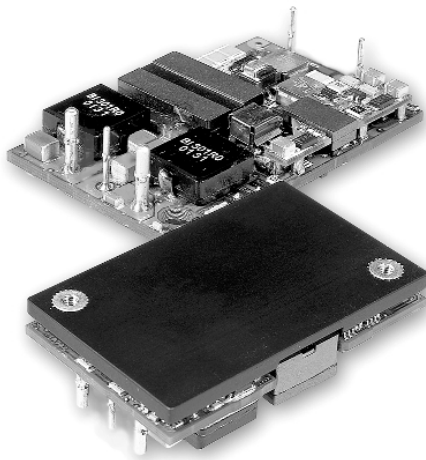


Quarter Brick DC/DC Converters

25 Amps KIQ025 Series

XPiQ inc.

Intelligent Design Quality Product



12 Volt Intermediate BUS for DPA

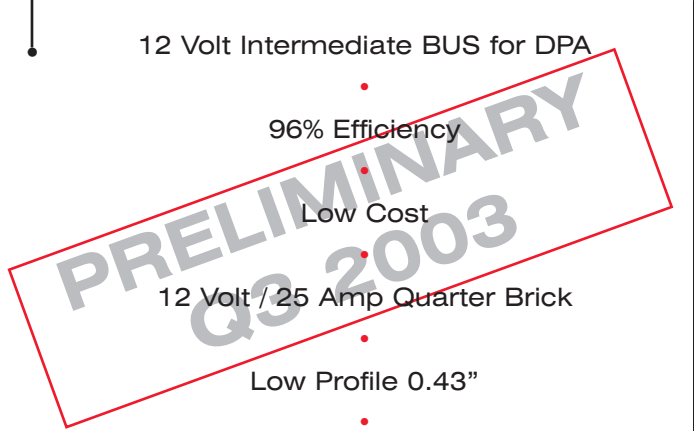
96% Efficiency

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

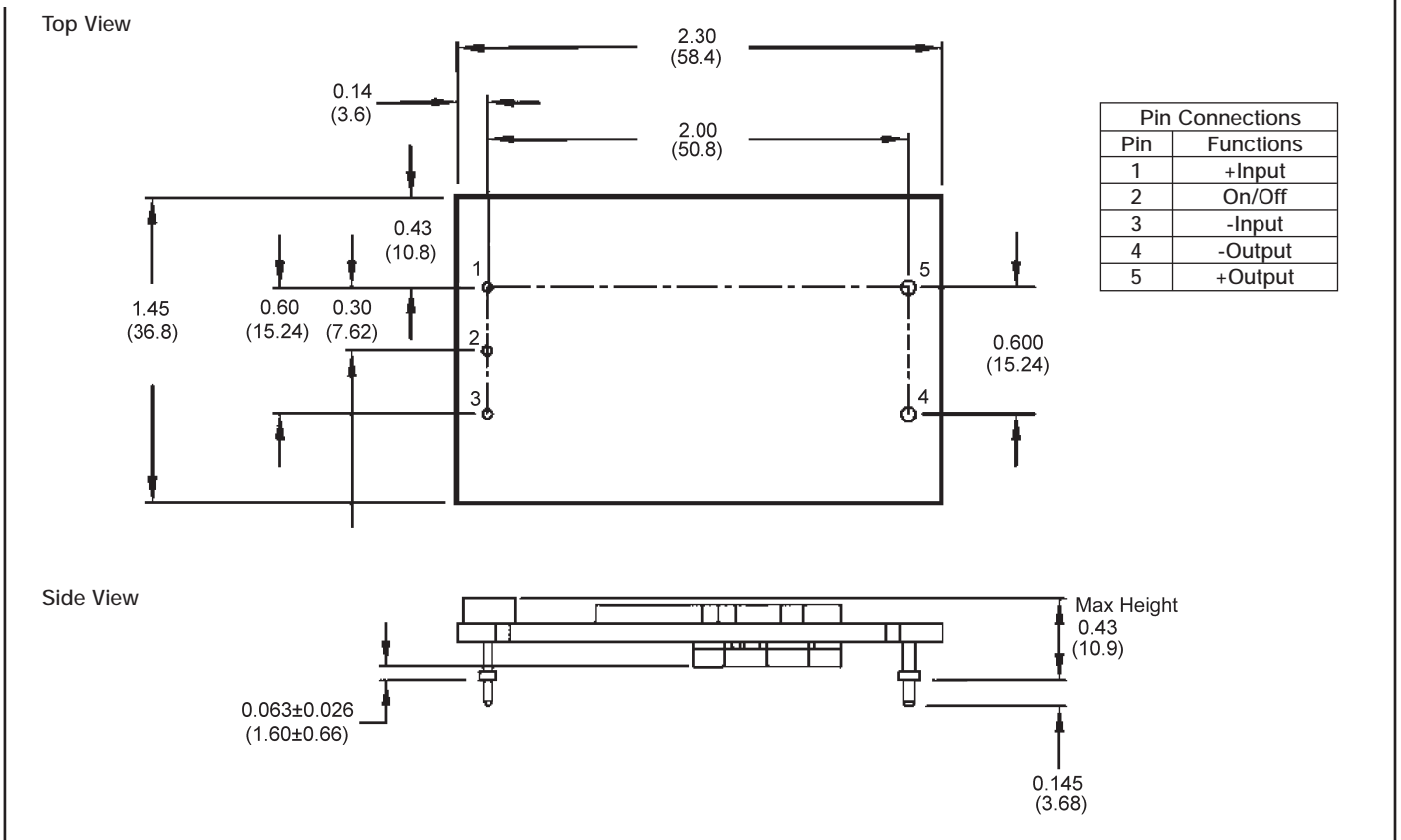
KIQ025

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

Notes

1. Standard product is open frame with negative logic.
2. Baseplate versions are built to order.
3. 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.
4. For details of external filtering, contact technical sales.

Mechanical Details



Derating Curve

