

# AED/ALD17

## 150 Watts

**Total Power:** 150 Watts  
**Input Voltage:** 48V  
**# of Outputs:** Single

### Special Features

- High efficiency (96% Typical)
- Industry standard package  
16th Brick 0.90" x 1.30"
- High capacitive load limit on start-up
- Output Enable Pin
- Undervoltage lockout
- Over Temperature Protection
- Meets Basic Insulation
- EU directive 2002/95/EC compliant for RoHS



Rev. 04.02.08  
AED/ALD17  
1 of 2

## Electrical Specifications

### Input

|                         |                     |
|-------------------------|---------------------|
| Input range             | 36V to 55V          |
| Efficiency              | 96%@ 9.6V (typical) |
| Over Voltage Protection | 60V typical         |
| Input UVLO              | 36 to 37.5V         |

### Output

|                             |  |
|-----------------------------|--|
| Output current              | 17A max                                      |
| Line regulation             | -25% / +15% Vo, nom                          |
| Load regulation             | 5% Vo (typical)                              |
| Noise/ripple <sup>1</sup>   | 90mV (typical)                               |
| Over current limit          | Auto-restart                                 |
| Over temperature protection | 115°C average PCB temperature (autorecovery) |
| Switching frequency         | 165kHz                                       |

### Control

|        |  |
|--------|--|
| Enable | TTL compatible (positive or negative enable logic) |
|--------|--|

### Isolation Voltage

|                 |             |
|-----------------|-------------|
| Input to Output | 2000Vdc max |
|-----------------|-------------|

## Environmental Specifications

|                                     |                        |
|-------------------------------------|------------------------|
| Operating ambient temperature range | -40°C to +85°C ambient |
| Storage temperature                 | -55°C to +125°C        |
| MTBF                                | >1 million hours       |

### Safety

UL, cUL 60950  
TUV EN60950



## Ordering Information

| Input Voltage | Output Voltage | Output Current | Efficiency <sup>2</sup> | Model Number         |
|---------------|----------------|----------------|-------------------------|----------------------|
| 38 - 55V      | 9.6V           | 17A            | 96% Typ                 | A(X)D17Q50(N)-(6)(L) |

Options:

(X) : "L" = Open Frame / Low Profile

"E" = Heatplate Construction

(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

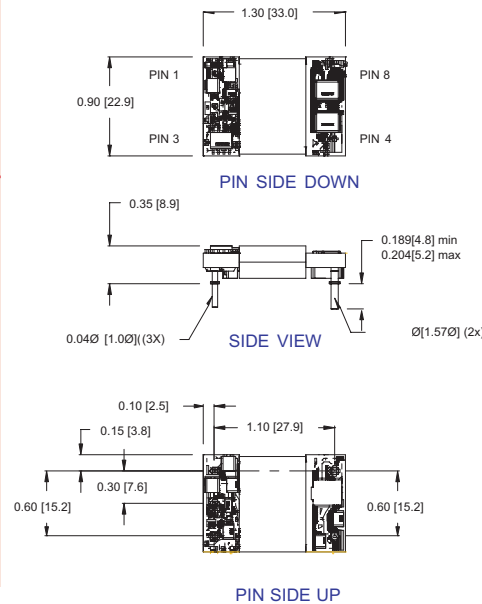
- +Vin
- Enable
- Vin
- Vout
- Blank
- Blank
- Blank
- +Vout

Notes:

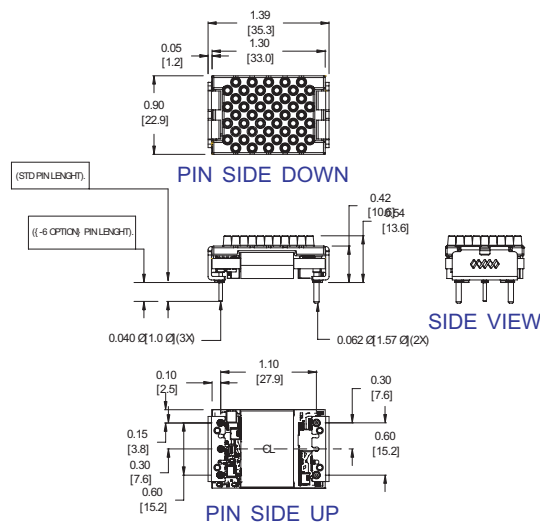
- 20 MHz bandwidth. External 10  $\mu$ F tant. capacitor in parallel with 1  $\mu$ F ceramic capacitor placed across the output and secondary return ground.
- Efficiency measurements are typical values taken at 48V input, nominal output, full load and  $T_A = 25^\circ\text{C}$ .
- All specifications are typical at nominal line, full load and  $T_A = 25^\circ\text{C}$  unless otherwise noted.
- All specifications subject to change without notice.
- 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]. Pin diameter,  $\varnothing = 0.06$ " for Pin 4 (-Vout) and Pin 8 (+Vout), the rest of the pins are  $\varnothing = 0.04$ ".
- Technical Reference Notes should be consulted for detailed information when available.
- Warranty 1yr.

## Mechanical Drawing

## ALD Series



## AED Series



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## 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)

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