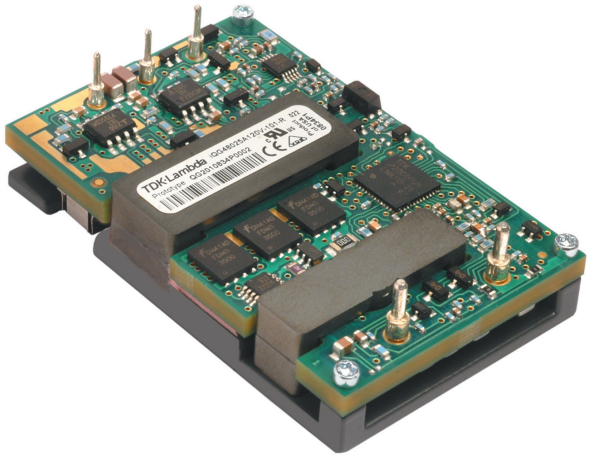
300-450W Quarter Brick Converters

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

Industrial Test COMM Broadcast

Isolated RoHS

Specifications

Model		iQG48033A120V-000-109	iQG48033A120V-1D1 & 1D9	iQG48042A120V-109 & 1U9
Nominal Output Voltage	VDC	12V	12V	12V
Input Voltage Range	VDC	36 - 75VDC		39 - 75VDC
Input Current (max)	A	10.5A		15A
Efficiency (48V Input)	%	94.5%		
Output Voltage Tolerance	VDC	11.5 - 11.85	11.6 - 12.0	11.93 - 12.35
Output Voltage Adjustment	-	None		
Ripple & Noise (max) (pk - pk)	mV	125mV	150mV	175mV
Line Regulation (typical)	mV	20mV		12mV
Load Regulation (typical)	mV	35mV	n/a	35mV (-109 only)
Overload Protection (typ)	A	39A (non-latching)		52A (non-latching)
Overvoltage Protection	VDC	13.7 - 15.6 (latching)		
Remote Sense	-	No	Yes	No
Remote On / Off	-	Negative		
Current Share (Droop Mode)	-	No	Yes	(-1U9 only)
Current Share Accuracy	-	-	±10% (50-100% of total load)	
Temperature (operating)	°C	-40 to 124°C (1)		-40 to 125°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^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	g	70g		88g
Size (LxWxH)	mm	57.91 x 36.83 x 13.21		57.91 x 36.83 x 13.97
Warranty	Yrs	3 Years		

Note: See website for detailed specifications and test methods

(1) See detailed datasheet for derating

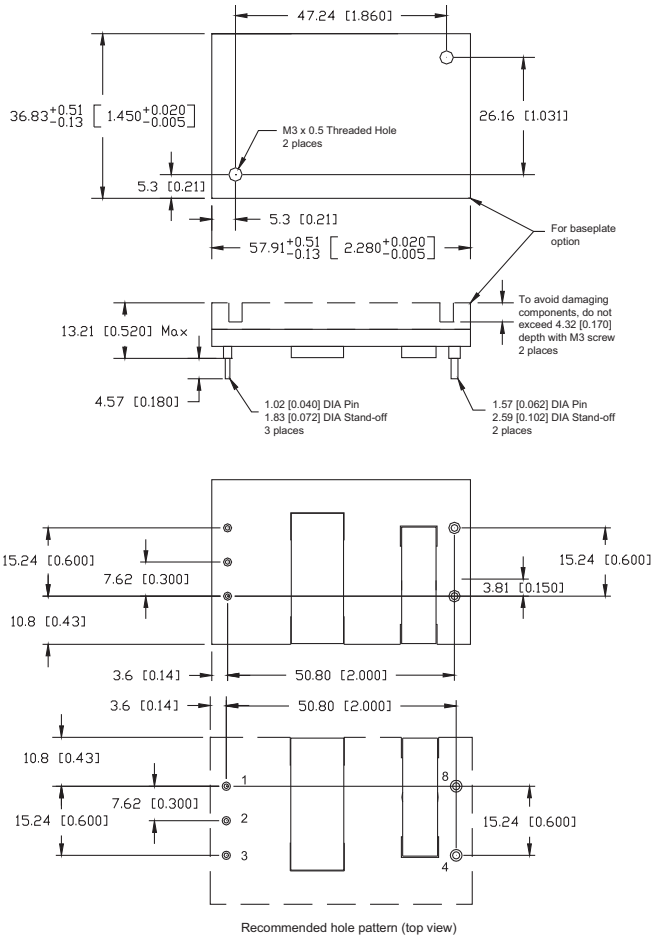
Model Selector

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
iQG48042A120V-109-R	39 - 75	12	42	504	Neg	0.180”	Yes
iQG48042A120V-1U9-R	39 - 75	12	42	504	Neg	0.166”	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]



Recommended hole pattern (top view)

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