UL-EU CERTIFICATE

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Certificate Holder

Manufacturer

Production site

Certified Product Model

Trademark

Rated Voltage / Frequency Rated Current / Power Insulation Class Degree of protection (IP)

> Tested acc. to Test Report No. Additional Expire date

DC-DC Converter BMR454****/***, BMR457****/*** See Page 2-3

Flex Electronics (Shanghai) Co Ltd 33 Fuhua Road, Jiading District Shanghai, 201818 China

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EN 62368-1:2014/A11:2017, EN 62368-1:2014 E496569-A6006-CB-1 issued on 2019-11-14

2029-11-14

Certification Manager Jan-Erik Storgaard 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 Rark requirements. The designated Certificate holder is entitled to use the UL-EU Mark for the Certificate 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 Kervice. 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with the Service Agreement including without limitation if the Standard(s) identified on this Certificate is amended or withdrawn prior the expiration date.



Appendix UL-EU CERTIFICATE

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Model Details: BMR454****/** The model series BMR454***/***, with safety identical models, and the following is a description of differences: 1st '*': 0-9 = pin option 2nd '*': 0-1 = mechanical option: 0 = open frame1 = baseplate3rd and 4th '*': 00= hardware designed for 9-12Vout. Rating; in= 36-75Vdc, out 9-12Vdc 20 A, max 240VA. 01= hardware designed for 9-12Vout without the digital contact. Rating: in= 36-75Vdc. out 9-12Vdc 20 A. max 240VA. 02= hardware designed for 3.3-5Vout. Rating; in= 36-75Vdc, out 3.3-5Vdc 40 A, max 190VA. 03= hardware designed for 3.3-5Vout without the digital contact. Rating; in= 36-75Vdc, out 3.3-5Vdc 40 A, max 190 VA. 04= hardware designed for 12Vout fixed. Rating; in= 36-75Vdc, out 12Vdc 20 A, max 240VA. 05= hardware designed for 12Vout fixed without the digital contact. Rating; in= 36-75Vdc, out 12Vdc 20 A, max 240VA. 80-99: hardware with label 5th-7th '*': 000-999= software configuration. BMR457 ****/*** The model series BMR457 ****/*** with safety identical models, and the following is a description of differences: The first "*" defines the pin option: 0-9 The second "*" defines the mechanical option:0-1: 0 = open frame1 = baseplate 3 = Upside down mechanical option 4 = Different height of baseplate (see test report for details) The third and fourth "*" defines variants: 00: hardware optimized for 12Vout. 40-60Vin. Vout can be set from 6.9-13.2V,25A 300W. 01: hardware optimized for 12Vout. 40-60Vin. Vout can be set from 6.9-13.2V, without communication interface, 25A 300W. 04: hardware optimized for 12Vout. 36-75Vin. Vout can be set from 6.9-13.2V,22A 264W. 05: hardware optimized for 12Vout. 36-75Vin. Vout can be set from 6.9-13.2V, without communication interface, 22A 264W. 06: hardware optimized for 12Vout. 36-75Vin. Vout can be set from 6.9-13.2V. Drop function, without communication interface, 22A.261W 07: hardware optimized for 12Vout. 36-75Vin. Vout can be set from 6.9-13.2V. Drop function, with communication interface, 22A.261W 11: hardware optimized for 12Vout. 40-60Vin. Vout can be set from 6.9-13.2V. Drop function, without communication interface, 25A.297W 12: hardware optimized for 12Vout. 40-60Vin. Vout can be set from 6.9-13.2V. Drop function, with communication interface.25A.297W 16: hardware additial optimized for 12Vout. 40-60Vin. Vout can be set from 6.9-13.2V, with communication interface.25A.300W 17: hardware additial optimized for 12Vout. 40-60Vin. Vout can be set from 6.9-13.2V, without communication interface,25A.300W

Certification Body 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. The designated Certificate holder is entitled to use the UL-EU Mark 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 Certificate 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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18: hardware additial optimized for 12Vout. 36-75Vin. Vout can be set from 6.9-13.2V, with communication interface,25A.264W
19: hardware additial optimized for 12Vout. 36-75Vin. Vout can be set from 6.9-13.2V, without communication interface,25A.264W
80-99: hardware with label
Fifth, sixth and seventh "*": 000-999: software configuration

Ratings:

All ratings are optional, no ratings are required to be printed on product

See test report for complete ratings program

Certification Body

This is to certify that representative samples of the Certified Product listed above have been investigated by Underwriters Laboratories to the Standard(s) indicated on this Certificate, in accordance with the UL Global Services Agreement and the UL-EU Mark Service Terms and Conditions ("Agreement"). The Certificate Holder is entitled to use the UL-EU Mark for the Certificate Product listed on the certificate and manufactured at the production site(s) listed, in accordance with the terms of the Agreement. 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 a Standard identified on this Certificate is amended or withdrawn prior to that date or there is a non-compliance with the Agreement.



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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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