UL-EU CERTIFICATE

Certificate No. UL-EU-01707-M1

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Date of Issue 2019-09-05

Certificate Holder Flex Electronics (Shanghai) Co Ltd

33 Fuhua Road, Jiading District

Shanghai, 201818 China

Manufacturer Flex Electronics (Shanghai) Co Ltd

33 Fuhua Road, Jiading District

Shanghai, 201818 China

Production site Flex Electronics (Shanghai) Co Ltd

33 Fuhua Road, Jiading District

Shanghai, 201818 China

Certified Product DC-DC Converter

Model PKB4111DA PI, PKB4111DA PIHS, PKB4111DA SI,

PKB4111DA, PKB4210DA PI, PKB4210DA PIHS,

See Page 2

Trademark flex

Rated Voltage / Frequency See Page 2

Rated Current / Power See Page 2

Insulation Class - Degree of protection (IP) X0

Tested acc. to EN 62368-1:2014/A11:2017, EN 62368-1:2014

Test Report No. OFF-4788764152-A-1-Amendment-1 issued on 2019-09-05 **Additional** The report was revised to include technical modifications.

Expire date 2029-03-19

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 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 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with the Service Agreement including without limitation if the Standard(s) identified on this Certificate is amended or withdrawn prior the expiration date.

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Appendix UL-EU CERTIFICATE

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Model Details:

PKB4210DA PIHS,PKB4210DA PI,PKB4210DA SI,PKB4211DA PIHS,PKB4211DA PI,PKB4211DA SI PKB4111DA,PKB4111DA SI,PKB4111DA PI,PKB4111DA PIHS

PI - pins for through hole mounting

SI - pins for surface mounting

HS - base plate

Ratings:

(optional)

For models

PKB4210DA PIHS

PKB4210DA PI

PKB4210DA SI

PKB4211DA PIHS

PKB4211DA PI

PKB4211DA SI

Vin=36-75Vdc, Iin=8A Max; Vout=3.3Vdc, Iout=62A or Vin=36-75Vdc, Iin=10A Max; Vout=5Vdc, Iout=52A

For models

PKB4111DA

PKB4111DA SI

PKB4111DA PI

PKB4111DA PIHS

Vin=45-60Vdc, Iin=8A Max; Vout=5Vdc, Iout=40A

Maralal	In most	Outunt	T
Model	Input	Output	Transformer
PKB4210DA PIHS	Vin=36-75∨dc, Iin=8A Max	Vout=3.3Vdc, lout=62A	Half bridge 4:1
PKB4210DA PI	Vin=36-75∨dc, Iin=8A Max	Vout=3.3Vdc, lout=62A	Half bridge 4:1
PKB4210DA SI	Vin=36-75Vdc, Iin=8A Max	Vout=3.3Vdc, lout=62A	Half bridge 4:1
PKB4211DA PIHS	Vin=36-75Vdc, Iin=10A Max	Vout=5∨dc, Iout=52A	Half bridge 3:1
PKB4211DA PI	Vin=36-75∨dc, Iin=10A Max	Vout=5Vdc, Iout=52A	Half bridge 3:1
PKB4211DA SI	Vin=36-75Vdc, Iin=10A Max	Vout=5Vdc, Iout=52A	Half bridge 3:1
PKB4111DA	Vin=45-60√dc, lin=8A Max	Vout=5Vdc, Iout=40A	Half bridge 4:1
PKB4111DA SI	Vin=45-60√dc, lin=8A Max	Vout=5Vdc, Iout=40A	Half bridge 4:1
PKB4111DA PI	Vin=45-60√dc, lin=8A Max	Vout=5Vdc, Iout=40A	Half bridge 4:1
PKB4111DA PIHS	Vin=45-60√dc, lin=8A Max	Vout=5Vdc, Iout=40A	Half bridge 4:1

Additional Information:

This certificate replaces certificate No. UL-EU-01707 dated 2019-03-20 due to add new models PKB4111DA, PKB4111DA PI and PKB4111DA PIHS.

Certification Body

UL International Demko A/S
Borupvang 5A
2750 Ballerup
Denmark

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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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