

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 77F (25C) ambient, 120Vac 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 @ 120Vac,
3.1 amps @ 240Vac
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.

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

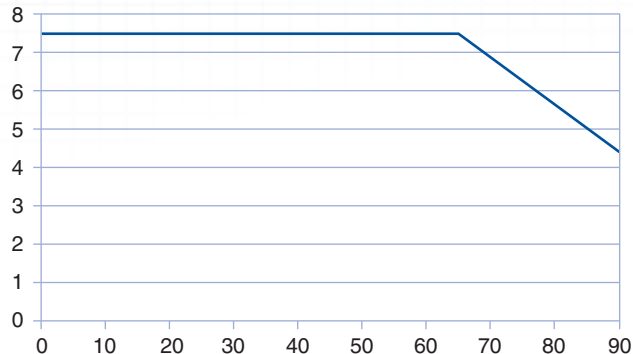
ALARMS AND MONITORING

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



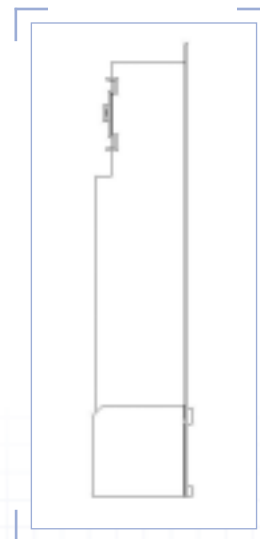
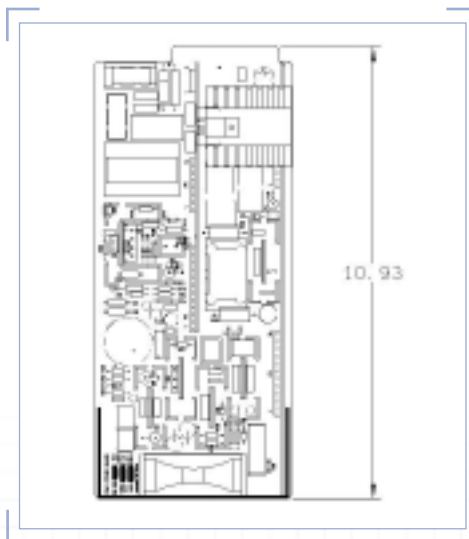
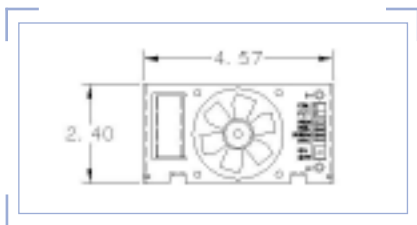
Environmental

Operating Range:-40F (-40C) to 149F (65C)
 Extended Operating Range: . . .149F (65C) to 194F (90C)
 The rectifier will reduce its maximum output linearly from 100% to 58% as the ambient temperature increases from 149F (65C) to 194F (90C).
 The rectifier will turn off its output at 194F (90C).
 Storage:-58F (-50C) to 185F (85C)
 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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