

350W

AEH30

Ultra High Efficiency



Total Power: 350 Watts (12V @ 29.17A)
 Input Voltages: 48 V
 No. of Outputs: Single

Electrical Specs

Input

Input range 36-75 VDC
 Input Surge 100V / 100ms
 Efficiency¹ 92.7% @ 12V (Typical)

Control

Enable TTL compatible
 (positive or negative enable logic control options)

Output

Regulation (Line, Load, Temp) <2%
 Ripple and Noise² 120mVpk-pk typical
 Remote Sense Up to 10%Vout
 Output Voltage Adjust Range³ ±10% of nominal output
 Transient Response 700mV output deviation
 50% to 75% step load
 500 μS recovery time
 Overvoltage Protection 115% V_O Typ (Latching)
 Overcurrent Protection 115% I_O Typ (Latching)
 Over Temperature Protection 115°C Baseplate Temperature (autorecovery)
 Isolation Voltage 1500 Vdc

Special Features

- High efficiency, 12V@ 92.7% (Typical)
- Industry Standard Half Brick baseplate design
- Low output ripple and noise
- High capacitive load limit on start-up
- Remote sense compensation
- Regulation to zero load
- Fixed frequency switching
- Industry standard features: OCP, OVP, OTP, Short circuit protection, Trim, Remote Sense
- Positive or Negative enable logic control option
- Meets Basic Insulation

Environmental

Operating temperature: -40°C to +100°C Baseplate
 Storage temperature: -55°C to +125°C
 MTBF: >1 million hours

Safety

UL, cUL 60950 Recognized
 TUV EN60950 Licensed

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AEH30B48

Ordering Information

Input Voltage	Output Voltage	Efficiency	Model Number
48V	12V @ 29.17A	92.7%	AEH30B48
48V	12V @ 29.17A	92.7%	AEH30B48N

OPTION: suffix "N" = Negative Enable
 no suffix "N" = Positive Enable (default)

Pin Assignments

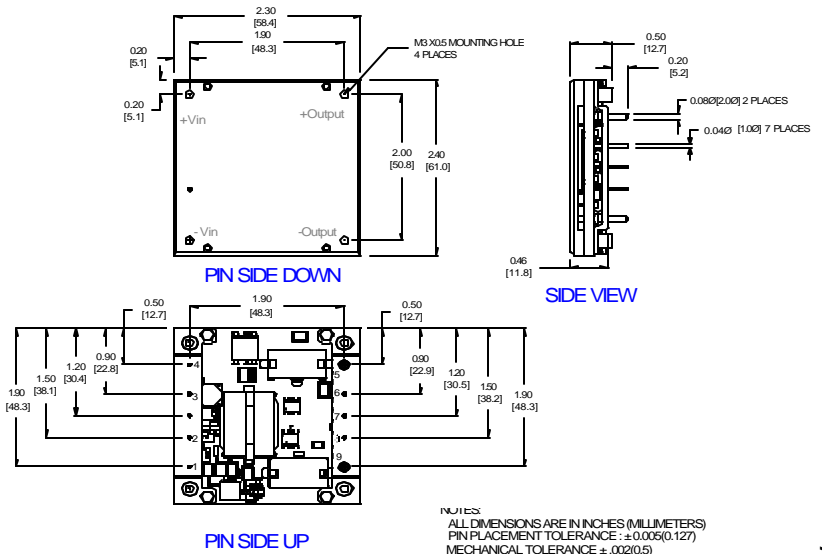
Single Output

- +Vin
- Enable (On/Off)
- Case (AEH)
- Vin
- Output
- Sense
- Trim
- + Sense
- + Output

Notes:

- Typical efficiency measurement taken at nominal line, full load, 25°C ambient.
- 20 MHz BW with external 10uF/25V tantalum in parallel with 0.1uF/50V X7R ceramic capacitor placed across the output.
- Total output power not to exceed 350W.
- Requires a 2.2 uf, 100V film capacitor connected between +V in and -V in to meet FCC class A and ETS300-386-1 requirements for conducted noise. Consult Factory for filtering information to meet FCC class B, VDE or EIC specifications.
- All specifications are typical at nominal line, full load, and 25°C unless otherwise noted.
- All specifications subject to change without notice. Mechanical drawings are for reference only.
- Technical Reference Notes should be consulted for detailed information.
- Warranty: 1yr.

* Astec reserves the right to make changes to the information contained herein without notice and assumes no liability as a result of its use or application. (REV A: AUGUST 25, 2005)



Astec Industry Standard