

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

CB TEST CERTIFICATE

Product

Switching Power Supply

Name and address of the applicant

TDK-LAMBDA CORP
NAGAOKA TECHNICAL CENTER R&D DIV
2704-1 SETTAYA-MACHI NAGAOKA-SHI NIIGATA 940-1195
JAPAN

Name and address of the manufacturer

TDK-LAMBDA CORP
NAGAOKA TECHNICAL CENTER R&D DIV
2704-1 SETTAYA-MACHI NAGAOKA-SHI NIIGATA 940-1195
JAPAN

Name and address of the factory

ALPS LOGISTICS FACILITIES CO LTD
593-1 NISHIOHASHI TSUKUBA-SHI IBARAKI-KEN 305-0831
JAPAN

Note: When more than one factory, please report on page 2

 Additional Information on page 2

Ratings and principal characteristics

Input:
100-240 Vac, 50-60 Hz,
0.5 A (for model HWS50A-3),
0.7 A (for all models except for model HWS50A-3)

Trademark (if any)

TDK-Lambda

Type of Customer's Testing Facility (CTF) Stage used

Model / Type Ref.

HWS50A-3, HWS50A-5, HWS50A-12, HWS50A-15,
HWS50A-24, HWS50A-48
Maybe followed by suffix "abcde" (a is "/" or blank, b is "HD" or
blank, c is "R" or blank, d is "A", "B", "AB" or blank, and e is "FG",
"DIN" or blank)Additional information (if necessary may also be
reported on page 2) Additional Information on page 2A sample of the product was tested and found
to be in conformity with

IEC 62368-1:2014

As shown in the Test Report Ref. No. which forms part
of this Certificate

4788651190 issued on 2018-09-18

This CB Test Certificate is issued by the National Certification Body



- UL (US), 333 Pflugsten Rd IL 60062, Northbrook, USA
- UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
- UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
- UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2018-09-20

Original Issue Date: 2017-06-30

Signature:

Masamichi Takagi

Factories:

ZHANGJIAGANG HUA YANG ELECTRONICS CO LTD
TONGXIN RD ZHAOFENG ECONOMIC DEVELOPMENT ZONE LEYU TOWN ZHANGJIAGANG JIANGSU 215622
CHINA

TDK-LAMBDA CORP
2704-1 SETTAYA-MACHI NAGAOKA-SHI NIIGATA-KEN 940-1195
JAPAN

SENDAN ELECTRONICS MFG CO LTD
1010 HABUSHIN NANTO-SHI TOYAMA-KEN 939-1756
JAPAN

TDK-LAMBDA MALAYSIA SDN BHD
LOT 2 & 3, BATU 9 3/4 KAWASAN PERINDUSTRIAN BANDAR BARU JAYA GADING 26070 KUANTAN
MALAYSIA

TDK-LAMBDA MALAYSIA SDN BHD
PLO33 KAWASAN PERINDUSTRIAN SENAI 81400 SENAI
MALAYSIA

WUXI TDK-LAMBDA ELECTRONICS CO LTD
NO 6 XING CHUANG ER LU WUXI JIANGSU 214028
CHINA

Additional Information:

The original report was modified to include the following changes/additions:

- Addition of Alternate X-Capacitor (C1, C4); Okaya Electric Industries Co., Ltd. Type LE-MX.
- Addition of Alternate Inductor (L3); TDK-Lambda Corp. Type A24702x (x = A to Z, or blank).
- Minor electrical changes for Diode Bridge (D1) and FET (Q1).
- Additional evaluation of: National Differences for IEC 62368-1:2014 (AT, AU, NZ, GB), and Group Differences fulfilling the requirements of EN 62368-1:2014 + A11:2017.

Additionally evaluated to IEC 60950-1:2005 (Second Edition) + A1:2009 + A2:2013, EN 60950-1:2006 /A11:2009 /A1:2010 /A12:2011 /A2:2013, IEC 60065:2014 (Eighth Edition) and EN 62368-1:2014/ A11:2017.
National Differences specified in the CB Test Report.

Additional information (if necessary)



UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA

UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK

UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN

UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2018-09-20

Original Issue Date: 2017-06-30

Signature:

Masamichi Takagi