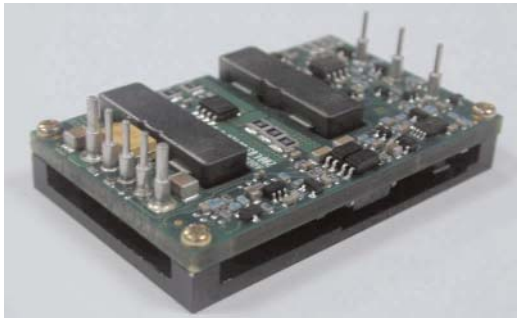
Embedded Power for
Business-Critical Continuity

ALQ12/AEQ12 Series

18 to 50.4 Watts

Total Power:
132 Watts (for the 3.3 Vo device)
48 Watts (for the 1.2 Vo device)
Input Voltage: 36 - 75 VDC
# of Outputs: Single



RoHS 2002/95/EC

Special Features

- Delivers up to 12 A output current (6.3 A for the 8 Vo)
- 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

Electrical Specifications

Input	
Input Range	36 to 75 VDC
Input Current (max.)	1.6 A
Input Reflected-ripple Current	20 mAp-p 5Hz to 20MHz: 12uH source impedance, TA=25 °C

Output	
Output voltage	8V, 3.3V, 1.8V,1.5V nominal
Output Current	12A (6.3 A for the 8 Vo)
Efficiency	>80% (See ordering information)
Line output regulation	5 mV (3 mV Typical) : 1.5 V & 1.8 V device 10 mV (5 mV Typical) : 3.3 V device 15 mV (8 mV Typical) : 8.0 V device
Load Output Regulation	10 mV max (5 mV Typ) : 1.5 V and 1.8 V device 20 mV max (10 mV Typ) : 3.3 V and 8.0 V device
Switching Frequency	300 Khz

Isolation	
I/O isolation	1500 Vdc
Isolation Capacitance	2200 pF
Isolation Resistance	>10 Mohms

Environmental Specifications

Operating ambient temperature range	-40 °C to 55 °C
Storage temperature	-55 °C to 125 °C
Temperature Regulation	0.02 %Vo/°C
Calculated MTBF	3.080 Million hours (typ.); Io=Io-max; Tc=25 °C

ASTEC

EMERSON Network Power

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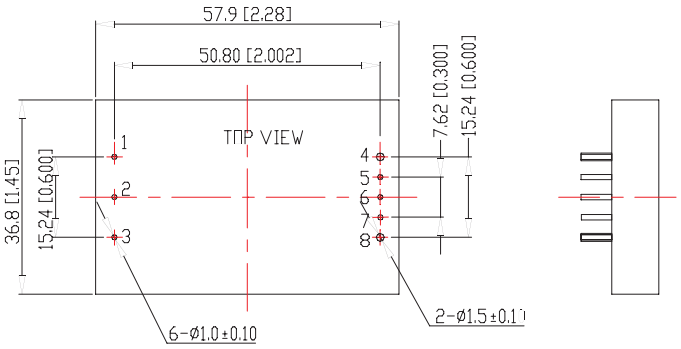
Ordering Information

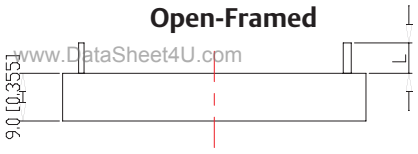
Vin (V)	Vout (V)	Iout (A)	Effy	Model Number
36-75	8	6.3	90%	AEQ06L48(N)-L
36-75	3.3	12	88%	ALQ12F48(N)-L
36-75	1.8	12	84%	AEQ12Y48(N)-L
36-75	1.8	12	84%	ALQ12Y48(N)-L
36-75	1.5	12	82%	AEQ12M48(N)-L
36-75	1.5	12	82%	ALQ12M48(N)-L

Note: Option “N” is for the negative enabled option, omit if converter is positve enabled.

Mechanical Drawing



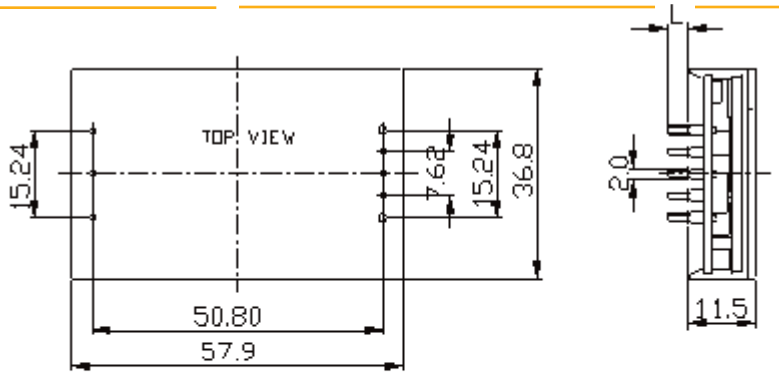
Open-Framed



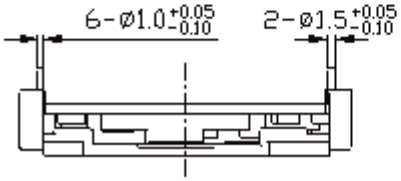
Pin Length Option

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

TOLERANCES : X.Xmm=+/-1.5mm



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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