

AEH25 Series

300 Watts

Total Power: 300 Watts (12 V @ 25 A)
Input Voltage: 48 V
of Outputs: Single

Special Features

- Industry Standard Half Brick baseplate design
- Low output ripple and noise
- High capacitive load limit on start-up
- Regulation to zero load
- Fixed frequency switching
- Industry standard features: Input UVLO, OCP, OVP, OTP; Output Adjust, Differential Remote Sense, On/Off Enable
- Meets Basic Insulation
- EU directive 2002/95/EC compliant for RoHS

Safety

- **UL, cUL** 60950-1 Recognized
- **TUV** EN60950-1 Licensed



Rev. 3.4.09_179
 AEH25 Series
 1 of 2



Electrical Specifications

Input

Input range: 36-75 Vdc
 Input surge: 100 V / 100 ms
 Efficiency: 93% @ 12 V (typical)

Output

Regulation: (Line, Load, Temp) < 2%
 Ripple and noise¹: 120 mV (typical)
 Remote sense: Up to 10% Vout
 Output voltage adjust range: ± 10% of nominal output
 Transient response: 180 mV typical output deviation
 25% step change
 300 μs recovery time
 Overvoltage protection: 115% nominal output
 Overcurrent protection: 116% I_o nominal
 Isolation voltage: 1500 Vdc

Control

Enable: TTL compatible (positive or negative enable logic control options)

Environmental Specifications

Operating temperature: -40 °C to +100 °C baseplate
 Storage temperature: -55 °C to +125 °C
 Overtemperature protection: 110 °C typical
 MTBF: > 1 mission hours



Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency ²	Model Number
36 V to 75 V	12 V	25 A	93%	AEH25B48(N)-6C(L)
36 V to 75 V	12 V	25 A	93%	AEH25B48N-5CL

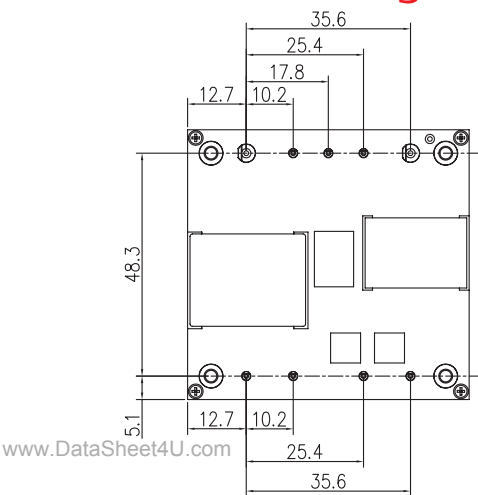
Notes:

Efficiency values taken at nominal input, full load condition, 25 °C ambient temperature

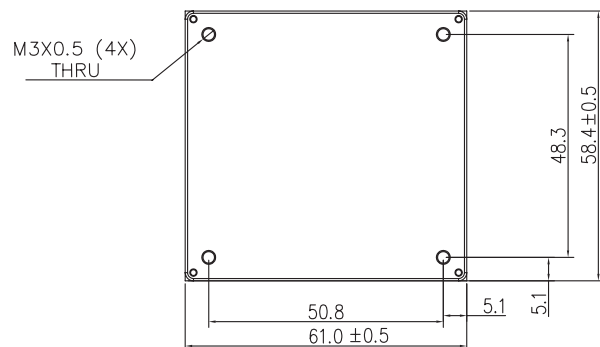
Options:

- (N) : "N" = designates Negative Logic Enable (default is Positive with no suffix "N" required)
- (L) : "L" = RoHS compliant (RoHS 6) / "Blank" = RoHS compliant with Lead (Pb) in solder exemption (RoHS 5)
- - -5CL = RoHS compliant (RoHS 6), 4.5mm nominal pin length

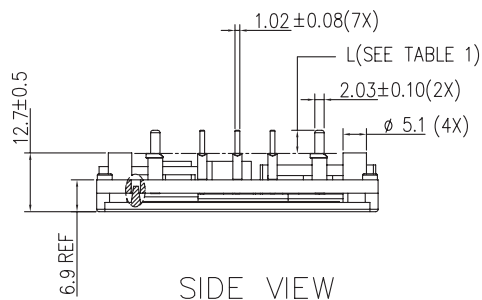
Mechanical Drawing



PIN SIDE TOP



PIN SIDE BOTTOM



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	- Sense
Pin 7	Trim
Pin 8	+ Sense
Pin 9	+ Output

Notes:

- Measured at 20 MHz bandwidth with external 10uF tantalum in parallel with 0.1uF/50V-7R ceramic capacitor placed across the output.
- 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

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
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.
©2008 Emerson Electric Co.