

AEH08U48 53V @ 7.55 A

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



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 ¹	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 ²	Model Number
38 - 60 V	53.0 V	7.55 A	94% Typ	AEH08U48(N)-(6)(A)(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)
 (A) : "A" = M2.5 screw clearance mounting holes non-threaded
 (default is M3.0x0.5 threaded with no suffix "A" required)

Pin Assignments

Single Output

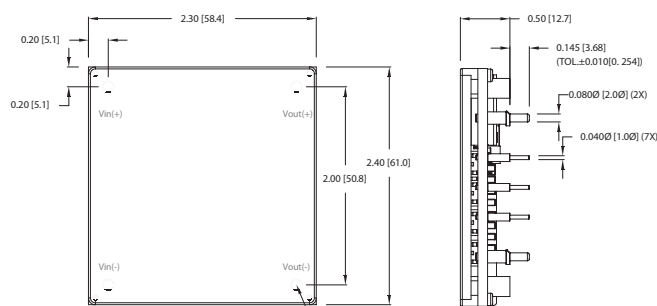
1. +Vin
2. Enable
3. Case Ground
4. -Vin
5. -Vout
6. -Sense
7. Trim
8. +Sense
9. +Vout

Notes:

1. Measured at 20 MHz bandwidth with external 0.1 μ F ceramic capacitor in parallel with 2X 100 μ F E-cap / 63 V rated placed across +Vout and -Vout; 100 μ 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 ± 0.005 [0.127]. Mechanical Tolerance ± 0.02 [0.5].
6. Technical Reference Notes should be consulted for detailed information when available.
7. Warranty 2 years.

Mechanical Drawing

AEH08U48 Series

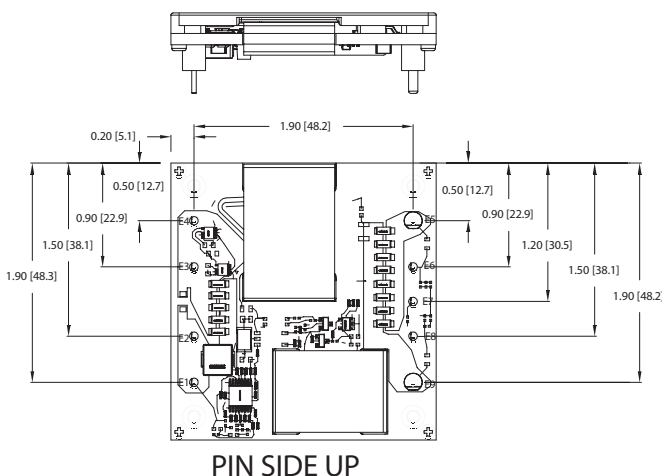


PIN SIDE DOWN

M3 X0.5 MOUNTING HOLE
4 PLACES (see options)

Mounting Hole Options

-6AL	M2.5 clearance hole, non-threaded
Default	M3.0 x 0.5 threaded



PIN SIDE UP

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.Emerson.com/EmbeddedPower
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.
©2011 Emerson Electric Co.