

300 to 396W Quarter Brick Converters

Features

- ◆ Standard Quarter Brick Footprint
- ◆ 36-75VDC Input
- ◆ 12V 25A or 33A Output
- ◆ Through Hole Mounting
- ◆ Low 13.2mm Profile
- ◆ 1500VDC Basic Isolation
- ◆ High operating efficiency (up to 95%)
- ◆ Constant switching frequency
- ◆ Starts with pre-biased output
- ◆ Baseplate cooled
- ◆ Parallel Operation (400W model)



Key Market Segments & Applications



Specifications		iQG48025A120V	iQG48033A120V-000~xx9	iQG48033A120V-1D9
Nominal Output Voltage	VDC	11.6V	11.5V	11.8V
Input Voltage Range	VDC	36 - 75VDC		
Input Current (max)	A	9A	10.5A	10.5A
Efficiency (48V Input)	%	94-95% Load Dependent		
Output Voltage Tolerance	VDC	11.2 - 12V	11.15 - 11.85V	11.6 - 12V
Output Voltage Adjustment	-	None		
Ripple & Noise (max) (pk - pk)	mV	70mV	125mV	150mV
Line Regulation (typical)	mV	50mV	20mV	20mV
Load Regulation (typical)	mV	50mV	35mV	20mV/A
Overload Protection (typ)	A	30A - auto recovery	39A - auto recovery	39A - auto recovery
Overvoltage Protection	VDC	13.7 - 15.6V (Latching)		
Remote Sense	-	None		
Remote On / Off	-	Negative Logic standard. Positive logic available, contact factory		
Current Share (Droop Mode)	-	None	None	Yes, 20mV/A
Current Share Accuracy	-	Not Applicable	Not Applicable	±10% (50-100% of total load)
Temperature (operating)	°C	-40 to 124°C (See detailed datasheet for derating)		
Temperature (storage)	°C	-55 to 125		
Humidity (operating)	%RH	20-95% RH Non condensing		
Humidity (storage)	%RH	10-95% RH Non condensing		
Cooling	-	Conduction, convection or forced air (See detailed datasheet for derating)		
Isolation Voltage	VDC	1500VDC Input to Output, Input to Baseplate		
Vibration (non operating)	-	5~50Hz @ 0.5g (4.9m/s ²), and 50~500Hz @ 1.5g (14.7m/s ²) per Bellcore TR-EOP-000063-5.4.4		
Shock	-	196.1m/s ²		
Safety Agency Certifications	-	UL60950-1 (US and Canada), VDE0805 (IEC60950-1), CB scheme (IEC60950-1), CE Mark		
Weight (max)	g	55g open frame, 70g with baseplate		70g
Size (LxWxH)	mm	57.91 x 36.83 x 13.21		
Warranty	Yrs	3 Years		

Note: See website for detailed specifications and test methods

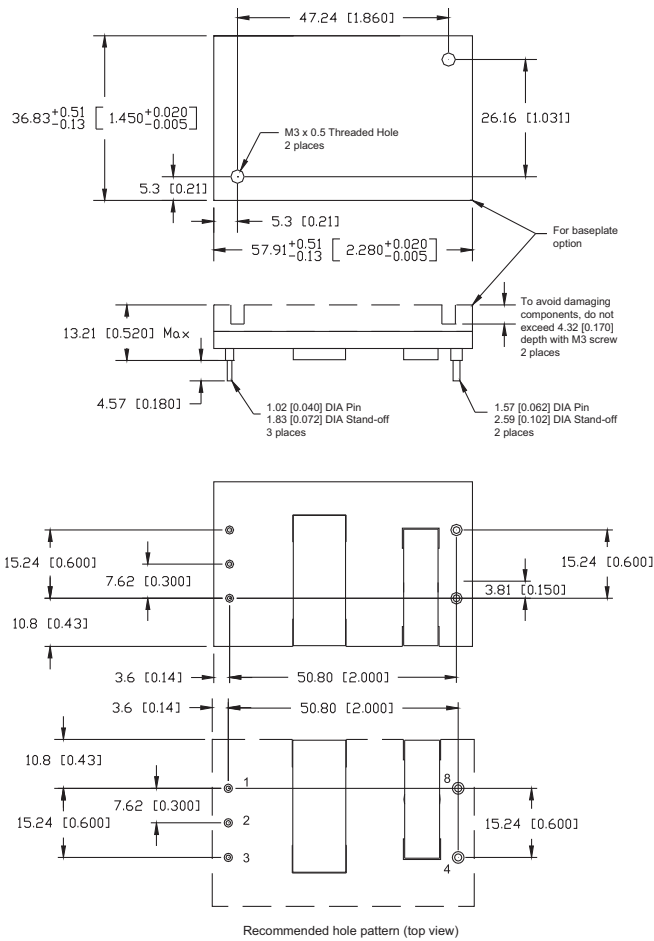
Model Selector

Model	Input Voltage (V)	Output Voltage (V)	Max. Curr. (A)	Max. Output Power (W)	On/Off Polarity	Pin Length	Base Plate
iQG48025A120V-101-R	36 - 75	12	25	300	Neg	0.145"	Yes
iQG48025A120V-109-R	36 - 75	12	25	300	Neg	0.180"	Yes
iQG48033A120V-109-R	36 - 75	12	33	396	Neg	0.180"	Yes
iQG48033A120V-1D9-R	36 - 75	12	33	396	Neg	0.180"	Yes

Preferred Model

Recommended Footprint (Top View)

Dimensions are in mm [in]. Unless otherwise specified tolerances are: x.x ± 0.5 [0.2], x.xx and x.xxx ± 0.25 [0.010]



Pinout

PIN	Function	PIN	Function
1	Vin (+)	5	None
2	On / Off	6	None
3	Vin (-)	7	None
4	Vout (-)	8	Vout (+)

For Additional Information, please visit us.tdk-lambda.com/lp/products/iqg-series.htm

