

## ALQ25/AEQ25 Series

62.5 to 100 Watts

### Total Power:

100 Watts (5 and 12Vo device)  
82.5 Watts (for the 3.3Vo device)  
62.5 Watts (for the 2.5Vo device)  
Input Voltage: 36-75 VDC  
# of Output: Single

### Special Features

- Delivers up to 25 A output current
- Industry standard quarter brick
- Basic Isolation
- Ultra High Efficiency
- Improved thermal performance: 12A (6.3A for the 8 V) at 55 °C at 1.5ms-1 (300LFM)
- High power density
- Low output noise
- Industry standard pinout
- 2:1 wide input voltage
- CNT function
- Remote sense
- Trim function: +10% / -20%
- Input under-voltage lockout
- Output over-current lockout
- Output over-voltage protection
- Over temperature protection
- RoHS Compliant

### Safety

UL cUL  
CSA  
EN0950



Rev. 01.24.07  
AEQ25Series  
1 of 2



## Electrical Specifications

### Input

Input Range	36 to 75 VDC
Input Current (max.)	3.4 A
Input Reflected-ripple	20 mAp-p 5Hz to 20MHz: 12uH source impedance, TA=25 °C

### Current Output

### Output

Output voltage	2.5V, 3.3V, 5V and 12V nominal
Output Current	25A (8.3 A for the 12 Vo, 20A for the 5V)
Efficiency	>87% (See ordering information)
Line output regulation	8 mV (5 mV Typical) : 2.5 V device 10 mV (5 mV Typical) : 3.3 V and 5 V device 25 mV (12 mV Typical) : 12 V device
Load Output Regulation	15 mV max ( 10 mV Typ) : 2.5 V device 20 mV max (10 mV Typ) : 3.3 V and 5 V device 70 mV max (25 mV Typ) : 12 V device
Switching Frequency	300 KHz

### Isolation

I/O isolation	1500 Vdc
Isolation Resistance	>10 Mohms

## Environmental Specifications

Operating ambient temperature range	-40 °C to 70 °C
Storage temperature	-55 °C to 125 °C
Temperature Regulation	0.02 %Vo/°C
Calculated MTBF	2 Million hours (typ.); Io=Io-max; Tc=25 °C

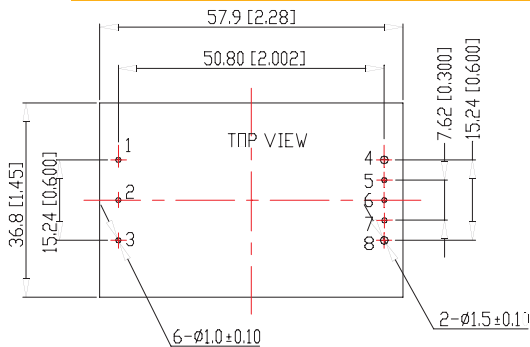


### Ordering Information

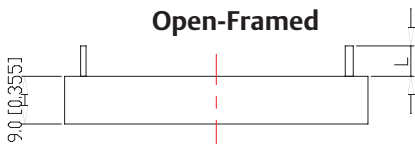
Vin (V)	Vout (V)	Iout (A)	Effy	Model Number
36-75	2.5	25	88%	AEQ25G48(N)-L
36-75	2.5	25	88%	ALQ25G48(N)-L
36-75	3.3	25	89.5%	AEQ25F48(N)-L
36-75	3.3	25	89.5%	ALQ25F48(N)-L
36-75	5	20	90%	AEQ20A48(N)-L
36-75	5	20	90%	ALQ20A48(N)-L
36-75	12	8.33	90%	AEQ08B48(N)-L
36-75	12	8.33	90%	ALQ08B48(N)-L

Note: Option "N" is for the negative enabled option, omit if converter is positive enabled.

### Mechanical Drawing



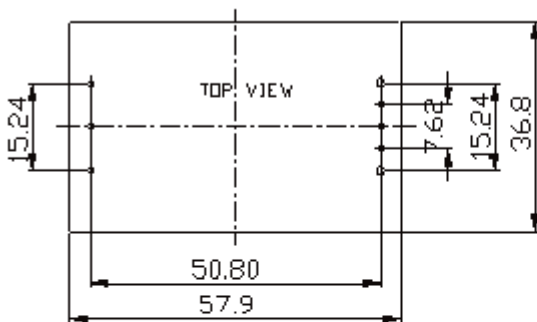
#### Open-Framed



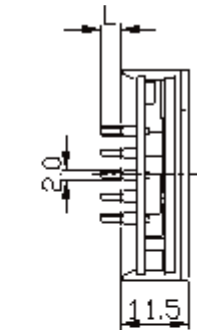
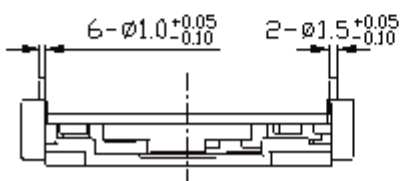
TOLERANCES : X.Xmm= +/- 1.5mm

#### Pin Length Option

Device Code Suffix	L
-4	4.8mm +/- 0.5mm
-6	3.8mm +/- 0.5mm
-8	2.8mm +/- 0.25mm
NONE	5.8mm +/- 0.5mm



#### Baseplate



Pin 1	+Vin	Pin 4	+Vo
Pin 2	CNT	Pin 5	+Sense
Pin 3	-Vin	Pin 6	Trim
		Pin 7	-Sense
		Pin 8	-Vo

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