DEMKO CERTIFICATE

Certificate No. D-07499-A1

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2020-02-11 Date of Issue

TDK-LAMBDA CORP NAGAOKA TECHNICAL CENTER R&D DIV Certificate Holder

2704-1 SETTAYA-MACHI

NAGAOKA-SHI NIIGATA 940-1195 JAPAN

TDK-LAMBDA CORP NAGAOKA TECHNICAL CENTER R&D DIV Manufacturer

2704-1 SETTAYA-MACHI

NAGAOKA-SHI NIIGATA 940-1195 JAPAN

TDK-LAMBDA MALAYSIA SDN BHD **Production site**

> LOT 2 & 3, BATU 9 3/4 KAWASAN PERINDUSTRIAN BANDAR BARU JAYA GADING 26070 KUANTAN PAHANG MALAYSIA

See Page 2

Switching Power Supply

Certified Product RWS1000B-12/ME, RWS1000B-15/ME, RWS1000B-24/ME,

RWS1000B-36/ME, RWS1000B-48/ME

See Page 2

Trademark

Model

'DK-Lambda

See Page 2 Rated Voltage / Frequency See Page 2 **Rated Current / Power** CLASS I **Insulation Class**

IPX0 Degree of protection (IP)

EN 60601-1:2006/A12:2014, EN 60601-1:2006/A1:2013, EN Tested acc. to

60601-1:2006

E309264-D1027-2/A1/C0-CB issued on 2020-02-10 Test Report No.

Additional The report was revised to include administrative modifications.

Expire date 2029-09-16

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with the Service Agreement including without limitation if the Standard identified on this Certificate is amended or withdrawn prior the expiration date.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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Date of Issue 2020-02-11

Model Details:

RWS1000B-12/ME, RWS1000B-15/ME, RWS1000B-24/ME, RWS1000B-36/ME, RWS1000B-48/ME may be followed by suffix "abcd" (a is R or S, b is CO2, c is FO, d is RF; and "a", "b", "c" and "d" may be blank)

Options "abcd" are defined as below.

- a: R (control on/off to output) or S (AUX output with 5 Vdc),
- b: CO2 (thin coating (QMJU2) on both sides of printed wiring board to prevent unintentional objectives from adhering),
- c: FO (remote sensing, parallel operation, low output voltage alarm),
- d: RF (DC fan with opposite direction and air flow, and different derating curve),

In addition, there is "RFO" combination "R" and "FO".

All the combinations using the options above are available except for "R"+"RFO" and "FO" + "RFO". For "FO" and "RFO" only, transformer (T1) is used.

Suffix "S" mainly indicates AUX output with 5 Vdc, 1 A, and the associated changes below.

- Circuit diagram, silk/pattern trace layouts,
- Additional transformer (T401),
- Additional insulation sheet to keep adequate spacing,
- Alternate noise filter coil (L1), type DN-DL3626, Instead, type DN-DL3153 is not used.
- Change of shape of fan flow barrier for suffix "S" + "RF"

Factories

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

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

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

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

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

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

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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Date of Issue 2020-02-11

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

Rated Voltage Frequency: Input: 100-240 Vac, 50-60 Hz

Output:

RWS1000B-12/ME: 12 Vdc, 84 A RWS1000B-15/ME: 15 Vdc, 67 A RWS1000B-24/ME: 24 Vdc, 42 A RWS1000B-36/ME: 36 Vdc, 28 A RWS1000B-48/ME: 48 Vdc, 21 A AUX output for suffix "S": 5 Vdc, 1 A

Additional Information:

This certificate replaces earlier issued D-Mark certificate No. D-07499, dated 2019-09-17.

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

- Addition of factory, TDK-Lambda (China) Electronics Co., Ltd., No.95, Zhujiang Rd, Xinwu District, Wuxi JiangSu China

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



