

## 96 - 204W Quarter Brick Converter

### Features

- ◆ Standard Quarter Brick Footprint
- ◆ 18-36, 36-75VDC Inputs
- ◆ 3.3V 40A - 15V 10A Nominal Outputs
- ◆ Through Hole Mounting
- ◆ Low 10.41mm Profile
- ◆ 1500VDC Basic Isolation
- ◆ High operating efficiency (>90%)
- ◆ Constant switching frequency
- ◆ Low component count



### Key Market Segments & Applications



Specifications						
Model						
Nominal Output Voltage	VDC	3.3	5	8	12	15
Input Voltage Range	VDC	See Model Selector				
Input Current (max)	A	10				
Efficiency	-	Typically 90% at full load				
Output Voltage Tolerance	VDC	3.2 - 3.4	4.85 - 5.15	7.76 - 8.24	11.58 - 12.42	14.48 - 15.52
Ripple & Noise (max)(pk to pk) (1)	mV	150	150	150	150	150
Line Regulation (max)	mV	10	15	25	30	30
Load Regulation (max)	mV	10	30	25	30	30
Overload Protection (typ)	%	Inception- 133-158% of rated output; Short circuit - auto recovery				
Overvoltage Protection	VDC	3.8 - 4.6	5.7 - 6.7	8.9 - 11	13.6 - 16.5	16.7 - 21
Remote Sense	-	Yes				
Remote On / Off	-	Positive or Negative Logic available, see Model Selector				
Temperature (operating)	°C	-40 to 125				
Temperature (storage)	°C	-55 to 125				
Humidity (operating)	-	20-95% RH Non condensing				
Humidity (storage)	-	10-95% RH Non condensing				
Cooling	-	Convection or forced air				
Isolation Voltage	VDC	1500				
Vibration (non operating)	-	5 to 50Hz @ 0.5g (4.9m/s <sup>2</sup> ), and 50 to 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 Approvals	-	UL60950 (US and Canada), VDE0805 (IEC60950), CB scheme (IEC60950)				
Weight (max)	g	50				
Size	mm	57.9 x 36.8 x 10.41				
Warranty	-	3 Years				

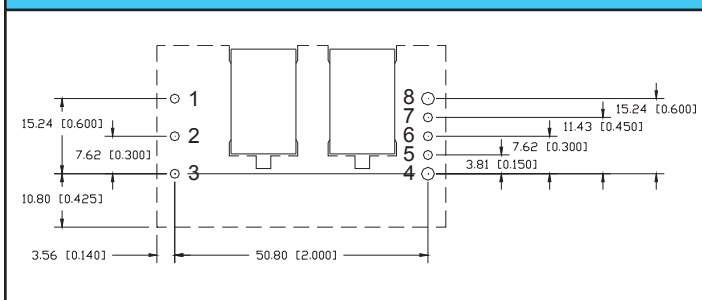
Notes: See website for detailed specifications

- (1) Measured across one 22µF and one 0.1µF ceramic capacitor;  
BW = 20MHz

## Model Selector

Model	Input Voltage (V)	Output Voltage (V)	Adjust Range (V)	Max. Curr. (A)	Max. Output Power (W)	On/Off Polarity	Pin Length
iQE24030A033V-001-R	18 - 36	3.3	2.97 - 3.63	30	99	Neg	0.145
iQE24030A033V-007-R	18 - 36	3.3	2.97 - 3.63	30	99	Neg	0.180
iQE48040A033V-000-R	36 - 75	3.3	2.97 - 3.63	40	132	Pos	0.145
iQE48040A033V-001-R	36 - 75	3.3	2.97 - 3.63	40	132	Neg	0.145
iQE48040A033V-007-R	36 - 75	3.3	2.97 - 3.63	40	132	Neg	0.180
iQE24024A050V-001-R	18 - 36	5	4.5 - 5.5	24	120	Neg	0.145
iQE24024A050V-007-R	18 - 36	5	4.5 - 5.5	24	120	Neg	0.180
iQE48030A050V-000-R	36 - 75	5	4.5 - 5.5	30	150	Pos	0.145
iQE48030A050V-001-R	36 - 75	5	4.5 - 5.5	30	150	Neg	0.145
iQE24012A080V-001-R	18 - 36	8	7.2 - 8.8	12	96	Neg	0.145
iQE24012A080V-007-R	18 - 36	8	7.2 - 8.8	12	96	Neg	0.180
iQE48014A080V-001-R	36 - 75	8	7.2 - 8.8	14	112	Neg	0.145
iQE24009A120V-001-R	18 - 36	12	10.8 - 13.2	9	108	Neg	0.145
iQE24009A120V-007-R	18 - 36	12	10.8 - 13.2	9	108	Neg	0.180
iQE4W011A120V-001-R	18 - 60	12	10.8 - 13.2	11	132	Neg	0.145
iQE48017A120V-000-R	36 - 75	12	10.8 - 13.2	17	204	Pos	0.145
iQE48017A120V-001-R	36 - 75	12	10.8 - 13.2	17	204	Neg	0.145
iQE48017A120V-007-R	36 - 75	12	10.8 - 13.2	17	204	Neg	0.180
iQE24007A150V-001-R	18 - 36	15	13.5 - 16.5	7	105	Neg	0.145
iQE24007A150V-007-R	18 - 36	15	13.5 - 16.5	7	105	Neg	0.180
iQE48010A150V-001-R	36 - 75	15	13.5 - 16.5	10	150	Neg	0.145
iQE48010A150V-007-R	36 - 75	15	13.5 - 16.5	10	150	Neg	0.180

## Recommended Footprint (Top View)



## Pinout

PIN	Function
1	Vin (+)
2	On / Off
3	Vin (-)
4	Vout (-)
5	Sense (-)
6	Trim
7	Sense (+)
8	Vout (+)

For Additional Information, please visit [us.tdk-lambda.com/lp/products/iqe-series.htm](http://us.tdk-lambda.com/lp/products/iqe-series.htm)

