

240 Watts

AM80A

Total Power: 240 Watts
Input Voltages: 24V, 48V, 150V, 300V, or 320V
No. of Outputs: Single



Electrical Specs

Input

Input Range 18 - 36V or 36 - 72 VDC
 or 90 - 200 VDC or 180 - 400 VDC
Efficiency 84% typical (5V @ 40A)
 87% typical (12V @ 18A)

Output

Load Regulation 0.1% typical down to no load
Line Regulation 0.02% typical
Noise/Ripple 50 mV typical (output below 5V)
 1% typical (output 5V and over)
 Up to 0.5V
Remote sense
Output Voltage
Adjust Range $\pm 20\%$ of nominal
Transient Response 3% typical deviation with 300 μ s recovery
 (25-75% full load)
Current Share Accuracy 3% typical
Overvoltage Protection 115% V_o (nominal)
Current Limit 110% I_o maximum

Control

Voltage Adjust 80 to 120% V_o linear programming
Enable TTL compatible (low to enable)
Current Limit Adjust 20 to 100% I_o linear programming
Clock Input
 (external sync) 3.3 to 5.5Vp-p @ 1MHz $\pm 10\%$
Clock Output
 (internal clock) 4.5Vp-p typical @ 1MHz $\pm 0.5\%$
Power Good
Identification High (V_o) = power good
Temperature
Monitor Output 10 mV/ $^{\circ}$ K (2.73V = 0 $^{\circ}$ C)
Current Monitor Output 0 to 1mA (1 mA = 100% I_o rated)
Over Voltage
Protection Adjust 110 to 150% V_o linear programming by
 voltage or resistor

Special Features

- 1MHz Fixed frequency
- 100 $^{\circ}$ C Baseplate operating temperature (no derating)
- Low output ripple and noise
- Excellent transient response
- Safety isolated low voltage interface with ALPTM linear control
- High reliability - over 1 million hours MTBF
- Wide input voltage range
- Parallelable with accurate current sharing
- Current and temperature monitoring outputs

Environmental

Operating temperature (baseplate):
 -20 $^{\circ}$ C to +100 $^{\circ}$ C
Storage temperature: -40 $^{\circ}$ C to +105 $^{\circ}$ C
Overtemperature protection: 110 $^{\circ}$ C typical
MTBF: > 1 million hours (50 $^{\circ}$ C baseplate)

Environmental

UL	UL 1950	E132002
CSA	CSA22.2-234	LR53982C
	CSA22.2-950	
VDE	IED950	20396-3336-1005 & 1006
EN	60950	
CE	CEMark (LVD)	

Notes

Nominal values apply with sense pins connected and other control pins unconnected.

Specifications subject to change without notice.

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Ordering Information

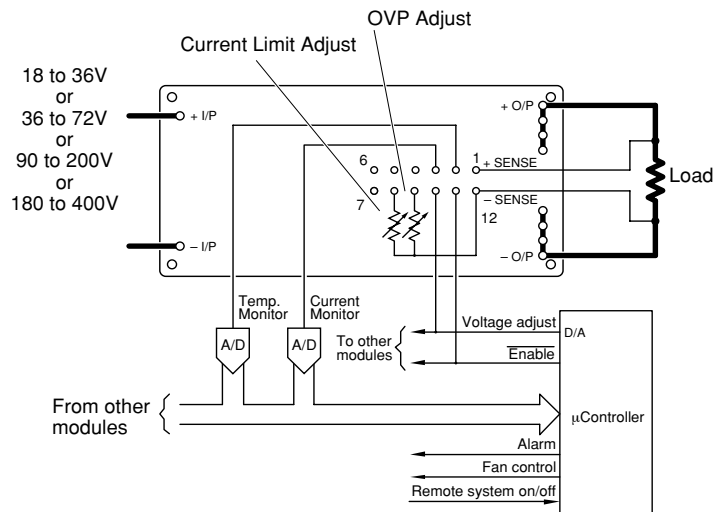
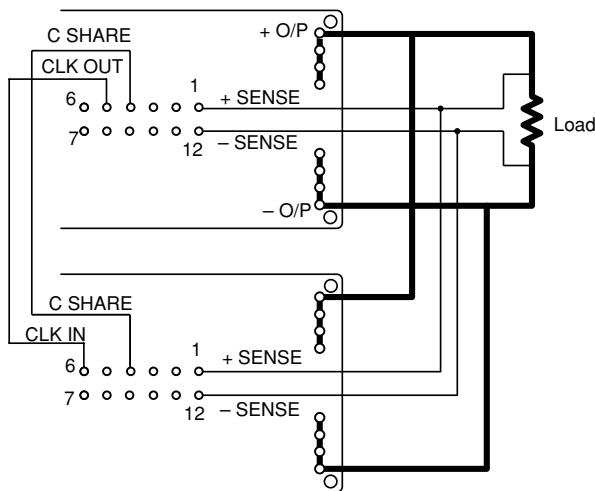
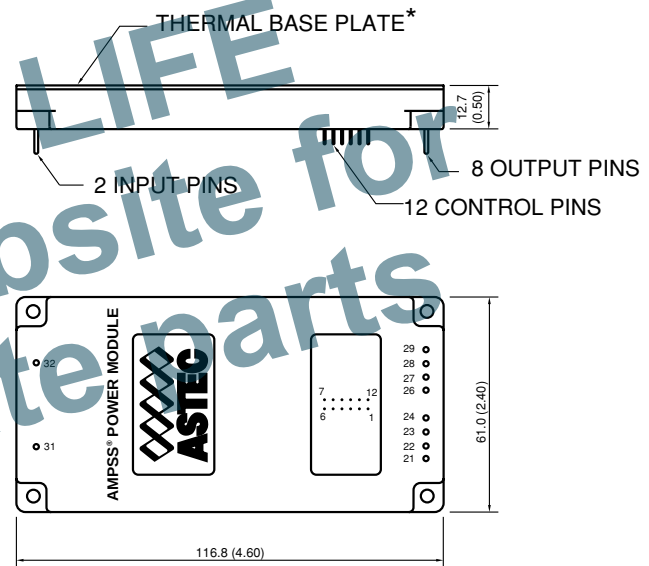
AM80A

Input Voltage	Output Voltage	Output Current	Model Number	Input Voltage	Output Voltage	Output Current	Model Number
300V	2.2V	60A	AM80A-300L-022F60	150V	6.5V	33A	AM80A-150L-065F33
300V	3.3V	50A	AM80A-300L-033F50	48V	1.2V	60A	AM80A-048L-012F60
300V	5V	40A	AM80A-300L-050F40	48V	2.2V	60A	AM80A-048L-022F60
300V	6.5V	33A	AM80A-300L-065F33	48V	3.3V	50A	AM80A-048L-033F50
300V	12V	18A	AM80A-300L-120F18	48V	5V	40A	AM80A-048L-050F40
300V	15V	16A	AM80A-300L-150F16	48V	12V	18A	AM80A-048L-120F18
300V	24V	10A	AM80A-300L-240F10	48V	15V	16A	AM80A-048L-150F16
300V	28V	9A	AM80A-300L-280F09	48V	24V	10A	AM80A-048L-240F10
320V	28V	9A	AM80A-320L-280F09**	24V	6.5V	27A	AM80A-024L-065F27

Please contact Astec for information on other output voltages, power ranges and configurations.

Pin Assignments

Input	Output	Control Pins
31. +ve	21.	1. +SENSE
32. -ve	22.	2. TEMP MON
	23.	3. C MON
	24.	4. C SHARE
	26.	5. CLK OUT
	27.	6. CLK IN
	28.	7. PG/ID
	29.	8. CLIM ADJ
		9. OVP ADJ
		10. V ADJ
		11. ENABLE
		12. -SENSE



Astec Integrated Power