### **UL-EU CERTIFICATE**

Certificate No. UL-EU-02422

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Date of Issue 2023-09-06

**Certificate Holder** FLEX ELECTRONICS (SHANGHAI) CO LTD

33 FUHUA ROAD, JIADING DISTRICT SHANGHAI, Shanghai Shi, 201818

**CHINA** 

Production site FLEX ELECTRONICS (SHANGHAI) CO LTD

33 FUHUA ROAD, JIADING DISTRICT SHANGHAI, SHANGHAI SHI, 201818

**CHINA** 

See Page 2 for additional information

Certified Product DC-DC Converter

> Model BMR351X1X2X3X4/X5X6X7. BMR350X1X2X3X4/X5X6X7

> > See page 2-3 for additional Information

flex flex flex Ratings

1. Input: 40-60Vdc, 35A; Output: 8-13.2Vdc, 0-108A, Max.1300W

2. Input: 40-60Vdc, 50A, Output: 8-13.2Vdc, 0-136A, Max.1600W

Tested acc. to EN 62368-1:2014. EN 62368-1:2014/A11:2017 Test Report No. E496569-A6045-CB-1 issued on 2023-09-05

**Additional** 

**Trademark** 

2024-07-06 **Expire date** 

**Certification Manager Thomas Wilson** 

UL International Demko A/S Borupvang 5A 2750 Ballerup Denmark 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 UL-EU Requirements. As specified in the on this Certificate, in accordance with the UL-EU Requirements. As specified in the respective appendices below the designated Certificate holder is entitled to use the UL-EU Mark, or its alternative for cables, for the Certified Product manufactured at the production site(s) identified above, in accordance with the UL-EU Mark Service Agreement, including without limitation the UL-EU Mark Testing and Certification Services Service Terms. Only those Products bearing the UL-EU Mark for Europe should be considered as being covered by UL's UL-EU 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with the Service Agreement including without limitation if the Standard(s) identified on this Certificate is amended or withdrawn prior the expiration date.

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### **Factories:**

FLEXTRONICS TECHNOLOGY(PENANG)SDN BHD BLOK A1, NO.2466, TINGKAT PERUSAHAAN 4A KAWASAN PERUSAHAAN PERAI PERAI, Pulau Pinang 13600 MALAYSIA

#### Additional Model(s):

BMR350X1X2X3X4/X5X6X7, X1 defines the Mechanical pin option

X1=0: TH - Standard Pin length 5,33 mm

X1=1: SMD

X1=2: LA = lead length 3.69 mm

X1=3: LB = lead length 4.57 mm

X1=4: LC = lead length 2.79 mm

X1=5: lead length 6.5 mm

X1=6-9: TBD

X2 defines the Mechanical option

X2=0: Standard open frame

X2=1: Base plate 12+/- 0.5mm Open Deck

X2=2: Base plate 12+/- 0.5mm Open Deck with Bottom side Heat spreader

X2=3: Base plate 13.3+/- 0.5mm Flat

X2=4: Base plate 13.4+/- 0.4mm Closed Deck, PEM insert and Bottom side Heat spreader

X2=5-9: TBD

X3X4 is used as sequence number for additional variants:

X3X4 can be a number between 0 and 99.

X3=0 3:1 860W

X3=1 3:1 700W

X3=2 3:1 600W

X3=5 3:1 1300W

X3X4=00: Vout 12.24V, 40-60Vin 860W 7 pin digital interface with PG and active current share

X3X4=01: Vout 12.12V, 40-60Vin 860W 7 pin digital interface with sense function

X3X4=02: Vout 12.12V, 40-60Vin 860W 7 pin digital interface with Address0 on pin 13

X3X4=20: Vout 12.12V, 40-60Vin 600W 7 pin digital interface with sense function

X3X4=50: Vout 12.12 V, 40-60Vin 1300W 7 pin digital interface with PG and active current share,

X3X4=51: Vout 12.12 V, 40-60Vin 1300W 4 pin digital interface

X3X4=52: Vout 12 V, 40-60Vin 1300W 4 pin digital interface

X3X4=53: Vout 12 V, 40-60Vin 1300W 7pin digital interface, with Sense function+ DLS current share

X3X4=03-19, 21-49, 54-99; TBD

X5X6X7 is used as sequence number for CDA files:

Model number is CDA102 0350/ X5, X6, X7

X5, X6, X7 can be a number between 000 and 999. Both general numbers specified in the datasheet and customer unique numbers exists.

All CDA sequence number are SW unique.

NOTE: Standard CDA should be used start from /001, Customized CDA should be used start from /800.

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### Additional Model(s):

BMR351X1X2X3X4/X5X6X7, X1 defines the Mechanical pin option

X1=0: TH - Standard Pin length 5,33 mm

X1=1: SMD

X1=2: LA = lead length 3.69 mm

X1=3: LB = lead length 4.57 mm

X1=4: LC = lead length 2.79 mm

X1=5: lead length 6.5 mm

X1=6-9: TBD

X2 defines the Mechanical option

X2=0: Standard open frame

X2=1: Base plate 14+/- 0.4mm Open Deck with Bottom side Heat spreader

X2=2: Base plate 14.7+/- 0.4mm Closed Deck with Bottom side Heat spreader

X2=3-9: TBD

X3X4 is used as sequence number for additional variants:

X3X4 can be a number between 0 and 99.

X3=0 3:1 1600W

X3X4=00: Vout 12.00V, 40-60Vin 1600W 7 pin digital interface with PG and dual address

X3X4=01: Vout 12.00V, 40-60Vin 1600W 7 pin digital interface with PG and active current share

X3X4=02: Vout 12.20V, 40-60Vin 1600W 7 pin digital interface with PG and SENSE

X3X4=08: Vout 12.00V, 40-60Vin 1600W 4 pin digital interface

X3X4=09: Vout 12.00V, 40-60Vin) 1600W Without digital interface

X3X4=03-07, 10-99: TBD

X5X6X7 is used as sequence number for CDA files:

Model number is CDA102 0351/ X5, X6, X7

X5, X6, X7 can be a number between 000 and 999. Both general numbers specified in the datasheet and customer unique numbers exists.

All CDA sequence number are SW unique.

NOTE: Standard CDA should be used start from /001, Active current share CDA should contain /X3X.

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### **Certification Mark UL-EU Mark**

The UL-EU Mark, as displayed below, shall appear on certified products only. Minimum size is not specified, as long as the Mark is legible. The following is suggested.



The minimum height of the registered trademark symbol ® shall be 1 mm. When the overall diameter of the UL-EU Mark is less than 9.5 mm, the trademark symbol may be omitted if it is not legible to the naked eye.

The UL-EU 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.

All content shall be in accordance with the details provided on this UL-EU Certificate.

#### **PROCUREMENT**

The Production site may reproduce the Mark or obtain it from a UL authorized supplier. The list of UL authorized suppliers can be found on UL's online directory at www.ul.com

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### Alternate certification Mark for cables

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

(UL)-EU

The alternate UL-EU 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 UL-EU Certificate.