

- Standard Industry Footprint (DOSA)
- 3.0-5.5V and 6.0-14.0V Input
- 0.8-5.0V Nominal Outputs
- Surface Mount
- Low 8.5mm Profile
- Non Isolated Output

iAA/iAC Series

15 to 16A

Point of Load Converter

iAA / iAC Features and Benefits

Features

- High operating efficiency (up to 95%)
- Constant switching frequency
- Starts with pre-biased output

Benefits

- Reduced system heating
- Easier system filtering
- Supports complex digital systems

Specifications

MODEL		iAA05015A008V	iAC12016A008V
ITEMS			
Nominal Output Voltage	VDC	0.75-3.63	0.8 - 5.0
Input Voltage Range	VDC	3.0-5.5 ⁽²⁾	6.0 ⁽¹⁾ - 14
Input Current (max)	A	16	18
Output Voltage Tolerance	VDC	±3.3% Vo, set	-2.5 to +3.5% Vo, set
Ripple & Noise (max) (pk to pk) (3)	mV	75	100
Line Regulation (max)	mV	5	10
Load Regulation (max)	mV	10	15
Overload Protection	%	Inception - 175-235% of rated output; Short circuit - auto recovery	
Overvoltage Protection	-	N/A	
Remote Sense	-	Yes	
Remote On / Off	-	Positive or Negative Logic available, see Feature Set	
Temperature (operating)	°C	-40°C to +125°C	
Temperature (storage)	°C	-55°C to +125°C	
Humidity (operating)	-	20 - 95% RH Non condensing	
Humidity (storage)	-	Per IPC / JEDEC J-STD-020, for MSL-2 (<30C/60%RH) in original packaging	
Cooling	-	Convection or forced air	
Isolation Voltage	-	N/A	
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)	
Weight (max)	g	12	
Size	mm	33 x 13.5 x 8.5	
Warranty	yrs	3	

Notes:

- (1) 8.3 - 14V when output is >3.63V
- (2) 4.5 - 5.5V when output is >3.0V
- (3) Measured across one 0.1μF ceramic capacitor and one 47μF ceramic capacitor; BW = 20MHz

Model Selector

Model	Output Voltage (V)	On/Off Logic Positive	On/Off Logic Negative	Output Curr. (A)	Max. Output Power (W)	Efficiency at Full Load (%)
iAA05015A008V-000-R	0.75 - 3.63	✓		15	49.5	94.5
iAC12016A008V-002-R	0.8 - 5.0	✓		16	80	94
iAC12016A008V-003-R	0.8 - 5.0		✓	16	80	94

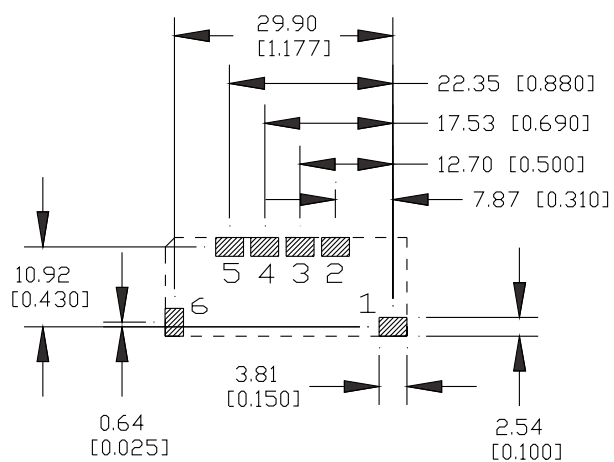
NB other configurations on request

Pinout

PIN	iAA	iAC
1	Vin	On/Off
2	Gnd	Vin
3	Vout	Gnd
4	Trim	Vout
5	Sense	Trim
6	On/Off	Sense
7	-	-

Recommended Footprint (Top View) iAA/iAC (no sequence) Series

iAA/iAC



TDK-LAMBDA EMEA

www.emea.tdk-lambda.com



TDK-Lambda France SAS

ZAC des Delaches
CS 41077
9 rue Thuillere
91978 Villebon Courtaboeuf
France
Tel: +33 1 60 12 71 65
Fax: +33 1 60 12 71 66
france@fr.tdk-lambda.com
www.fr.tdk-lambda.com



Italy Sales Office
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@it.tdk-lambda.com
www.it.tdk-lambda.com



TDK-Lambda Germany GmbH

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



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



TDK-Lambda Ltd.

Kibbutz
Givat Hashlosa 48800
Israel
Tel: +9 723 902 4333
Fax: +9 723 902 4777
info@tdk-lambda.co.il
www.tdk-lambda.co.il



Russia

Technical Support:
St Petersburg
Tel: +7 (812) 6580463
Sales:
Moscow
Tel: +7 (499) 7557732
info@tdk-lambda.ru
www.tdk-lambda.ru

LOCAL DISTRIBUTION