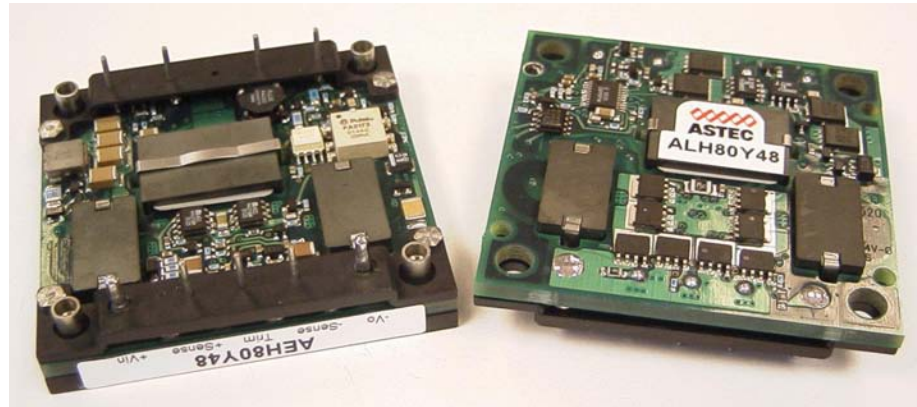


AEH-ALH80 Series

144 Watts

Total Power: 144 Watts
Input Voltage: 48 V
of Outputs: Single



Special Features

- Ultra high efficiency
- Open frame (ALH80) and Baseplate (AEH80)
- Redundant output power pins (with single pair option)
- Positive or negative enable logic control option
- Low output ripple and noise
- High capacitive load limit on start-up
- Remote sense compensation
- Regulation to zero load
- Fixed frequency switching (400 kHz)
- Meets basic insulation

Safety

- UL, cUL 60950 Recognized
- TUV EN60950 Licensed

Electrical Specifications

Input

| | |
|--------------|-----------------------|
| Input range: | 36-75 Vdc |
| Input surge: | 100 V / 100 ms |
| Efficiency: | 87% @ 1.8 V (typical) |

Output

| | |
|-----------------------------------|---|
| Regulation: (Line, Load, Temp) | < 2% |
| Ripple and noise ¹ : | 50 mVp-p (typical) |
| Remote sense: | Up to 10% Vo |
| Output voltage adjust range: | ± 10% Vo, nominal |
| Transient response: | 4% deviation with 50 to 75% step load 300 µs recovery |
| Overvoltage protection: | 130% Vo,nominal (latching) |
| Overcurrent protection: | 120% Io,max (latching) |
| Overtemperature protection: | Shutdown - autorecovery mode |
| Isolation voltage: | 1500 Vdc |

Control

| | |
|---------|--|
| Enable: | TTL compatible (positive or negative enable options) |
|---------|--|

Environmental Specifications

| | |
|-----------------------------|---|
| 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 |



Ordering Information

| Input Voltage | Output Voltage | Efficiency ² | Model Number |
|---------------|----------------|-------------------------|-----------------|
| 48 V | 1.2 V @ 80 A | 83% | AEH80K48(N)-(3) |
| 48 V | 1.5 V @ 80 A | 85% | AEH80M48(N)-(3) |
| 48 V | 1.8 V @ 80 A | 87% | AEH80Y48(N)-(3) |
| 48 V | 1.8 V @ 80 A | 87% | AEH80Y48N-63T |
| 48 V | 1.2 V @ 80 A | 83% | ALH80K48(N)-(3) |
| 48 V | 1.5 V @ 80 A | 85% | ALH80M48(N)-(3) |
| 48 V | 1.8 V @ 80 A | 87% | ALH80Y48(N)-(3) |

Notes:
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 (pins 6 and 10 omitted)
- Standard pin length is 5 mm nominal. Consult factory for other options.

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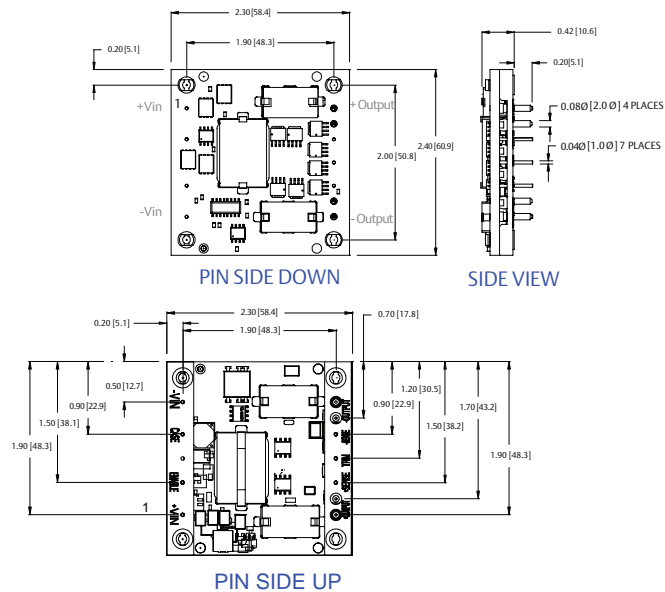
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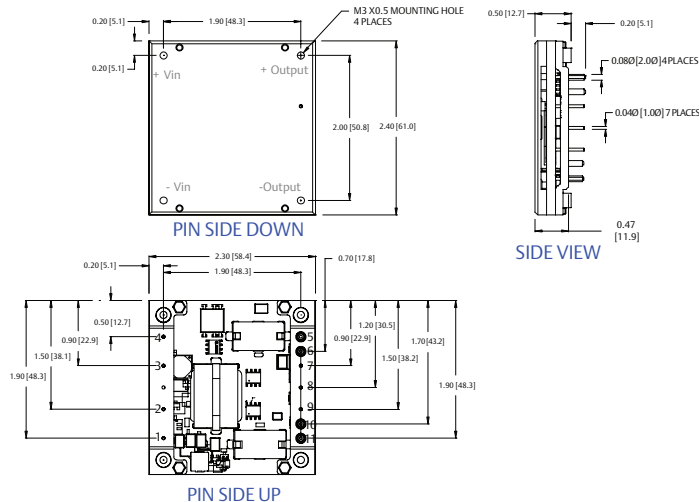
For global contact, visit:

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OPEN FRAME (ALH)



BASEPLATE (AEH)



Pin Assignments

| Pin Number | Function |
|------------|-------------------------|
| Pin 1 | +Vin |
| Pin 2 | Enable (On/Off) |
| Pin 3 | Case (AEH) |
| Pin 4 | -Vin |
| Pin 5 | + Output |
| Pin 6 | + Output (optional pin) |
| Pin 7 | + Sense |
| Pin 8 | Trim |
| Pin 9 | - Sense |
| Pin 10 | - Output (optional pin) |
| Pin 11 | - Output |

Notes:

- 20 MHz bandwidth. External 10uF tant. capacitor + 0.1uF 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.
- Suffix "-6" for 3.7mm nominal pin length, "3" for standard halfbrick pinout (Pin 6 & 10 omitted), "T" for tuned version for specific transient response requirement. Minimum capacitance required. Refer to TRN for details.
- 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

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