

	<p>Test Report issued under the responsibility of:</p>	
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<p>TEST REPORT IEC 60950-1 Information technology equipment - Safety - Part 1: General requirements</p>	
Report Reference No	4786910627-10
Date of issue	2015-10-19
Total number of pages	103
CB Testing Laboratory	UL Japan, Inc.
Address	4383-326 Asama-cho, Ise-shi, Mie, 516-0021, Japan
Applicant's name	TDK-LAMBDA CORP
Address	NAGAOKA TECHNICAL CENTER R&D DIV 2704-1 SETTAYA-MACHI NAGAOKA-SHI NIIGATA 940-1195 JAPAN
Test specification:	
Standard	IEC 60950-1:2005 (Second Edition); Am1:2009 + Am2:2013
Test procedure	CB Scheme
Non-standard test method	N/A
Test Report Form No.	IEC60950_1F
Test Report Form originator	SGS Fimko Ltd
Master TRF	Dated 2014-02
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<p>The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.</p>	

Test item description	Switching Power Supply												
Trade Mark	<i>TDK·Lambda</i> or <i>TDK·Lambda</i>												
Manufacturer	TDK-LAMBDA CORP NAGAOKA TECHNICAL CENTER R&D DIV 2704-1 SETTAYA-MACHI NAGAOKA-SHI NIIGATA 940-1195 JAPAN												
Model/Type reference	JWT75-522, JWT75-5FF, JWT75-525 (may be provided with suffix: "/A", "/B", "/C", "/R", "/RA", "/RB" or "/RC")												
Ratings	Input: AC 100-240V, 50/60Hz, 1.4A Output:												
	<table border="1"> <tr> <td>JWT75-522</td> <td>DC +5V/8.0A</td> <td>DC +12V/4.0A</td> <td>DC -12V/0.5A</td> </tr> <tr> <td>JWT75-5FF</td> <td>DC +5V/8.0A</td> <td>DC +15V/3.2A</td> <td>DC -15V/0.5A</td> </tr> <tr> <td>JWT75-525</td> <td>DC +5V/8.0A</td> <td>DC +12V/4.0A</td> <td>DC -5V/0.5A</td> </tr> </table>	JWT75-522	DC +5V/8.0A	DC +12V/4.0A	DC -12V/0.5A	JWT75-5FF	DC +5V/8.0A	DC +15V/3.2A	DC -15V/0.5A	JWT75-525	DC +5V/8.0A	DC +12V/4.0A	DC -5V/0.5A
JWT75-522	DC +5V/8.0A	DC +12V/4.0A	DC -12V/0.5A										
JWT75-5FF	DC +5V/8.0A	DC +15V/3.2A	DC -15V/0.5A										
JWT75-525	DC +5V/8.0A	DC +12V/4.0A	DC -5V/0.5A										
	All current values are maximum values, of separate outputs. The maximum total output power for each model: 75W												

Testing procedure and testing location:	
<input checked="" type="checkbox"/> CB Testing Laboratory	UL Japan, Inc. 4383-326 Asama-cho, Ise-shi, Mie, 516-0021, Japan
Testing location / address	
<input type="checkbox"/> Associated CB Test Laboratory	
Testing location / address	
Tested by (name + signature)	Ayano Matsumoto <i>A. Matsumoto</i>
Approved by (name + signature)...	Tetsuo Iwasaki TetsuoIwasaki
<input type="checkbox"/> Testing Procedure: TMP/CTF Stage 1	
Testing location / address	
Tested by (name + signature)	
Approved by (name + signature)...	
<input type="checkbox"/> Testing Procedure: WMT/CTF Stage 2	
Testing location / address	
Tested by (name + signature)	
Witnessed by (name + signature)..	
Approved by (name + signature)...	
<input type="checkbox"/> Testing Procedure: SMT/CTF Stage 3 or 4	
Testing location / address	
Tested by (name + signature)	
Approved by (name + signature)...	
Supervised by (name + signature).	
<input type="checkbox"/> Testing Procedure: RMT	
Testing location / address	
Tested by (name + signature)	
Approved by (name + signature)...	
Supervised by (name + signature).	

List of Attachments
National Differences (pages)
Enclosures (pages)
Summary Of Testing
Unless otherwise indicated, all tests were conducted at UL Japan, Inc. 4383-326 Asama-cho, Ise-shi, Mie, 516-0021, Japan.

Tests performed (name of test and test clause)	Testing location / Comments
Input: Single-Phase (1.6.2)	
Capacitance Discharge (2.1.1.7)	
SELV Reliability Test Including Hazardous Voltage Measurements (2.2.2, 2.2.3, 2.2.4)	
Humidity (2.9.1, 2.9.2, 5.2.2)	
Determination of Working Voltage; Working Voltage Measurement (2.10.2)	
Transformer and Wire /Insulation Electric Strength (2.10.5.13)	
Heating (4.5.1, 1.4.12, 1.4.13)	
Ball Pressure (4.5.5, 4.5)	
Touch Current (Single-Phase; TN/TT System) (5.1, Annex D)	
Electric Strength (5.2.2)	
Component Failure (5.3.1, 5.3.4, 5.3.7)	
Abnormal Operation (5.3.1 - 5.3.9)	
Transformer Abnormal Operation (5.3.3, 5.3.7b, Annex C.1)	
Power Supply Output Short-Circuit/Overload (5.3.7)	
<p>Summary of Compliance with National Differences: Countries outside the CB Scheme membership may also accept this report. List of countries addressed: CA, DE, DK, EU, FI, GB, KR, SE, SI, US The product fulfills the requirements of: EN 60950-1:2006 + A1:2010 + A11:2009 + A12:2011 + A2:2013</p>	

Copy of Marking Plate - Refer to Enclosure titled Marking Plate for copy.

Test item particulars :

Equipment mobility	for building-in
Connection to the mains	not directly connected to the mains
Operating condition	continuous
Access location	N/A
Over voltage category (OVC)	OVC II
Mains supply tolerance (%) or absolute mains supply values	-10%, +6%
Tested for IT power systems	Yes
IT testing, phase-phase voltage (V)	230V
Class of equipment	Not classified, class I construction
Considered current rating of protective device as part of the building installation (A)	Not considered (built-in application)
Pollution degree (PD)	PD 2
IP protection class	IPX0
Altitude of operation (m)	≤ 2000m
Altitude of test laboratory (m)	< 1000m
Mass of equipment (kg)	0.6kg

Possible test case verdicts:

- test case does not apply to the test object : N/A
- test object does meet the requirement : P(Pass)
- test object does not meet the requirement : F(Fail)

Testing:

Date(s) of receipt of test item	2002-08, 2006-06-07
Date(s) of Performance of tests	2002-08, 2006-05, 2006-07-31

General remarks:

"(see Enclosure #)" refers to additional information appended to the report.
 "(see appended table)" refers to a table appended to the report.
 Throughout this report a point is used as the decimal separator.

Manufacturer's Declaration per Sub Clause 4.2.5 of IEC60950-1:

The application for obtaining a CB Test Certificate includes more than one factory and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided Yes

When differences exist, they shall be identified in the General Product Information section.

Name and address of Factory(ies): TDK-LAMBDA CORP
 2704-1 SETTAYA-MACHI

NAGAOKA-SHI
NIIGATA-KEN 940-1195 JAPAN

Wuxi TDK-Lambda Electronics Co Ltd
NO 6
XING CHUANG ER LU
WUXI
JIANGSU 214028 CHINA

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

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

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

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

GENERAL PRODUCT INFORMATION:

Report Summary

All applicable tests according to the referenced standard(s) have been carried out.

Product Description

The product tested is built-in type switching power supply for use in general office equipment (host equipment is not specified).

Model Differences

All models are identical to each other except for output rating and type name of transformer T1.

Suffix for type designation;

"/A" with cover
"/B " with connector
"/C" with connector and cover
"/R" with remote control circuit
"/RA" with remote control circuit and cover
"/RB" with remote control circuit and connector
"/RC" with remote control circuit, connector and cover

Additional Information

This report is a reissue of CBTR Ref. No.:12027292 001, CB Test Certificate Ref. No.JPTUV-045293. Based on the previously conducted testing and the review of product technical documentation including photos, schematics, wiring diagrams and similar, has been determined that the product continues to comply with the standard.

Abbreviations used in the report.

- built-in application: B/I

In this Test Report, CENELEC mark license indicating compliance to EN standard was used to verify component compliance to IEC standard because the standards are technically equivalent.

It was considered that UL Standard has requirements that meet or exceed the relevant IEC requirements.

Technical Considerations

- The product was submitted and evaluated for use at the maximum ambient temperature (T_{ma}) permitted by the manufacturer's specification of: See enclosure Id 7-03.
- The product is intended for use on the following power systems: TN
- The product was investigated to the following additional standards: EN 60950-1:2006 + A11:2009 + A1:2010 + A12:2011 + A2:2013 (which includes all European national differences, including those specified in this test report).

Engineering Conditions of Acceptability

When installed in an end-product, consideration must be given to the following:

- The end-product Electric Strength Test is to be based upon a maximum working voltage of: max working voltage: 433 V_{rms}, 784 V_{pk}
- The following secondary output circuits are SELV: All output
- The power supply terminals and/or connectors are: Suitable for factory wiring only
- The investigated Pollution Degree is: 2
- Proper bonding to the end-product main protective earthing termination is: Required
- An investigation of the protective bonding terminals has: Not been conducted
- The following magnetic devices (e.g. transformers or inductor) are provided with an OBJY2 insulation system with the indicated rating greater than Class A (105°C): T1 (Class B)
- The following end-product enclosures are required: Fire, Electrical

Abbreviations used in the report:

- | | | | |
|--|------|----------------------------------|-------|
| - normal condition | N.C. | - single fault condition..... | S.F.C |
| - operational insulation | OP | - basic insulation | BI |
| - basic insulation between parts of opposite polarity: | BOP | - supplementary insulation | SI |
| - double insulation | DI | - reinforced insulation | RI |

Indicate used abbreviations (if any)