

COMPRESSOR DEFINITION

Designation	EM U26CLC
Nominal Voltage/Frequency	220-240 V 50 Hz
Engineering Number	893AA57

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	RSIR		
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 254 V	-
8.2 LBP (43°C Ambient temperature)	Static	198 to 254 V	-
8.3 HBP (32°C Ambient temperature)	-	-	-
8.4 HBP (43°C Ambient temperature)	-	-	-
9 Maximum condensing pressures/temperature			
9.1 Operating (gauge)	7.7	[kgf/cm ²] (109 psig)	/ °C - °F
9.2 Peak (gauge)	9.8	[kgf/cm ²] (139 psig)	/ °C - °F
10 Maximum winding temperature	130	[°C]	

B - MECHANICAL DATA

1 Commercial designation		[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	MINERAL / ISO7	
4 Weight (with oil charge)	7.1	[kg] (15.65 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	PTC	
2.1 Starting device	2019	
3 Start capacitor	-	[µF(VAC minimum)]
4 Run capacitor	-	[µF(VAC minimum)]
5 Motor protection	AD23AHN10	
6 Start winding resistance	35.41	[Ω at 25°C (77°F)] +/- 8%
7 Run winding resistance	42.70	[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)	0.43	[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]
290	73	85	62	0.45	0.91	4.65	1.17	1.36

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)	148	37	43	44	0.39	0.46	3.34	0.84	0.98
-30 (-22)	210	53	61	51	0.40	0.66	4.12	1.04	1.21
-25 (-13)	283	71	83	58	0.42	0.89	4.90	1.23	1.43
-20 (- 4)	368	93	108	65	0.44	1.16	5.69	1.44	1.67
-15 (+ 5)	468	118	137	72	0.47	1.47	6.54	1.65	1.92
-10 (+14)	583	147	171	78	0.50	1.84	7.47	1.88	2.19
-5 (+23)	715	180	209	84	0.52	2.26	8.51	2.14	2.49

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)	135	34	40	45	0.39	0.42	2.98	0.75	0.87
-30 (-22)	193	49	56	52	0.40	0.60	3.69	0.93	1.08
-25 (-13)	262	66	77	60	0.43	0.82	4.37	1.10	1.28
-20 (- 4)	346	87	101	68	0.46	1.09	5.06	1.28	1.48
-15 (+ 5)	443	112	130	77	0.50	1.40	5.78	1.46	1.69
-10 (+14)	557	140	163	85	0.53	1.76	6.56	1.65	1.92
-5 (+23)	687	173	201	93	0.56	2.17	7.43	1.87	2.18

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)	119	30	35	44	0.39	0.37	2.71	0.68	0.79
-30 (-22)	173	44	51	52	0.41	0.54	3.36	0.85	0.98
-25 (-13)	240	60	70	61	0.44	0.75	3.96	1.00	1.16
-20 (- 4)	320	81	94	70	0.47	1.01	4.56	1.15	1.34
-15 (+ 5)	416	105	122	80	0.51	1.31	5.16	1.30	1.51
-10 (+14)	528	133	155	91	0.55	1.67	5.81	1.46	1.70
-5 (+23)	657	166	193	101	0.59	2.08	6.53	1.65	1.91

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		