

## 300-450W Quarter Brick Converters

### Features

- ◆ Standard Quarter Brick Footprint
- ◆ 36-75VDC Input
- ◆ 9.6 or 12V Outputs
- ◆ 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



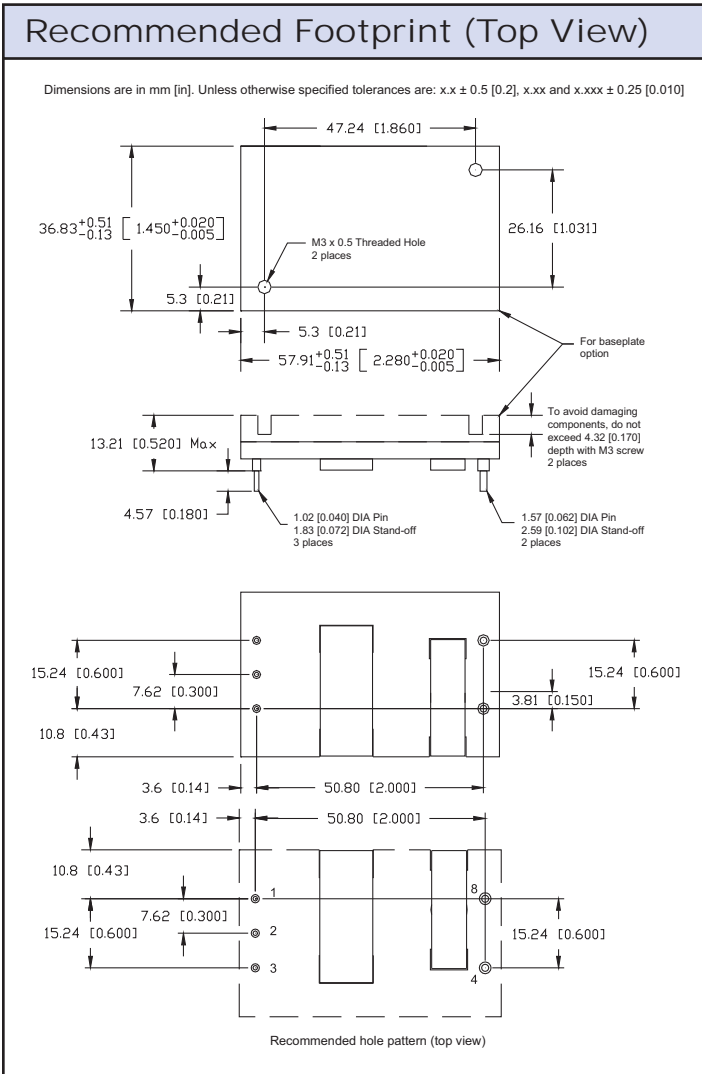
Specifications		iQG48047A096V-1D1	iQG48033A120V-000~109	iQG48033A120V-1D1 & 1D9
Nominal Output Voltage	VDC	9.6V	12V	12V
Input Voltage Range	VDC	36 - 75VDC		
Input Current (max)	A	12A	10.5A	
Efficiency (48V Input)	%	95.2%	94.5%	
Output Voltage Tolerance	VDC	9.51 - 9.81	11.15 - 11.85	11.6 - 12.0
Output Voltage Adjustment	-	None		
Ripple & Noise (max) (pk - pk)	mV	100mV	125mV	150mV
Line Regulation (typical)	mV	15mV	20mV	
Load Regulation (typical)	mV	n/a	35mV	n/a
Overload Protection (typ)	A	53A (non-latching)	39A (non-latching)	
Overvoltage Protection	VDC	13.7 - 15V (latching)	13.7 - 15.6V (latching)	
Remote Sense	-	None		
Remote On / Off	-	Negative		
Current Share (Droop Mode)	-	Yes	No	Yes
Current Share Accuracy	-	±10% (50-100% of total load)	-	±10% (50-100% of total load)
Temperature (operating)	°C	-40 to 125°C (1)	-40 to 124°C (1)	
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 <sup>2</sup> ), and 50~500Hz @ 1.5g (14.7m/s <sup>2</sup> ) per Bellcore TR-EOP-000063-5.4.4		
Shock	-	196.1m/s <sup>2</sup>		
Safety Agency Certifications	-	UL60950-1 (US and Canada), VDE0805 (IEC60950-1), CB scheme (IEC60950-1), CE Mark		
Weight (max)	g	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

(1) See detailed datasheet for derating

Model Selector							
Model	Input Voltage (V)	Output Voltage (V)	Max. Curr. (A)	Max. Output Power (W)	On/Off Polarity	Pin Length	Base Plate
iQG48047A096V-1D1-R	36 - 75	9.6	47	450	Neg	0.145"	Yes
iQG48025A120V-001-R	36 - 75	12	25	300	Neg	0.145"	No
iQG48025A120V-101-R	36 - 75	12	25	300	Neg	0.145"	Yes
iQG48025A120V-009-R	36 - 75	12	25	300	Neg	0.180"	No
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
iQG48033A120V-101-R	36 - 75	12	33	400	Neg	0.145"	Yes
iQG48033A120V-1D1-R	36 - 75	12	33	400	Neg	0.145"	Yes
iQG48033A120V-009-R	36 - 75	12	33	400	Neg	0.180"	No

### Preferred Model



### 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](http://us.tdk-lambda.com/lp/products/iqg-series.htm)

