

COMPRESSOR DEFINITION

Designation	EM Y66CLP
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	897LA72

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	RSIR		
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 (32°C Ambient temperature)	Static	198 to 254 V	-
8.2 LBP (43°C Ambient temperature)	Static	-	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing temperature			
9.1 Operating	6.9	[kgf/cm²] (98 psig)	/ °C - °F
9.2 Peak	7.8	[kgf/cm²] (111 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[hp]
2 Displacement	10.61	[cm³] (0.647 cu.in)
2.1 Bore [mm]	26.000	
2.2 Stroke [mm]	20.000	
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)	7.9	[kg] (17.42 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	PTC		
2.1 Starting device	V230		
3 Start capacitor	-	[μF(VAC minimum)]	
4 Run capacitor	-	[μF(VAC minimum)]	
5 Motor protection	T0520/07		
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 Hz)	5.60	[A] - Measured according to UL 984	
9 FLA - Full load amperage L/MBP (50 Hz)	0.72	[A]	
10 FLA - Full Load Amperage HBP (50 Hz)	-	[A]	
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]
605	152	177	115	0.75	1.90	5.26	1.33	1.54

E - PERFORMANCE - CURVES

TEST CONDITIONS: @220V50Hz				ASHRAE32 Static		(Condensing temperature 35°C (+95°F))				
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	(-31)	375	95	110	78	0.62	1.17	4.81	1.21	1.41
-30	(-22)	488	123	143	90	0.66	1.53	5.42	1.37	1.59
-25	(-13)	633	159	185	103	0.70	1.98	6.15	1.55	1.80
-20	(- 4)	809	204	237	116	0.75	2.54	6.96	1.75	2.04
-15	(+ 5)	1018	257	298	130	0.80	3.20	7.83	1.97	2.29
-10	(+14)	1259	317	369	144	0.85	3.97	8.73	2.20	2.56

TEST CONDITIONS:				ASHRAE32		(Condensing temperature 45°C (+113°F))				
@220V50Hz		Static								
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	(-31)	348	88	102	79	0.63	1.09	4.42	1.11	1.29
-30	(-22)	457	115	134	92	0.67	1.43	4.96	1.25	1.45
-25	(-13)	598	151	175	107	0.72	1.87	5.59	1.41	1.64
-20	(- 4)	771	194	226	122	0.77	2.42	6.29	1.59	1.84
-15	(+ 5)	978	246	287	139	0.83	3.08	7.03	1.77	2.06
-10	(+14)	1218	307	357	157	0.90	3.84	7.79	1.96	2.28

TEST CONDITIONS: @220V50Hz				ASHRAE32 Static		(Condensing temperature 55°C (+131°F))				
Evaporating temperature		Cooling capacity			Power consumption	Current consumption	Gas flow rate	EFFICIENCY RATE		
		+/- 5%			+/- 5%	+/- 5%	+/- 5%	+/- 7%		
°C	(°F)	[Btu/h]	[kcal/h]	[W]	[W]	[A]	[kg/h]	[Btu/Wh]	[kcal/Wh]	[W/W]
-35	(-31)	315	79	92	79	0.62	0.98	4.00	1.01	1.17
-30	(-22)	416	105	122	93	0.67	1.31	4.48	1.13	1.31
-25	(-13)	552	139	162	110	0.73	1.73	5.02	1.27	1.47
-20	(- 4)	721	182	211	128	0.79	2.27	5.62	1.42	1.65
-15	(+ 5)	924	233	271	148	0.87	2.91	6.25	1.57	1.83
-10	(+14)	1161	293	340	169	0.95	3.66	6.87	1.73	2.01

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	4.94 +0.08/-0.08	[mm]	(0.194" +0.003"/-0.003")
3.2.1 Material	Copper		
3.2.2 Shape	Straight		
3.3 PROCESS	6.1 +0.10/+0.00	[mm]	(0.240" +0.004"/+0.000")
3.3.1 Material	Copper		
3.3.2 Shape	Slanted 42°		
3.4 Oil cooler (Copper)	No	[mm]	
3.5 Connector sealing	Rubber Plugs		