



Ref. Certif. No.

JP-25462-M1-UL

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	TDK-LAMBDA CORP 2704-1 SETTAYA-MACHI NAGAOKA-SHI NIIGATA-KEN 940-1195 JAPAN <input checked="" type="checkbox"/> Additional Information on page 2
Note: When more than one factory, please report on page 2	
Ratings and principal characteristics	See Page 3
Trademark / Brand (if any)	
Customer's Testing Facility (CTF) Stage used	
Model / Type Ref.	See Page 2
Additional information (if necessary may also be reported on page 2)	The report was revised to include technical modifications. Additionally evaluated to EN IEC 62368-1:2020/A11:2020. National Differences specified in the CB Test Report. <input checked="" type="checkbox"/> Additional Information on pages 3 and 4
A sample of the product was tested and found to be in conformity with	IEC 62368-1:2018
As shown in the Test Report Ref. No. which forms part of this Certificate	E122103-A6144-CB-1 issued on 2024-11-11

This CB Test Certificate is issued by the National Certification Body



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

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

Date: 2024-11-12
Original Issue Date: 2021-09-17

Signature: Masamichi Takagi



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Factory(ies):

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

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

TDK-LAMBDA (CHINA) ELECTRONICS CO LTD
NO.95, ZHUJIANG RD, XINWU DISTRICT WUXI JIANGSU 214028
CHINA

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

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

Model Detail(s):

HWS600-#(*)

represents nominal output voltage value either 3, 5, 12, 15, 24, 48 or 55

(*) - may be followed by optional suffix a, b, c, d and/or e denoting minor variations: where a is "/", b is "PV", c is "CO" or "HD", d is "LLF", e is "MF"

HWS600-24(**)

(**) - followed by suffix "/RY", "/RYCO", "/RYLLF", "/RYHD" or "/MESC"

HWS600-12/RF,
HWS600-42/DS,
HWS600-48/HKM, HWS600-48/PVLNF

HWS600P-%(***) , HWS600PCN-\$(***)

% represents nominal output voltage value either 24, 36 or 48

\$ represents nominal output voltage value either 24 or 30

(***) - HWS600P-% and HWS600PCN-\$ may be followed by optional suffix a, b, c, d and/or e denoting minor variations: where a is "/", b is "PV", c is "CO" or "HD", d is "LLF", e is "MF"

HWS600P-24(****) , HWS600PCN-24(****)

(****) - followed by suffix "/RY", "/RYCO", "/RYLLF", or "/RYHD"

HWS600-24/LNT(*****) , HWS600-48/LNT(*****)

(*****) - may be followed by optional suffix b and/or c denoting minor variations: where b is "PV", c is "CO" or "HD"

Additional information (if necessary)



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Ratings:

Input: AC 100-240 V, 50/60 Hz, 8.2 A

(for Models except for HWS600P-24, HWS600PCN-24, HWS600PCN-30, HWS600P-36, and HWS600P-48)

Input: AC 100-240 V, 50/60 Hz, 8.7 A

(for Models HWS600P-24, HWS600PCN-24, HWS600PCN-30, HWS600P-36, and HWS600P-48)

Output: Refer to test report

Summary of Modifications:

- Deletion of Factory, ZHANGJIAGANG HUA YANG ELECTRONICS CO LTD.
- Addition of Japan National Differences and China National Differences.
- Update of U.S.A. and CANADA National Differences.
- Deletion of Alternate Fan for models other than model with suffix /PVLNF or Suffix d = LLF, NMB Technologies Corporation, type 3110KL-04WB89.
- Addition of Tube for T33, Sumitomo Electric Fine Polymer Inc., type Sumitube F2(Z). (no construction changes, only for clarification)
- Addition of Lead Wire for Fan for models other than model with suffix /PVLNF or Suffix d = LLF, Proterial, Ltd., type 3385 and Manufacturer: Interchangeable, type: Interchangeable. (no construction changes, only for clarification)
- Addition of Tube for Lead Wire for Fan for models other than model with suffix /PVLNF or Suffix d = LLF, Tyco Electronics Corp., type VERSAFIT V2 and LS Cable & System Ltd., type GSHS-1625G. (no construction changes, only for clarification)
- Addition of Lead Wire for Alternate Fan for models other than model with suffix /PVLNF or Suffix d = LLF, Proterial, Ltd., type 1007 or 1061 and Manufacturer: Interchangeable, type: Interchangeable. (no construction changes, only for clarification)
- Addition of Tube for Lead Wire for Alternate Fan for models other than model with suffix /PVLNF or Suffix d = LLF, Tyco Electronics Corp., type VERSAFIT V2 and LS Cable & System Ltd., type GSHS-1625G. (no construction changes, only for clarification)
- Addition of Lead Wire for Alternate Fan for models other than model with suffix /PVLNF or Suffix d = LLF, Proterial, Ltd., type 3385 and Manufacturer: Interchangeable, type: Interchangeable. (no construction changes, only for clarification)
- Addition of Tube for Lead Wire for Alternate Fan for models other than model with suffix /PVLNF or Suffix d = LLF, Tyco Electronics Corp., type VERSAFIT V2 and LS Cable & System Ltd., type GSHS-1625G. (no construction changes, only for clarification)
- Addition of Lead Wire for Fan for Model HWS600-48/PVLNF, Proterial, Ltd., type 3385 and Manufacturer: Interchangeable, type: Interchangeable. (no construction changes, only for clarification)
- Addition of Tube for Lead Wire for Fan for Model HWS600-48/PVLNF, Tyco Electronics Corp., type VERSAFIT V2 and LS Cable & System Ltd., type GSHS-1625G. (no construction changes, only for clarification)
- Addition of Lead Wire for Fan for Suffix d = LLF, Proterial, Ltd., type 3385 and Manufacturer: Interchangeable, type: Interchangeable. (no construction changes, only for clarification)
- Addition of Tube for Lead Wire for Fan for Suffix d = LLF, Tyco Electronics Corp., type VERSAFIT V2 and LS Cable & System Ltd., type GSHS-1625G. (no construction changes, only for clarification)
- Addition of Lead wire for NTC Sensor, Manufacturer: Interchangeable, type Style 2651 and Manufacturer: Interchangeable, type: Interchangeable. (no construction changes, only for clarification)
- Correction of Manufacturer of Terminal Block/TB1 (except for HWS600PCN series), from "Emden Corp" to "Emuden Corp" due to typo.

Additional information (if necessary)



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Summary of Modifications (Continued):

- Addition of Alternate X-Capacitor/ C1, Trademark : Okaya Electric industries Co., Ltd., type LE*, Xiamen Faratronic Co., Ltd., type MKP62 and Eurotronic (Suzhou) Co., Ltd., type MPX2.
- Addition of Alternate Y-Capacitor/ C3, C4, C11, C14, C15, C33, Murata Mfg. Co., Ltd., type RA-Series.
- Correction of Object of Thyristor/ SA1, from "Thyristor/ SA1" to "Thyristor/ SR1" due to typo.
- Addition of Alternate IC/ A351, Power Integrations, type TNY177DG-TL.
- Correction of technical data of FET/ Q31, Q32 for PWB Assembly [Board No.PZA-039x (x = A to Z or blank)](for models HWS600-3, HWS600-5, HWS600-12, HWS600-15, HWS600-24, HWS600-48, HWS600-42/DS, HWS600-55), from "Min. 40A" to "Min. 38.8A" due to typo.
- Update of manufacturer name, model name, technical data, standard and/or Mark of conformity of some components of table 4.1.2.
- Addition of Alternate Construction.

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