	1.46
-5	**(+23)**	747	188	219	139	0.65	3.19	5.34	1.34	1.56

F - EXTERNAL CHARACTERISTICS

1 Base plate	European Standard		
2 Tray holder	No		
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°		
3.2 DISCHARGE	5.02 +0.02/-0.02	[mm]	(0.198" +0.001"/-0.001")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
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 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		