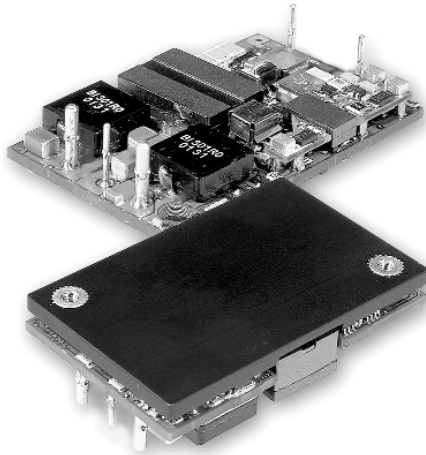


Quarter Brick DC/DC Converters

25 Amps KIQ025 Series

XPiQ inc.

Intelligent Design Quality Product



12 Volt Intermediate BUS for DPA

96% Efficiency

Low Cost

12 Volt / 25 Amp Quarter Brick

Low Profile 0.43"

International Safety Approvals



Specification

Input

- Input Voltage Range • 42-53 VDC
- Input Current • 5.90 A max at 42 VDC
6.63 A max at 53 VDC
- Input Reflected Ripple • 5 mA pk-pk
- Remote On/Off • Shorted to -Vin (Logic Low) = ON
Open (Logic high) = OFF
Positive logic is available
- Input Reverse Voltage Protection • External components required
- Undervoltage lockout • Below 37.6 to 40.7 VDC = OFF
Above 40.9 to 44.2 VDC = ON

Output

- Output Voltage • 12 VDC
- Minimum Load • No minimum load required
- Line Regulation • ± 1.3 V
- Load Regulation • ± 500 mV
- Setpoint Accuracy • ± 50 mV
- Ripple & Noise • 120 mV pk-pk maximum
- Transient Response • 200mV max deviation, 100 μ s recovery time for a 25% load change
- Temperature Coefficient • 0.01%/°C
- Overvoltage Protection • 14.9 V non-latching, hiccup mode
- Overcurrent Protection • 110-130% auto restart
- Overtemperature Protection • Shutdown at 120 °C auto restart

General

- Efficiency • 96%
- Isolation • 1500 VDC input to output
- Size • 2.30" x 1.45" x 0.43" (without baseplate)
- Package Style • Open frame, baseplate option
- Weight • 42 g for open frame

Environmental

- Operating Temperature • -40 °C to +85 °C ambient
See Derating Curve
Full power to +55 °C
- Storage Temperature • -55°C to +125°C
- Humidity • 5-95% RH non-condensing

EMC & Safety

- Safety Approvals • UL60950, EN60950,
CSA 60950 per cUL,
CE Marked for LVD
- EMI/EMC • FCC level B Part 15 with external filtering

* Preliminary datasheet - see website for current specs

OUTPUT VOLTAGE & CURRENT RATINGS

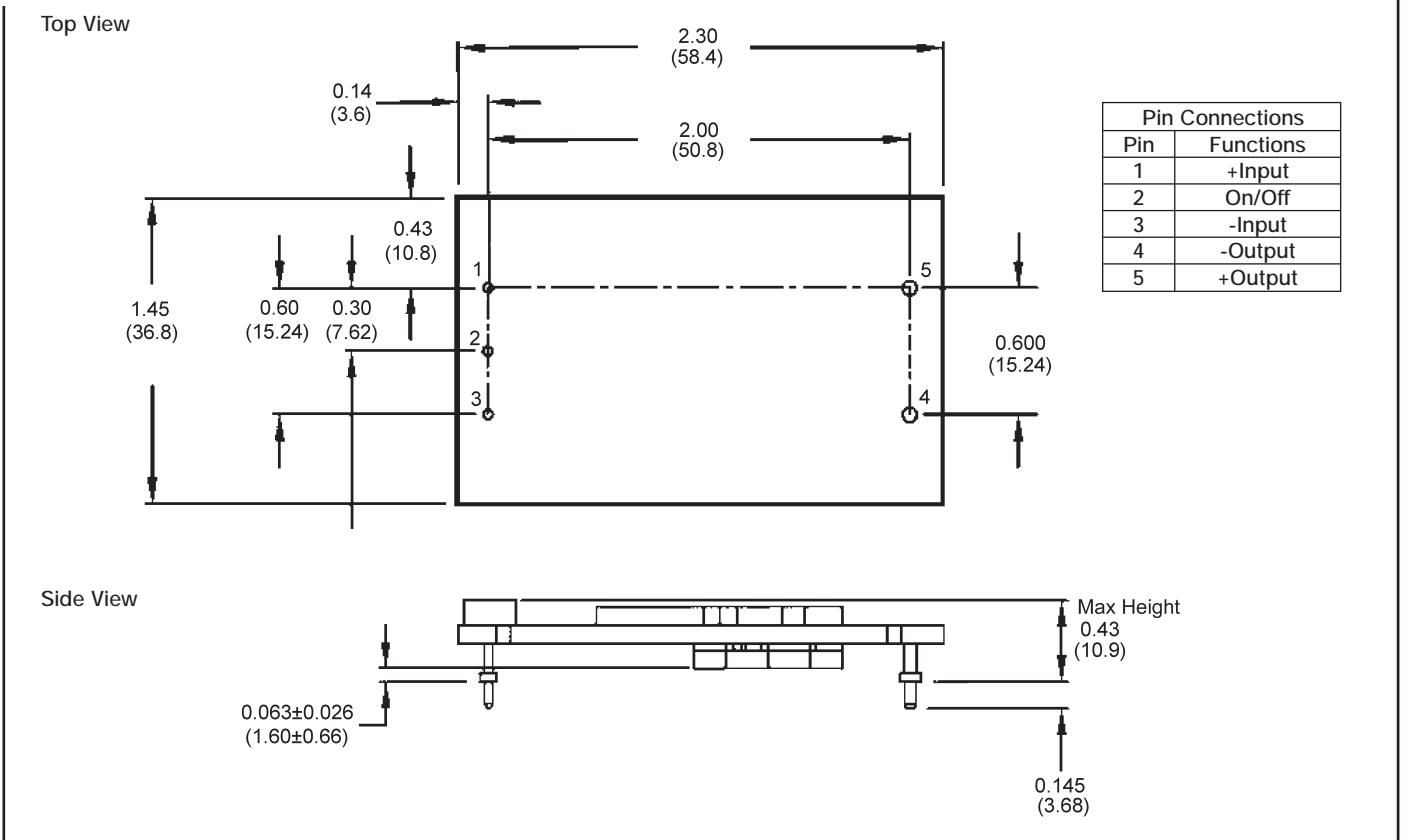
KIQ025

Output Power	Output Voltage	Output Current Maximum	Efficiency	Model Number ⁽³⁾
300 W	12 V	25 A	96%	KIQ02548S12

Notes

- Standard product is open frame with negative logic.
- Baseplate versions are built to order.
- Please add one of the following suffix code to the part number when ordering:
AL = Open Frame/Negative logic, AH = Open Frame/Positive logic, BL = Baseplate/Negative logic, BH = Baseplate/Positive logic.
- For details of external filtering, contact technical sales.

Mechanical Details



Derating Curve

