

ALQ/AEQ20B48

20 Amps

Total Power: 240 Watts
Input Voltage: 48V
of Outputs: 1



Special Features

- Quarter brick industry standard outline
- Baseplate or openframe low profile construction
- Industry Standard features :
Input UVLO with hysteresis, Enable, OVP, OCP, OTP, output Voltage Trim, Differential Remote Sense
- Fixed switching frequency for EMI predictability
- Prebias startup capable
- RoHS compliant
- Meets Basic Insulation
- EU directive 2002/95/EC compliant for RoHS

Safety

UL, cUL 60950
TUV EN60950

Electrical Specifications

Input	
Input range	36V to 75VDC
Input surge	100V / 100ms
Efficiency	93% (typical)
Output	
Line regulation	± 0.1% (typical)
Load regulation	± 0.1% (typical)
Noise/ripple ¹	60mV (typical)
Transient response	5% deviation (50% to 75% step load) <250µs setting time
Over current protection	130% I _o (autorecovery)
Over voltage protection	120% V _o (autorecovery)
Over temperature protection	115°C average PCB temperature (autorecovery)
Switching frequency	150kHz
Isolation voltage	2250 Vdc
Control	
Enable on/off	Positive or negative logic options; TTL compatible

Environmental Specifications

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



Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency ²	Model Number
36 - 75V	12V	20A	93% Typ	ALQ20B48(N)-(6)L
36 - 75V	12V	20A	93% Typ	AEQ20B48(N)-(6)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)

Notes:

- ALQ : = openframe construction
 AEQ : = baseplate construction
 L : = RoHS Compliant (RoHS 6)

Pin Assignments

Single Output

- +Vin
- Enable on/off
- Vin
- Vout
- Sense
- Trim
- +Sense
- +Vout

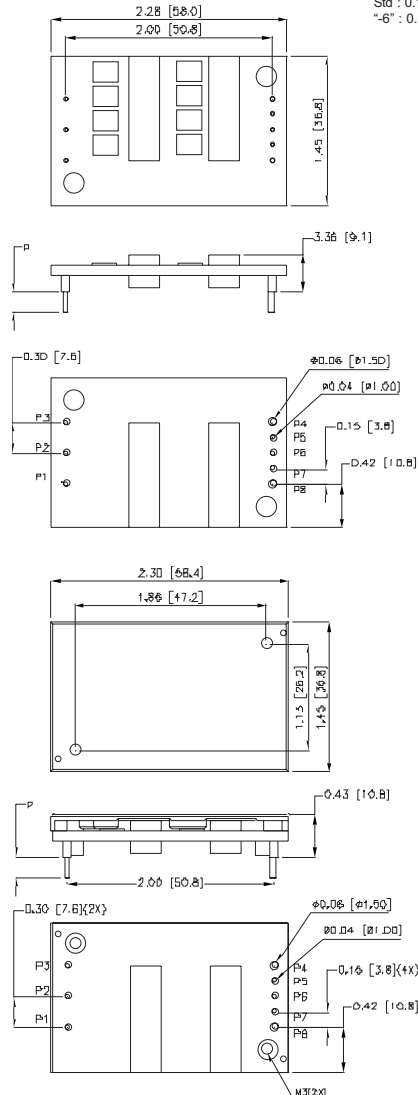
Notes:

- Measured at 20 MHz bandwidth with external 10 uF tant. capacitor in parallel with 1 uF ceramic capacitor placed across +Vout and -Vout, T_A = 25°C.
- Efficiency measurements taken at nominal line V_{IN} = 48V input, I_o = 100% load, T_A = 25°C.
- All specifications are considered typical values unless otherwise noted and are subject to change without notice.
- 2 year warranty.
- Consult factory for further product technical details.

Mechanical Drawing

OPENFRAME

PIN Length (inch [mm])
 Std : 0.197 [5.0]
 "-6" : 0.146 [3.7]



Astec Power

5810 Van Allen Way
 Carlsbad, CA 92008
 USA
 Telephone: +1 760 930 4600
 Facsimile: +1 760 930 0698
 Technical Support: +1 888 41 ASTEC
 or +1 407 241 2752

Waterfront Business Park
 Merry Hill, Dudley
 West Midlands, DY5 1LX
 United Kingdom
 Telephone: +44 (0) 1384 842 211
 Facsimile: +44 (0) 1384 843 355

Units 2111-2116, Level 21
 Tower 1, Metroplaza
 223, Hing Fong Road
 Kwai Fong, New Territories
 Hong Kong
 Telephone: +852 2437 9662
 Facsimile: +852 2402 4426

For global contact, visit:

www.astecpower.com
technicalsupport@astec.com

While every precaution has been taken to ensure accuracy and completeness in this literature, Astec Power assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

Printed in USA

Emerson Network Power.
 The global leader in enabling
 business-critical continuity.

- AC Power
- Connectivity
- DC Power
- Embedded Power**
- Inbound Power
- Integrated Cabinet Solutions
- Outside Plant
- Precision Cooling
- Site Monitoring and Services

EmersonNetworkPower.com

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co. ©2007 Emerson Electric Co.

* This is a Preliminary Data Sheet. Astec Power reserves the right to make changes to the information contained herein without notice and assumes no liability as a result of its use or application.