

# DEMKO CERTIFICATE

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|----------------------------------|---|
| <b>Certificate No.</b>           | D-05951-M1  |
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| <b>Date of Issue</b>             | 2018-09-21  |
| <b>Certificate Holder</b>        | TDK-LAMBDA CORP<br>NAGAOKA TECHNICAL CENTER R&D DIV<br>2704-1 SETTAYA-MACHI NAGAOKA-SHI NIIGATA 940-1195<br>JAPAN |
| <b>Manufacturer</b>              | TDK-LAMBDA CORP<br>NAGAOKA TECHNICAL CENTER R&D DIV<br>2704-1 SETTAYA-MACHI NAGAOKA-SHI NIIGATA 940-1195<br>JAPAN |
| <b>Production site</b>           | ALPS LOGISTICS FACILITIES CO LTD<br>593-1 NISHIOHASHI TSUKUBA-SHI IBARAKI-KEN 305-0831<br>JAPAN                   |
|                                  | See Page 2  |
| <b>Certified Product Model</b>   | Switching Power Supply<br>HWS50A-12, HWS50A-15, HWS50A-24, HWS50A-3, HWS50A-48,<br>HWS50A-5<br>See Page 2         |
| <b>Trademark</b>                 | <b><i>TDK-Lambda</i></b>  |
| <b>Rated Voltage / Frequency</b> | 100-240 Vac, 50-60 Hz   |
| <b>Rated Current / Power</b>     | 0.5 A (for model HWS50A-3),<br>0.7 A (for all models except for model HWS50A-3)                                   |
| <b>Insulation Class</b>          | Class I   |
| <b>Degree of protection (IP)</b> | IPX0  |
| <b>Tested acc. to</b>            | EN 62368-1:2014/A11:2017, EN 62368-1:2014   |
| <b>Test Report No.</b>           | 4788651190 issued on 2018-09-18   |
| <b>Additional</b>                | For building-in   |
| <b>Expire date</b>               | 2027-06-29  |

**Certification Manager**  
Jan-Erik Storgaard

This is to certify that representative sample(s) of the Product described herein ("Certified Product") have been investigated and found in compliance with the Standard(s) indicated on this Certificate, in accordance with the D Mark Requirements. The Designated Certificate holder is entitled to use the d or for cables <DEMKO> for the Certified Product manufactured at the production site(s) identified above, in accordance with the D Mark Service Agreement, including without limitation the D Mark Testing and Certification Services Service Terms. Only those Products bearing the D Mark should be considered as being covered by UL's D Mark Service. This Certificate shall remain valid through the expiration date, unless terminated earlier in accordance with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior to the expiration date.

**Certification Body**

UL International Demko A/S, Borupvang 5A, DK-2750  
Ballerup, Denmark, Tel. +45 44 85 65 65,  
info.dk@ul.com  
www.ul-europe.com



# Appendix DEMKO CERTIFICATE

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**Model Details:**

HWS50A-12,HWS50A-15,HWS50A-24,HWS50A-3,HWS50A-48,HWS50A-5 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)

**Production Sites:**

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:**

This Certificate replaces earlier issued certificate No. D-05951 due to

- 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. (There were not additional reports for corresponding national differences of the AT (Austria) and GB (United Kingdom).)

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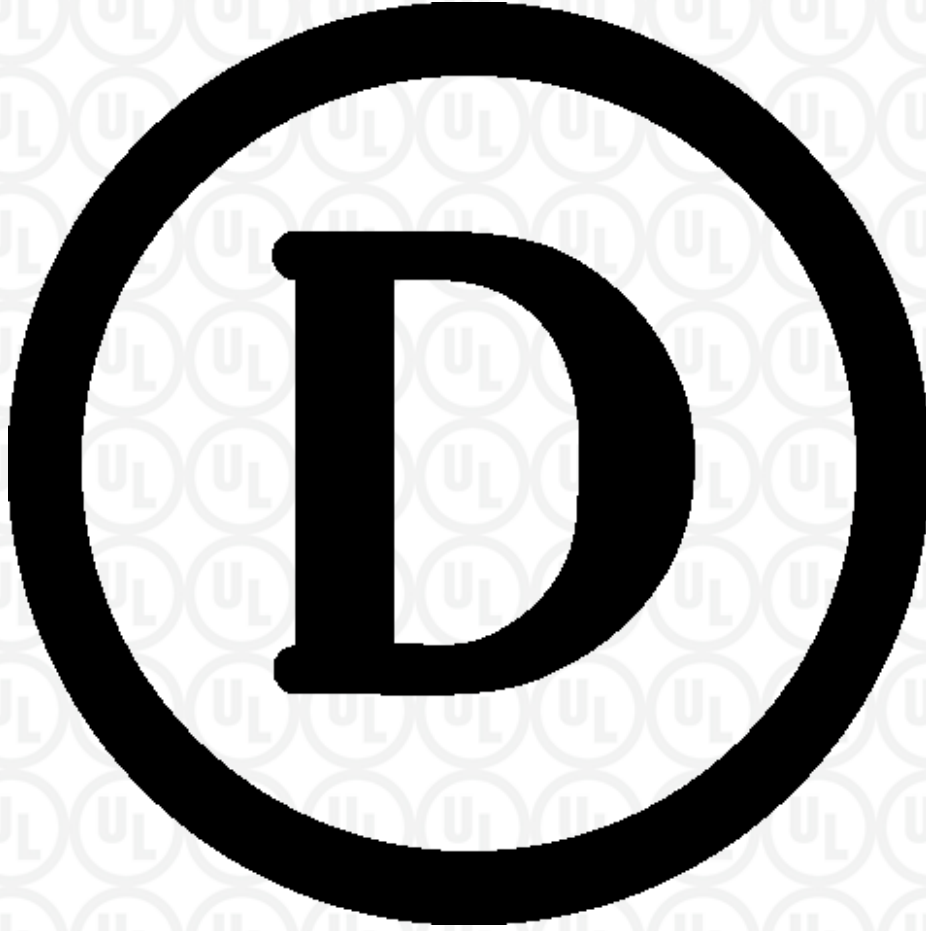
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