

# POWER

## ADQ600 Series

600 Watts

### Data Sheet

**Total Power:** 600 Watts

**Input Voltage:** 40 - 60 V

**# of Outputs:** Single

### SPECIAL FEATURES

- Delivering up to 50 A output
- Ultra-high efficiency 95.6% typical at full load
- Wide input range: 40 V - 60 V
- Excellent thermal performance
- No minimum load requirement
- Basic isolation
- High power density
- Low output noise
- RoHS 6 compliant
- Remote control function (negative logic)
- Input under voltage lockout
- Output over current protection
- Output over voltage protection
- Over temperature protection
- Industry standard quarter-brick pinout outline
- Open-frame and baseplated
- Pin length option: 3.8 mm

### SAFETY

- UL, cUL: UL60950
- TUV/CE: IEC/EN60950



### Electrical Specifications

#### Input

Input voltage (continuous)	63 V
Input voltage (non-continuous)	80 V 100 mSec
Input over voltage protection	63 Vdc
Input range	40 - 60 VDC
Efficiency	95.6% @ 12Vo

#### Output

Output voltage	12 V
Output current	50 A
Voltage tolerance	+/-1%
Line regulation	0.1%
Load regulation	3.3%
Noise/ripple	200 mV
Over voltage protection	Hiccup at between 13.6 V and 16 V
Over temperature protection	Auto-restart
Switching frequency	175 KHz
Temperature coefficient	$\pm 0.02/^\circ\text{C}$

#### Isolation

I/O isolation	1500 VDC min.
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## Environmental Specifications

Operating ambient temperature range	-40° C to +85 °C
Storage temperature	-55 °C to +125 °C
Humidity	5% to 95% (non-condensing)
MTBF	1.5 Million hours
RoHS Compliant	

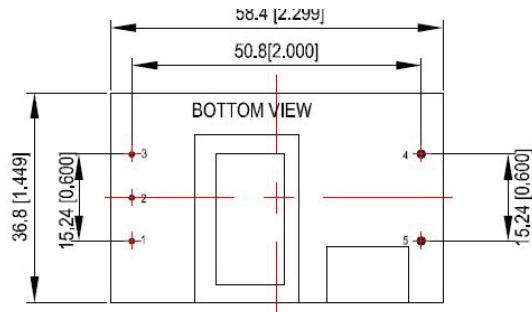
## Ordering Information

Model number	Input voltage	Output voltage	Power
ADQ600-48S12-6L	40 - 60 V	12 V @ 50 A	600 W
ADQ600-48S12B-6L	40 - 60 V	12 V @ 50 A	600 W

- Standard version is negative enable
- “-6” = 3.8 mm pin length
- “-L” = RoHS 6 compliance
- “B” = Baseplate

## Mechanical Drawings

### Open Frame Module:

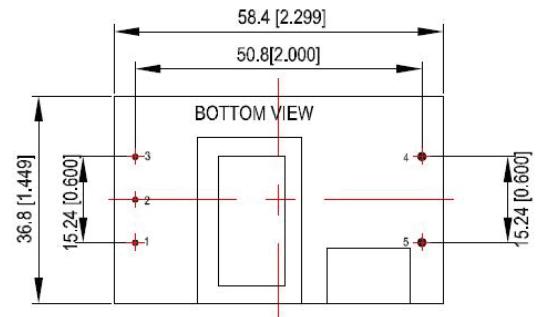


UNIT: mm[inch]

BOTTOM VIEW: pin on upside

TOLERANCE: X.Xmm±0.5mm[X.X in.±0.02in.]  
 X.XXmm±0.25mm[X.XX in.±0.01in.]

### Baseplate Module:



UNIT: mm[inch]

BOTTOM VIEW: pin on upside

TOLERANCE: X.Xmm±0.5mm[X.X in.±0.02in.]  
 X.XXmm±0.25mm[X.XX in.±0.01in.]

## Pin Assignments

Pin #	Function
1	+Vin
2	Remote On/Off
3	-Vin
4	-Vout
5	+Vout

### Notes:

1. All specifications are subject to change without notice. Mechanical drawings are for reference only.
2. Warranty: 2 years
3. Label and logo appearance may vary from what is shown on mechanical drawings.

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