

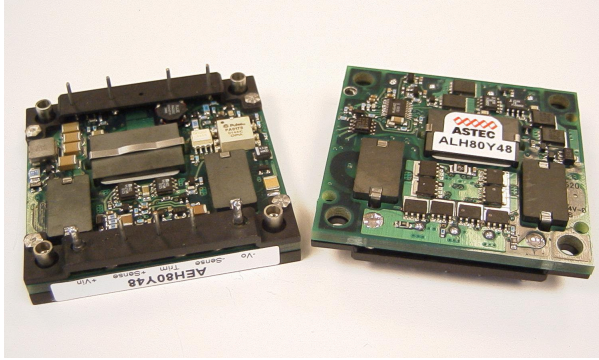
# 80Amps

## AEH80

## ALH80 (Open Frame)

Ultra High Efficiency

PRELIMINARY



Total Power: 144 Watts (1.8V@80Amps)  
 Input Voltages: 48 V  
 No. of Outputs: Single

### Electrical Specs

#### Input

Input range 36-75 VDC  
 Input Surge 100V / 100ms  
 Efficiency 87%@1.8V (Typical)

#### Control

Enable TTL compatible  
 (positive & negative enable options)

#### Output

Regulation (Line, Load, Temp) <2%  
 Ripple and noise 50mV p-p typical  
 Remote sense Up to 10%Vout  
 Output voltage adjust range +/-10% of nominal output  
 Transient Response 4% deviation with 50% to 75% step load  
 300  $\mu$ s recovery  
 Overvoltage Protection 130% nominal output

### Special Features

- Ultra High efficiency, 1.8V@87% (Typical)
- Open Frame (ALH80) and Baseplate (AEH80)
- Redundant In-line Output Pins Option
- Positive and Negative enable function
- Low output ripple and noise
- High capacitive load limit on start-up
- Remote sense compensation
- Regulation to zero load
- Fixed frequency switching (200 kHz)

### Environmental

Operating temperature  
 -40°C to +100°C Baseplate (AEH80)  
 -40°C to +85°C Ambient Air (ALH80)

Storage temperature: -55°C to +125°C

Overtemperature protection: 115°C PCB  
 Temperature (Typical)

MTBF: >1 million hours

### Safety

UL, CUL 60950 Recognized (Pending)

TUV EN60950 Licensed (Pending)



## Ordering Information

Input Voltage	Output Voltage	Efficiency	Model Number
48V	1.8V @ 80A	87% (Typ)*	AEH80Y48
48V	1.5V @ 80A	85% (Typ)	AEH80M48
48V	1.2V @ 80A	83% (Typ)	AEH80K48
48V	1.8V @ 80A	87% (Typ)	ALH80Y48
48V	1.5V @ 80A	85% (Typ)	ALH80M48
48V	1.2V @ 80A	83% (Typ)	ALH80K48

\* Typical Efficiency measured at nominal input voltage at an ambient temperature of Ta = 25°C.

OPTIONS: suffix "N" = for Negative Enable (default is Positive Enable without Suffix "N")  
 suffix "-3" = Standard half brick pinout with Pins 6 and 10 removed

## Pin Assignments

### Single Output

- +Vin
- Enable (on/off)
- Case
- Vin
- +Output
- +Output (optional pin)
- + Sense
- Trim
- Sense
- Output (optional pin)
- Output

### Notes:

- 20 mHz bandwidth. External 10 uF tant. capacitor + 0.1 uF cer. capacitor placed from +V out to -V out.
- Requires a 2.2 mf, 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 when available
- Warranty: 1yr

\* This is a Preliminary Data Sheet. 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 (FEBRUARY 13, 2003)

