

# AEH08U48 53V @ 7.55 A

Total Power: 400 Watts  
Input Voltage: 48 V  
# of Outputs: Single



Rev. 07.14.10\_164  
AEH08U48  
1 of 2



## Special Features

- High power converter
- High efficiency (94% Typical)
- Industry standard package  
Half Brick 2.30" x 2.40" x 0.50"
- High capacitive load limit on start-up
- Industry standard features:  
Input UVLO, Output Enable, Adjust, Differential Remote Sense; OCP, OVP, OTP
- Reinforced Insulation
- EU directive 2002/95/EC compliant for RoHS

## Electrical Specifications

Input	
Input range	38 V to 60 V
Efficiency	94% @ 53Vo (at nominal conditions)
Output	
Output current	7.55 A max
Line regulation	0.2% Vo, (max)
Load regulation	100 mV (max)
Noise/ripple <sup>1</sup>	150 mV (max)
Over current limit	Auto-restart
Over temperature protection	125 °C average PCB temperature (autorecovery)
Switching frequency	400 kHz
Control	
Enable	TTL compatible (positive or negative enable logic)
Isolation Voltage	
Input to Output	2250Vdc max

## Environmental Specifications

Operating ambient temperature range	-5 °C to +55 °C ambient
Storage temperature	-55 °C to +125 °C
MTBF	1.5 Mhrs @ 40 °C

## Safety

UL, cUL 60950-1  
TUV EN60950-1

## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency <sup>2</sup>	Model Number
38 - 60 V	53.0 V	7.55 A	94% Typ	AEH08U48(N)-(6)(L)

Options:

- (N) : "N" = designates Negative Logic Enable (default is Positive Enable with no suffix "N" required)
- (6) : "-6" = 3.7mm nominal pin length (default is 5mm nominal pin length with no suffix "-6" required)
- (L) : "L" = RoHS Compliant (RoHS 6)
- without "L" = RoHS Compliant with Lead (Pb) in solder exemption (RoHS 5)

## Pin Assignments

### Single Output

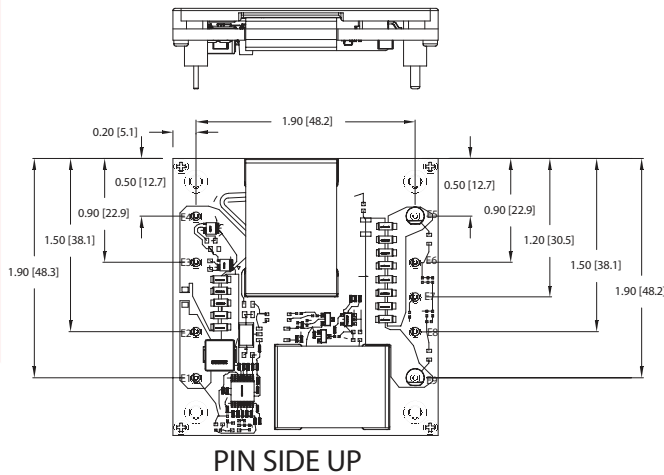
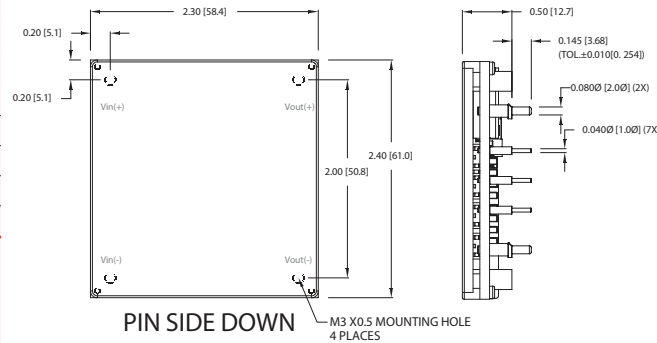
1. +Vin
2. Enable
3. Case Ground
4. -Vin
5. -Vout
6. -Sense
7. Trim
8. +Sense
9. +Vout

Notes:

1. Measured at 20 MHz bandwidth with external 0.1  $\mu$ F ceramic capacitor in parallel with 2X 100  $\mu$ F E-cap / 63 V rated placed across +Vout and -Vout; 100  $\mu$ F e-cap or equivalent placed across +Vin and -Vin.
2. Efficiency measurements are typical values taken at 48 V input, nominal output, full load and  $T_A = 25^\circ\text{C}$ .
3. All specifications are typical at nominal line, full load and  $T_A = 25^\circ\text{C}$  unless otherwise noted.
4. All specifications subject to change without notice.
5. Mechanical drawings are for reference only. Dimensions are in inches [millimeters]. Pin placement tolerance  $\pm 0.005$  [0.127]. Mechanical Tolerance  $\pm 0.02$  [0.5].
6. Technical Reference Notes should be consulted for detailed information when available.
7. Warranty 2 years.

## Mechanical Drawing

### AEH08U48 Series



## Americas

5810 Van Allen Way  
Carlsbad, CA 92008  
USA  
Telephone: +1 760 930 4600  
Facsimile: +1 760 930 0698

## Europe (UK)

Waterfront Business Park  
Merry Hill, Dudley  
West Midlands, DY5 1LX  
United Kingdom  
Telephone: +44 (0) 1384 842 211  
Facsimile: +44 (0) 1384 843 355

## Asia (HK)

14/F, Lu Plaza  
2 Wing Yip Street  
Kwun Tong, Kowloon  
Hong Kong  
Telephone: +852 2176 3333  
Facsimile: +852 2176 3888

For global contact, visit:

[www.PowerConversion.com](http://www.PowerConversion.com)  
[techsupport.embeddedpower@emerson.com](mailto:techsupport.embeddedpower@emerson.com)

While every precaution has been taken to ensure accuracy and completeness in this literature, Emerson Network Power assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

**Emerson Network Power.**  
The global leader in enabling  
business-critical continuity.

- AC Power
- Connectivity
- DC Power
- Embedded Computing
- Embedded Power**
- Monitoring
- Outside Plant
- Power Switching & Controls
- Precision Cooling
- Racks & Integrated Cabinets
- Services
- Surge Protection

**EmersonNetworkPower.com**

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co.  
©2010 Emerson Electric Co.