



- Standard Quarter Brick Footprint
- 18-36, 36-75VDC Inputs
- 1.2V 25A, 12V 12.5A Nominal Outputs
- Through Hole Mounting
- Low 8.81mm Profile
- 1500VDC Basic Isolation

iQB Series

25 - 150W

Quarter Brick Converter

iQB Features and Benefits

Features

- High operating efficiency (up to 92%)
- Constant switching frequency
- Low component count

Benefits

- Reduced system heating
- Easier system filtering
- Higher reliability

Specifications

MODEL		iQB							
ITEMS		1.2	1.5	1.8	2.5	3.3	5	12	
Nominal Output Voltage	VDC	1.2	1.5	1.8	2.5	3.3	5	12	
Input Voltage Range	VDC	36-75				18-36,36-75		36-75	
Input Current (max)	A	2 - 6.5 Amps model dependent							
Output Voltage Tolerance	VDC	1.16 - 1.24	1.45 - 1.55	1.74 - 1.86	2.42 - 2.58	3.20 - 3.40	4.85 - 5.15	11.58 - 12.42	
Ripple & Noise (max) (pk to pk) (1)	mV	75	100				125	150-250	
Line Regulation (max)	mV	5					10	24	
Load Regulation (max)	mV	7					10	24	
Overload Protection (typ)	%	Inception- 120-153% of output rating; Short circuit auto recovery							
Overvoltage Protection	VDC	1.41 to 1.8	1.7 to 2.3	2.15 to 2.58	2.7 to 3.5	3.75 to 4.4	5.7 to 6.7	13.6 to 16	
Remote Sense	-	Yes							
Remote On / Off	-	Positive or Negative Logic available, see Feature Set							
Temperature (operating)	°C	-40 to 120 (115°C for 24V input model)							
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 ²), and 50 to 500Hz @ 1.5g (14.7m/s ²) per Bellcore TR-EOP-000063-5.4.4							
Shock	-	196.1m/s ²							
Safety Agency Approvals	-	UL60950 (US and Canada), VDE0805 (IEC60950), CB scheme (IEC60950), CE Mark (LVD)							
Weight (max)	g	39							
Size	mm	57.9 x 36.8 x 8.81 (10.11 for 12V 8.3A model)							
Warranty	-	3 Years							

Notes: (1) Measured across one 1uF ceramic capacitor and one10uF Tan capacitor; BW = 20MHz

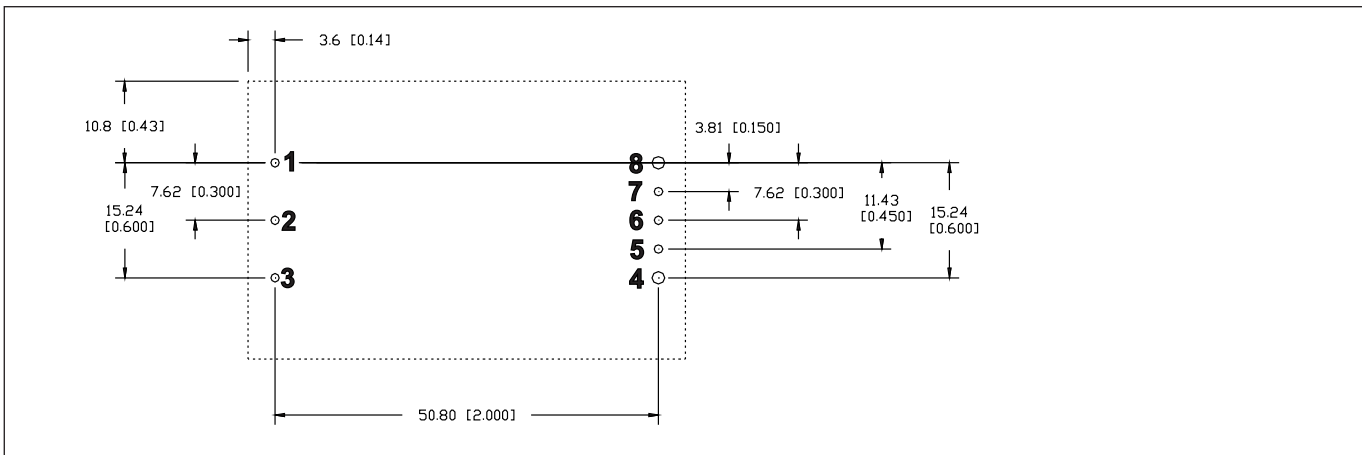


Model Selector

Model	Voltage (V)	Adjust Range (V)	Max. Curr. (A)	Max. Output Power (W)	Efficiency at Full Load (%)
iQB48025A012V-001-R	1.2	1.08 to 1.32	25	30	78
iQB48025A015V-001-R	1.5	1.35 to 1.65	25	37.5	82
iQB48015A018V-001-R	1.8	1.62 to 1.98	15	27	85
iQB48025A018V-001-R	1.8	1.62 to 1.98	25	45	84
iQB48010A025V-001-R	2.5	2.25 to 2.75	10	25	87
iQB48020A025V-001-R	2.5	2.25 to 2.75	20	50	86
iQB48025A025V-001-R	2.5	2.25 to 2.75	25	62.5	85
iQB48010A033V-001-R	3.3	2.97 to 3.63	10	33	90
iQB24015A033V-001-R*	3.3	2.97 to 3.63	15	49.5	89
iQB48020A033V-001-R	3.3	2.97 to 3.63	20	66	89
iQB48025A033V-001-R	3.3	2.97 to 3.63	25	82.5	88
iQB48008A050V-001-R	5	4.5 to 5.5	8	40	90
iQB48015A050V-001-R	5	4.5 to 5.5	15	75	90
iQB48004A120V-001-R	12	9.6 to 13.2	4.17	50	91
iQB48008A120V-001-R	12	9.6 to 13.2	8.33	100	90
iQB48012A120V-001-R	12	9.6 to 13.2	12.5	150	92

* 24V Nominal Input

Recommended Footprint (Top View) iQB Series



Feature Set

Feature Set	On / Off Logic	Pin Length
00	Positive	0.145"
01*	Negative	0.145"
02	Positive	0.110"
03	Negative	0.110"
04	Positive	0.200
05	Negative	0.200

* Preferred feature set
Model Number Example: iQB48015A050V-001-R

PIN Out

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

For full data and drawings please visit www.emea.tdk-lambda.com/www/iqb



TDK-LAMBDA EMEA

www.emea-tdk-lambda.com



TDK-Lambda France SAS
ZAC des Delaches
BP 1077-Gometz-le-Chatel
91940 LES ULIS
France
Tel: +33 1 60 12 71 65
Fax: +33 1 60 12 71 66
www.fr.tdk-lambda.com



TDK-Lambda Germany GmbH
Karl-Bold-Strasse 40
77855 Achern
Tel: +49 7841 666 0
Fax: +49 7841 5000
info.germany@de.tdk-lambda.com
www.emea.tdk-lambda.com



TDK-Lambda Italy S.r.l.
Via dei Lavoratori 128/130
20092 Cinisello Balsamo (MI)
Italy
Tel: +39 02 61 29 38 63
Fax: +39 02 61 29 09 00
info.italia@lambda-europe.com
www.it.tdk-lambda.com



TDK-Lambda Austria Sales Office
Aredstrasse 22
2544 Leobersdorf
Tel: +43 2256 655 84
Fax: +43 2256 645 12
info.germany@de.tdk-lambda.com
www.emea.tdk-lambda.com



TDK-Lambda Scandinavia Sales Office
PO Box 546
Rallarvägen 41
184 40 Åkersberga
Sweden
Tel: +46 854 084 990
Fax: +46 854 066 096
info.germany@de.tdk-lambda.com
www.emea.tdk-lambda.com



TDK-Lambda UK Ltd.
Kingsley Avenue
Ilfracombe
Devon EX34 8ES
United Kingdom
Tel: +44 (0) 12 71 85 66 66
Fax: +44 (0) 12 71 86 48 94
www.uk.tdk-lambda.com



Nemic Lambda Ltd.
Kibbutz Givat
Hashlosha 48800
Israel
Tel: +9 723 902 4333
Fax: +9 723 902 4777
www.nemic.co.il



TDK-Lambda Americas Inc.
Low Power
3055 Del Sol Blvd
San Diego CA 92154
USA
Tel: +1 800-LAMBDA-4 or 1-800-526-2324
Tel: +1 619-575-4400
Fax: +1 619-429-1011
www.us.tdk-lambda.com/lp/



TDK-Lambda Corporation
5F Dempa Bldg. 1-11-15
Higashi-Gotanda
Shinagawa-Ku
Tokyo 141-0022
Japan
Tel: +81 3 3447 4693
Fax: +81 3 3447 4750
www.tdk-lambda.com

High Power
405 Essex Road Neptune NJ 07753
USA
Tel: +1 732 922 9300
Fax: +1 732 922 1441
www.us.tdk-lambda.com/hp/

LOCAL DISTRIBUTION

