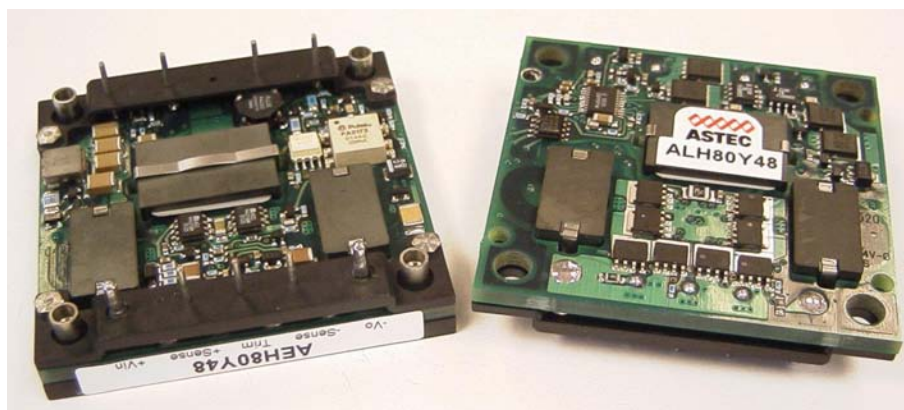


AEH-ALH80 Series

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)
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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



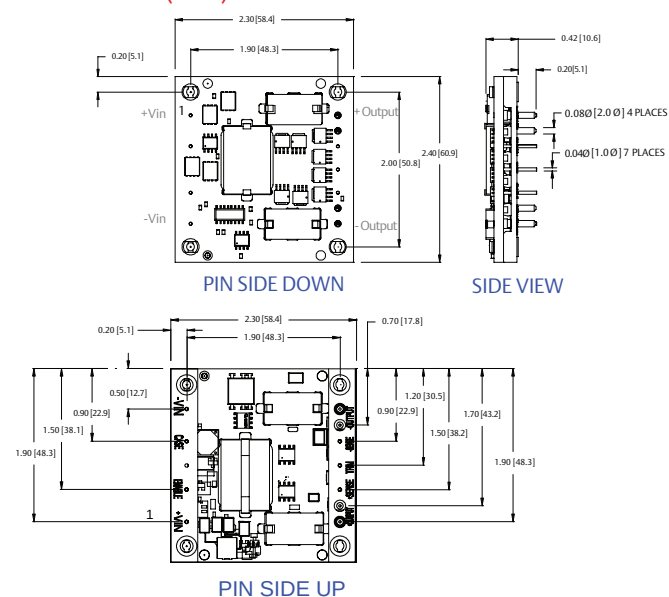
Ordering Information

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)

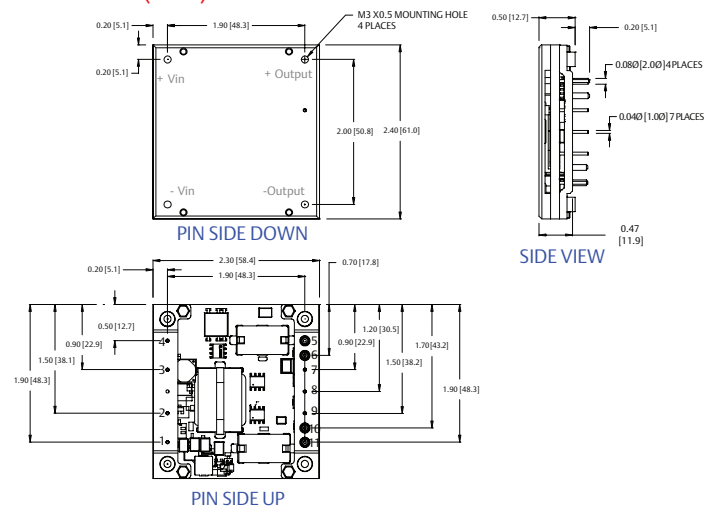
Notes:
Typical efficiency measured at nominal input voltage at an ambient temperature of $T_a = 25^\circ\text{C}$

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.

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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