

10-346

## AGM 48V / 7.5A RECTIFIER

### HFM 48AC7.5



The AGM 48V / 7.5A is a switched mode rectifier module designed to provide up to 7.5 amps of output current in a -48V nominal system. This rectifier is designed for use in conjunction with a battery to provide an uninterruptible DC power system.

The AGM 48V / 7.5A rectifier is configured into a system using the AGM 15, AGM 25, AGM 45, or AGM 60 power plant. When combined with these plants the result is a feature-rich and cost-effective solution for telecommunication applications.

### UNIT SPECIFICATIONS

#### Mechanical

	AGM 48V/7.5A Rectifier
Height	5.0 in (12.7 cm)
Width	2.5 in (6.4 cm)
Depth	11.0 in (27.9 cm)
Weight	3.0 lbs (1.4 kg)

#### Mounting

The AGM 48V / 7.5A installs into the AGM 15, AGM 25, AGM 45, or AGM 60 power plant. All mounting hardware are integrated into these plants.

#### Connections

Input and output connections are located on the rear of the rectifier; matching connectors are located on the back plane of the AGM power plants; mating of connectors occurs when the rectifier is installed into the power plant.

Operating characteristics of the AGM 48V / 7.5A rectifier are at 77°F (25°C) ambient, 120 Vac unless otherwise stated.

#### Input

Voltage:  
Single Phase: . . . . .Phase to Phase or Phase to Neutral  
Rated Voltage Range: . . . . .106-264 Vac  
Power Factor: . . . . .0.99 Typical  
Current: . . . . .4.6A RMS @ 120 Vac  
. . . . .2.6A RMS @ 208 Vac  
. . . . .2.1A RMS @ 240 Vac

Frequency: . . . . .50 / 60Hz +/- 10%  
Power Factor: . . . . .>0.99 at 40% to 100% load  
Harmonic Distortion: . . . . .<5% THD  
Efficiency: . . . . .Better than 85% at > 50% load  
Inrush Current: . . . . .Max 6.2 amps @ 120 Vac,  
3.1 amps @ 240 Vac  
Soft Start: . . . . .Ramp-up time 8 seconds to full load

Protection: . . . . .AC input fuse on each input line  
Voltage Withstand Test: 6000V / 3000A per ANSI / IEEE C62.41-1991 standards

Conversion Frequency: . . . . .100 KHz for input stage  
100 to 125 KHz for output stage

#### Output

Voltage:  
Float: . . . . .-48.0 to -56.0V  
Equalize . . . . .-48.0 to -60.0V

Static Regulation: . . . . .+/- 0.5% from 0% to 100% load  
Noise: . . . . .<250mV peak to peak (10Hz – 14MHz)

#### Load Sharing

Better than 10% of full scale from 10% to 100% of load.

#### Protection

Hotpluggable – No surge when connection is made to live DC bus.

Overvoltage – Fixed shutdown at 60Vdc, only faulty unit shuts down.

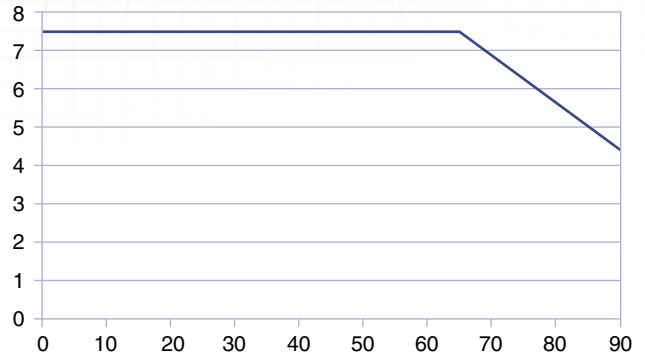
**ALARMS AND MONITORING**

Front Panel LED Condition Table

'REM' Yellow	'EQL' Yellow	'NORM' Green	'RFA' Red	Condition
1	0	0	0	Remote Control
0	1	0	0	Equalize
0	0	F-1S	1	Low current
0	0	F-2S	1	OVP mode
0	0	F-3S	1	Primary power bad
0	0	F-4S	1	High Temp
0	0	F-1L	1	Fan alarm
0	0	F-2L	1	External Shutdown
0	0	F-1L/1S	1	RC voltage out of bounds
0	0	F-1L/2S	1	Load voltage out of bounds
0	0	F-1L/3S	1	High ambient temperature
0	0	0	0	Rectifier not seated
0	0	0	1	Fan fail

Note: F indicates flashing LED  
 S indicates short flash  
 L indicates long flash  
 OVP-Over Voltage Protection

Output (Amps) vs. Ambient Temp



**Environmental**

Operating Range: . . . . .-40°F (-40°C) to 149°F (65°C)  
 Extended Operating Range: 149°F (65°C) to 194°F (90°C)

The rectifier will reduce its maximum output linearly from 100% to 58% as the ambient temperature increases from 149°F (65°C) to 194°F (90°C).

The rectifier will turn off its output at 194°F (90°C).

Storage: . . . . .-58°F (-50°C) to 185°F (85°C)

Operating Altitude: . . . . .Operational to 7,000 ft (2,133 m)

Consult factory above this

Humidity: . . . . .0 to 95%, non condensing

Cooling: . . . . .Forced convection cooling

Audible Noise: . . . . .<55dBa @ 5 ft from any vertical surface

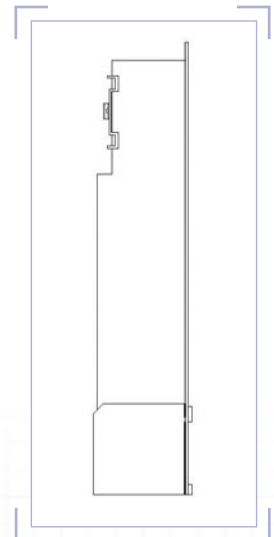
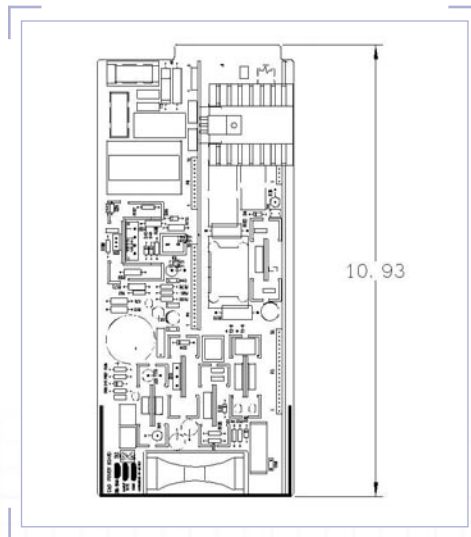
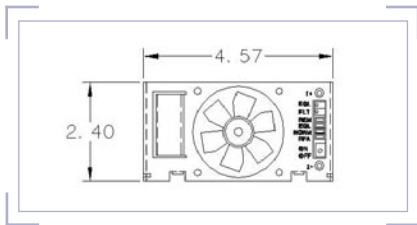
**Agency Compliance**

EMI / RFI: . . . . .FCC Part 15, Subpart J for Class A equipment, VDE-0875, Class N

Safety: . . . . .UL1950

Surge: . . . . .Exceeds ANSI / C62.41 1980

**DIMENSIONS**



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