Ref. Certif. No.

DE1-55140/A1

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product	Power supply for IT-Equipment / DC/DC-Converter
Name and address of the applicant	TDK-Lambda Americas Inc. 3320 Matrix Drive, Suite 100, RICHARDSON TX 75082 UNITED STATES OF AMERICA
Name and address of the manufacturer	TDK-Lambda Americas Inc. 3320 Matrix Drive, Suite 100, RICHARDSON TX 75082 UNITED STATES OF AMERICA
Name and address of the factory *Note: When more than one factory, please report on page 2*	TDK-Lambda Americas Inc. 3320 Matrix Drive Suite 100, RICHARDSON TX 75082 UNITED STATES OF AMERICA ☒ Additional Information on page 2
Ratings and principal characteristics	Input: DC 9 - 55 V (SELV), max. 16.5 A Output: SELV (see test report)
Trademark (if any)	TDK·Lambda
Customer's Testing Facility (CTF) Stage used	
Model / Type Ref.	i6A-Series (see test report)
Additional information (if necessary may also be reported on page 2)	Date of Origin: 2015-01-23 Reason for A1: Rating change ☐ Additional Information on page 2
A sample of the product was tested and found to be in conformity with	IEC 60950-1:2005 IEC 60950-1:2005/AMD1:2009 IEC 60950-1:2005/AMD2:2013
As shown in the Test Report Ref. No. which forms part of this Certificate	237556-CI3-1

This CB Test Certificate is issued by the National Certification Body

VDE Prüf- und Zertifizierungsinstitut GmbH
VDE *Testing and Certification Institute*
Zertifizierung Produkte / *Certification Products*

Date: 2017-04-24 Signature: G. Heine

TDK-Lambda Malaysia Sdn. Bhd. PLO 33 Kawasan Perindustrian Senai Locked Bag No. 110, 81400 SENAI, JOHOR, Johor MALAYSIA	

Additional information (if necessary)

VDE Prüf- und Zertifizierungsinstitut GmbH
VDE *Testing and Certification Institute*
Zertifizierung Produkte / *Certification Products*

Date: 2017-04-24 Signature: G. Heine

VDE Prüf- und Zertifizierungsinstitut

Zeichengenehmigung

Ausweis-Nr. / *Certificate No.*	Anlage / *Appendix*
40041519	100

Name und Sitz des Genehmigungs-Inhabers / *Name and registered seat of the Certificate holder*

TDK-Lambda Americas Inc., 3320 Matrix Drive, Richardson, TX 75082, USA

Aktenzeichen / *File ref.*	letzte Änderung / *updated*	Datum / *Date*
341 2520400-3336-0049		2017-05-03

Dieses Blatt gilt nur in Verbindung mit Blatt 1 des Zeichengenehmigungsausweises Nr. 40041519 .
This supplement is only valid in conjunction with page 1 of the Certificate No. 40041519

Netzgerät für IT-Geräte
Power supply for IT-Equipment

Technische Merkmale / *Technical Details*

Product Overview: The i6A product family consists of high density, non-isolated DC-DC power modules intended to be purchased and used as a component in an end-user's power system. The modules will be offered in multiple input voltage and output voltage ranges. The input ranges from 9 – 55Vdc input. The output voltage will be adjustable between -30 V to 40V. The rated output power will be 250W or less.

Models:
i6A24***A%%%V-0xx(-R)
where 24 represents nominal input voltage, with a 9-40Vdc input,
*** represents rated output current between 0A-14A,
%%% represents rated output voltage between 0.6Vdc–28Vdc,
and 0xx indicates a number or alphanumeric character which affects non safety related features.
Optional –R indicated RoHS compliance

i6A24***A%%%V-Nxx(-R)
where 24 represents nominal input voltage, with a 9-40Vdc input,
where *** represents rated output current between 0A-8A,
%%% represents rated output voltage between -0.6Vdc to -30Vdc
and Nxx indicates a number or alphanumeric character which affects non safety related features.
The "N" indicates the output voltage polarity is inverted with respect to the input voltage polarity.
Optional –R indicated RoHS compliance

i6A4W***A%%%V-0xx(-R)
where 4W represents input voltage between 9-55Vdc input,
*** represents rated output current between 0A-20A max.,
%%% represents rated output voltage between 0.6Vdc-40Vdc
and 0xx indicates a number or alphanumeric character which affects non safety related features.
Optional –R indicated RoHS compliance

The table below indicates the **preliminary example** model numbers:

MODEL #	Input Voltage (Vdc)	Max Input Current* (Adc)	Output Voltage**(Vdc)	Output Current (Adc)	Max. Output Power
i6A24014A033V-0xx(-R)	9-40	15	3.3V-28V	14	250W
i6A24008A033V-Nxx(-R)	9-40	15	-3.3V to -30V	8	75W
i6A4W020A033V-0xx(-R)	9-55	16.5	3.3V-15V	20	250W
i6A4W010A033V-0xx(-R)	9-55	16.5	3.3V-40V	10	250W

- * Maximum input current will be a data sheet parameter telling the customer the maximum current the power module will draw from 0Vin to Vin,max. The typical current draw will be significantly lower. Fuse value for testing shall be as specified in the product data sheet.
- ** The output voltage will be adjustable by the customer over a wide range as shown in the table. When the output voltage is adjusted up the maximum output power is fixed (i.e. maximum output current is decreased). When the output voltage is adjusted down, the maximum output current is fixed (i.e. available output power is decreased).

VDE Prüf- und Zertifizierungsinstitut

Zeichengenehmigung

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341

Aktenzeichen / *File ref.*: 2520400-3336-0049

letzte Änderung / *updated*

Datum / *Date*: 2017-05-03

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Netzgerät für IT-Geräte
Power supply for IT-Equipment

Naming Convention:

The initial letter I is a fixed character that indicates that the power module is a TDK-Lambda Americas Inc. product. The next two letters indicate the platform name; it dictates the mechanical form factor and pin out of the power module.

The first two numbers indicate the nominal input voltage, followed by three numbers that indicate the maximum output current. The three numbers are followed by an A indicating the unit for the current is amperes.

The next three numbers indicate the nominal output voltage; the next character - V for volts, indicates the unit for the voltage. Note that the third digit is preceded by a decimal point, so 033V implies 3.3 Volts.

The part number is completed with a -0xx or –Nxx where the three digits indicate the feature set. The second two characters of the feature set are considered to be non-safety affecting changes. Changes to the feature set could be mechanical changes such as modifying the pin length or could be electrical changes such as adding or modifying a control function e.g. modifying the logic for the customer on/off interface.

i6A Product Family Similarities:

The design intention is that the modules within a platform consist of a family of units with similar form, fit and function with the exception of the output voltage and current. The major differences between the modules will be as follows.

The PWB may be changed though the difference in the layout is minimal. The power output inductor is the same structure, but the number of turns will be modified depending upon the output voltage or current of the specific power module.

The semiconductors such as power switches may be different devices depending upon the specific voltage and current stresses in the various power module designs. The power devices may have heat sink applied or omitted.

The input and output filter capacitors may be different values depending upon the specific voltage and current stresses in the various power module designs.

Control circuits will have value changes to scale the typical circuit parameters such as output voltage and output current limit set point as required for the different designs.

Other control circuits such as the feedback compensation may have value changes as required for each specific design.

Product Directory Entry:

TDK Lambda Americas – Dallas Technical Center (formerly known as TDK Innoveta Inc.) located at 3320 Matrix Drive, Suite 100, Richardson, Texas 75082 will market and sell the i6A series products.