Ref. Certif. No.

DK-93727-M1-UL

IEC SYSTEM FOR MUTUAL RECOGNITION OF TEST CERTIFICATES FOR ELECTRICAL EQUIPMENT (IECEE) CB SCHEME

CB TEST CERTIFICATE

Product	DC-DC Converter
Name and address of the applicant	FLEX ELECTRONICS (SHANGHAI) CO LTD 33 FUHUA ROAD,JIADING DISTRICT SHANGHAI 201818 CHINA
Name and address of the manufacturer	FLEX ELECTRONICS (SHANGHAI) CO LTD 33 FUHUA ROAD,JIADING DISTRICT SHANGHAI 201818 CHINA
Name and address of the factory	FLEX ELECTRONICS (SHANGHAI) CO LTD 33 FUHUA ROAD,JIADING DISTRICT SHANGHAI 201818 CHINA
Note: *When more than one factory, please report on page 2*	☐ Additional Information on page 2
Ratings and principal characteristics	Input: (optional) 36-60Vdc / 36-75Vdc ☒ Additional Information on page 3, 4
Trademark (if any)	flex
Customer's Testing Facility (CTF) Stage used	CTF Stage 1
Model / Type Ref.	BMR456****/***, BMR458****/***, BMR458**30/***, BMR458**31/***, BMR458**32/*** ☒ Additional Information on page 2, 3
Additional information (if necessary may also be reported on page 2)	The report was revised to include technical modifications. ☒ Additional Information on page 3
A sample of the product was tested and found to be in conformity with	IEC 62368-1:2014
As shown in the Test Report Ref. No. which forms part of this Certificate	E496569-A6010-CB-1 issued on 2021-06-02

This CB Test Certificate is issued by the National Certification Body

☐ UL (US), 333 Pfingsten Rd IL 60062, Northbrook, USA
☒ UL (Demko), Borupvang 5A DK-2750 Ballerup, DENMARK
☐ UL (JP), Marunouchi Trust Tower Main Building 6F, 1-8-3 Marunouchi, Chiyoda-ku, Tokyo 100-0005, JAPAN
☐ UL (CA), 7 Underwriters Road, Toronto, M1R 3B4 Ontario, CANADA

For full legal entity names see www.ul.com/ncbnames

Date: 2021-06-02
Original Issue Date: 2020-03-06

Signature:
Jan-Erik Storgaard

Additional Model(s):
Series:
BMR453****/***, The first * : 0-9 defines the Mechanical pin option
The second *: 0-9 defines the Mechanical baseplate option
Third and fourth *:
00: hardware designed for 8.1-12Vout, max.396W output. Vin limitation for Vout which is large than 11Vout.
01: hardware designed for 8.1-12Vout, max.396W output, without the digital contact. Vin limitation for Vout which is large than 11Vout.
02: hardware designed for 3-5Vout, max.300W output. Full Vin Rating: 36-75Vdc,
03: hardware designed for 3-5Vout, max.300W output, without the digital contact. Full Vin Rating: 36-75Vdc,
04: hardware designed for 12Vout fixed, max.396W output. Full Vin Rating: 36-75Vdc,
05: hardware designed for 12Vout fixed, max.396W output, without the digital contact. Full Vin Rating: 36-75Vdc.
06: Hardware designed for 8.1V-12.45Vout with Droop function. Max.391W output. Vin limitation for Vout higher than 11Vout, without the digital contact.
07: Hardware designed for 8.1V-12.45Vout with Droop function. Max.391W output. Vin limitation for Vout higher than 11Vout, with the digital contact.
08: Stacker variant, Hardware designed for 8.1-12.45Vout with droop function. Max.720W output. Vin limitation for Vout higher than 11Vout, without the digital contact.
Fifth, sixth and seventh *: 000-999: software configuration.

BMR456****/***, The first * : 0-9 defines the Mechanical pin option
The second *: 0-9 defines the Mechanical baseplate option
The third and fourth * defines variants:
00: hardware optimized for 12Vout. 36-60Vin. Vout can be set from 6.9-13.2V
01: hardware optimized for 12Vout. 36-60Vin. Vout can be set from 6.9-13.2V, without communication interface
02: hardware optimized for 5Vout. 36-75Vin. Vout can be set from 2.0-6.7V
03: hardware optimized for 5Vout. 36-75Vin. Vout can be set from 2.0-6.7V, without communication interface
04: hardware optimized for 12Vout. 36-75Vin. Vout can be set from 6.9-13.2V
05: hardware optimized for 12Vout. 36-75Vin. Vout can be set from 6.9-13.2V, without communication interface
06: hardware optimized for 12Vout. 36-75Vin. Vout can be set from 6.9-13.2V. Drop function, without communication interface
07: hardware optimized for 12Vout. 36-75Vin. Vout can be set from 6.9-13.2V. Drop function, with communication interface
08: stacker variant, hardware optimized for 12Vout. 36-75Vin. Vout can be set from 4.0- 13.2V. Drop function, without communication interface
11: hardware optimized for 12Vout. 36-60Vin. Vout can be set from 6.9-13.2V. Drop function, with communication interface
12: hardware optimized for 12Vout. 36-60Vin. Vout can be set from 6.9-13.2V. Drop function, without communication interface.
Fifth, sixth and seventh *: 000-999: software configuration.

BMR458****/***, The first * : 0-9 defines the Mechanical pin option
The second *: 0-9 defines the Mechanical baseplate option
The third and fourth * defines variants:
00: 36-75Vin, Vout can be set from 8-13.2V, with communication interface
01: 36-75Vin, Vout can be set from 8-13.2V, without communication interface
02: 36-75Vin, Vout can be set from 8-13.2V, with communication interface
03: 36-75Vin, Vout can be set from 8-13.2V, without communication interface
11: 40-60Vin, Vout can be set from 8-13.2V, with communication interface
12: 40-60Vin, Vout can be set from 8-13.2V, without communication interface
20: 40-60Vin, Vout can be set from 8-13.2V, peak power, with communication interface
21: 40-60Vin, Vout can be set from 8-13.2V, peak power, without communication interface
Fifth, sixth and seventh *: 000-999: software configuration.

Additional information (if necessary)

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Additional Model(s):
Series:
BMR458**30/***, BMR458**31/***, BMR458**32/***, BMR458**33/***, BMR458**42/***
The first * will be 0-9 defines the Mechanical pin option
The second *: 0-9 defines the Mechanical baseplate option
third, fourth and fifth *: 000-999: software configuration.

Additionally evaluated to:
EN 62368-1:2014/A11:2017, EN 62368-1:2014
National Difference specified in the CB Test Report.

Summary of Modifications:
- Add model BMR458**33/***;
- Add model BMR458**42/***;
- Updated the data of Tables

Ratings:

(optional)
For BMR453**00/*** and BMR453**01/***:
DC Input: 36-75Vdc,
DC Output: 8.1-12Vdc/max.396W, max.33A.

For BMR453**02/*** and BMR453**03/***:
DC Input: 36-75Vdc,
DC Output: 3-5Vdc/max.300W, max.60A.

For BMR453**04/*** and BMR453**05/***:
DC Input: 36-75Vdc,
DC Output: 12Vdc/max.396W.

For BMR453**06/*** and BMR453**07/***:
DC Input: 36-75Vdc,
DC Output: 8.1-12.45Vdc/max.391W, MAX.33A.

For BMR453**08/***:
DC Input: 36-75Vdc,
DC Output: 8.1-12.45Vdc/max.720W.

For BMR456**00/*** and BMR456**01/***
DC Input: 36-60Vdc
DC output: 6.9-12Vdc. Max power 468W.

Additional information (if necessary)

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Ratings:

For BMR456**02/*** and BMR456**03/***
DC Input: 36-75Vdc
DC output: 2.0-6.7Vdc. Max power 315W.

For BMR456**04/*** and BMR456**05/***
DC Input: 36-75Vdc
DC output: 6.9-12Vdc. Max power 420W.

For BMR456**06/*** and BMR456**07/***
DC Input: 36-75Vdc
DC output: 6.9-12.45Vdc. Max power 415W.

For BMR456**08/***
DC Input: 36-75Vdc
DC output: 4.0-13.2Vdc. Max power 746W.

For BMR456**11/*** and BMR456**12/***
DC Input: 36-60Vdc
DC output: 6.9-12.45Vdc. Max power 463W.

For BMR458**00/***
DC Input: 36-75Vdc
DC output: 8-13.2Vdc. Max power 600W.

For BMR458**01/***
DC Input: 36-75Vdc
DC output: 8-13.2Vdc. Max power 600W.

For BMR458**02/***, BMR458**03/***, BMR458**32/***, BMR458**33/***, BMR458**42/***
DC Input: 36-75Vdc
DC output: 8-13.2Vdc. Max power 600W

For BMR458**11/***, BMR458**12/***, BMR458**30/***, BMR458**31/***
DC Input: 40-60Vdc
DC output: 8-13.2Vdc. Max power 650W.

For BMR458**20/***
DC Input: 40-60Vdc
DC output: 8-13.2Vdc. Max power 650W. 100ms peak power max 93A.

For BMR458**21/***
DC Input: 40-60Vdc
DC output: 8-13.2Vdc. Max power 650W. 100ms peak power max 93A.

Additional information (if necessary)

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