

DEMKO CERTIFICATE

Certificate No.	D-08874-M4
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Date of Issue	2023-08-23
Certificate Holder	TDK-LAMBDA CORP NAGAOKA TECHNICAL CENTER R&D DIV 2704-1 SETTAYA-MACHI NAGAOKA-SHI, Niigata, 940-1195 JAPAN
Production site	TDK-LAMBDA (CHINA) ELECTRONICS CO LTD NO.95, ZHUJIANG RD, XINWU DISTRICT WUXI, JIANGSU, 214028 CHINA
Certified Product	See Page 2 for additional information
Model	Switching Power Supply ZWS150BAF-24/FU, ZWS150BAF-abcdefghijkl See page 2 for additional Information
Trademark	<i>TDK-Lambda</i>
Ratings	Input: Model ZWS150BAF-3bcdefghij: 100-240 Vac, 50/60 Hz, 1.4A See page 2-3 for additional ratings
Tested according to	EN IEC 62368-1:2020, EN IEC 62368-1:2020/A11:2020
Test Report No.	E122103-A6172-CB-2 issued on 2023-08-09
Additional	Additionally evaluated to EN 50178:1997. The report was revised to include technical modifications. This Certificate replaces earlier issued certificate No. D-08874-M3 due to update 1 component.
Expire date	2031-11-07

Certification Manager
Thomas Wilson

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. As specified in the respective appendix below the Designated Certificate holder is entitled to use the D-Mark, or its alternative for cables, 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with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior the expiration date.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.com



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Factories:

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

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

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

ZHANGJIAGANG HUA YANG ELECTRONICS CO LTD
NO.15 TONGXIN RD, ZHAOFENG ECONOMIC DEVELOPMENT ZONE, LEYU TOWN ZHANGJIAGANG, JIANGSU,
215622
CHINA

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

YOKOTE SEIKO CO.,LTD.
1-71 ARAYATORIKIMACHI AKITA-SHI, AKITA, 010-1633
JAPAN

Additional Model(s):

Series: ZWS150BAF-abcdefghijkl,

a = 3, 5, 12, 15, 24 or 48

b = "/" or blank

c = "R" or blank

d = "A", "L" or blank

e = "CO2" or blank

f = "FG" or blank

g = "FV" or blank

h = "FGM" or blank

i = "SN" or blank

j = "N" or blank

Ratings:

Input:

Model ZWS150BAF-3bcdefghij:

100-240 Vac, 50/60 Hz, 1.4A

Models ZWS150BAF-5bcdefghij, -12bcdefghij, -15bcdefghij, -24bcdefghij, -48bcdefghij and

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ZWS150BAF-24/FU

100-240 Vac, 50/60 Hz, 2.0A

Output:

3.3 Vdc, 30A: ZWS150BAF-3bcdefghij (DC 2.64 - 3.63 V, max 30A, max 99.0W)

5 Vdc, 30A: ZWS150BAF-5bcdefghij (DC 4.0 - 5.5 V, max 30A, max 150W)

12 Vdc, 12.5A: ZWS150BAF-12bcdefghij (DC 9.6 - 13.2 V, max 12.5A, max 150W)

15 Vdc, 10A: ZWS150BAF-15bcdefghij (DC 12.0 - 16.5 V, max 10A, max 150W)

24 Vdc, 6.3A: ZWS150BAF-24bcdefghij and ZWS150BAF-24/FU (DC 19.2 - 26.4 V, max 6.3A, max 151.2W)

48 Vdc, 3.2A: ZWS150BAF-48bcdefghij (DC 38.4 - 52.8 V, max 3.2A, max 153.6W)

Not classified, Class 1 construction

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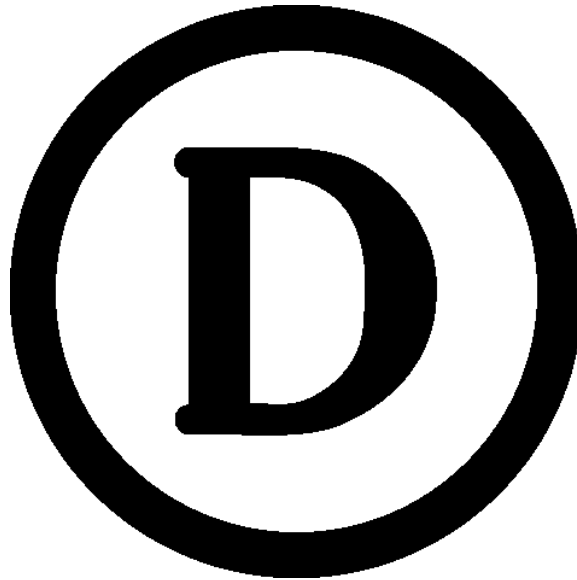
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Certification Mark D-Mark

The D-Mark, as displayed below, shall appear on certified products only. Except as specified below the Mark shall be legible and no Minimum size is specified.



The size of the Mark may be reduced or enlarged on the condition that it remains readable and that the proportions of width and height are kept. The use of dark text for the D-Mark on light backgrounds and light text on dark backgrounds is permitted.

The D-Mark may appear on a label, nameplate, or may be cast, stamped or molded into the product. When appearing on a label or nameplate, the Manufacturer's name or trademark along with a model number are also required on that same label or nameplate. If cast, stamped or molded, the Certificate Manufacturer's name or trademark and model number shall also appear elsewhere on the product

When putting the product on the EU market, the manufacturer's name, trademark or mark of origin must be affixed in a clearly visible location and position on the product, on the package and in the user manual. It can be affixed by label, be directly imprinted, or cast or molded into the product.

Where the size of the product does not allow the Mark, the manufacturer's name, trademark, mark of origin and model number to be legible, and appearance on a label is not desired, it is allowed to cast, stamp or mold the Mark into the product, in a size which is not visible to the naked eye, provided the legible Mark, the manufacturer's name, trademark or mark of origin and model number appears on the package and in the user manual

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Alternate certification Mark for cables

As an alternative to the D-Mark specified above the alternate D-Mark, displayed below, can appear on certified cables only. Minimum size is not specified, as long as the mark is legible.

<DEMKO>

The alternate D-Mark may be cast, stamped or molded into the cable and continue throughout the length of the cable as specified in the applicable cable standard.

All content shall be in accordance with the details provided on this D-Mark Certificate.

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