


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
<i>Note: When more than one factory, please report on page 2</i>	<input type="checkbox"/> Additional Information on page 2
Ratings and principal characteristics	See Page 2-3
Trademark / Brand (if any)	
Type of Customer's Testing Facility (CTF) Stage used	CTF Stage 1
Model / Type Ref.	1. PKB 4318 PIOB 2. PKB 4418 PIOA 3. PKB 4418 PI* 4. PKB 4619 PI* 5. PKB 4510 PI* See Page 2
Additional information (if necessary may also be reported on page 2)	The report was revised to include technical modification(s). <input checked="" type="checkbox"/> 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	OFF-4788962525-A-1-Amendment-2 issued on 2020-12-21

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/ncbnamesDate: 2020-12-22
Original Issue Date: 2019-07-08

Signature:

Jan-Erik Storgaard

Model Details:

- 1. PKB 4318 PIOB 2. PKB 4418 PIOA 3. PKB 4418 PI* 4. PKB 4619 PI* 5. PKB 4510 PI* 6. PKB 4610 PI*
- 7. PKB 4810 PI* 8. PKB 4417 PI* 9. PKB 4711 PI* 10. PKB 4713 PI* 11. PKB 4913 PI* 12. PKB 4715 PI*
- 13. PKB 4317Y PI* 14. PKB 4717 PI* 15. PKB 5610 PI* 16. PKB 5711 PI* 17. PKB 5713 PI* 18. PKB 5410 PI*
- 19. PKB 4110C PI* 20. PKB 4111C PI* 21. PKB 4113C PI* 22. PKB 4718LC PI* 23. PKB 4918HC PI*
- 24. PKB 4118GC PI* 25. PKB 4513 PI* 26. PKB 4318N PI* 27. PKB 4513 PINBOVLC 28. PKB 4111A PI*
- 29. PKB 4910A PI* 30. PKB 4111A SIOT 31. PKB 4518NC PI* 32. PKB 4216C PI* 33. PKB 4111D PI*
- 34. PKB 4110D PI* 35. PKB 4313D PI* 36. PKB 4211D PI* 37. PKB 4213D PI* 38. PKB 4413D PI*
- 39. PKB 4313DA* 40. PKB 4413DA* 41. PKB 4217ND* 42. PKB 4313DA PIOA
- 43. PKB 4413D PIHSUALA

PI in the type designation is replaced by SI for surface mount versions of the above through hole mount models, all models may be followed by any combination of characters representing minor differences that do not affect safety, see model differences for examples of suffixes.

All models' suffix is optional:

PI - pins for through hole mounting

SI - pins for surface mounting

PI or SI may be followed by a combination of the following additional suffixes:

P - positive remote control (negative remote control is standard)

M - increased stand-off and height

LA - lead length 3.69 mm (0.145 in.) (5.33 mm (0.210 in.) is standard)

LB - lead length 4.57 mm (0.180 in.) (5.33 mm (0.210 in.) is standard)

LC - lead length 2.79 mm (0.110 in.) (5.33 mm (0.210 in.) is standard)

LD - lead length 2.40 mm (0.094 in.) (5.33 mm (0.210 in.) is standard)

NB - no base plate(PKB-B models only)

OP - Optional part list

HS - base plate

LHS-low base plate

HV - baseplate with wings

G - baseplate with ground pin (HV baseplate only)

OC - custom optimized control loop

OV - 36-60V input voltage (PKB 4513 PINBOVLC only)

OA - 1.5 V output voltage (PKB 4418 PIOA only)

OB - 1.2 V output voltage (PKB 4318 PIOB only)

LV - latching over voltage protection

LT - latching over temperature protection

LI - latching over current protection

LP - latching over temperature and over voltage protection

LIV - latching over current and over voltage protection

LIT - latching over current and over temperature protection

LPA - latching over voltage, over temperature and over current protection

OT - change UnderVoltage at shut down level

O - Electrical Optional part list

L - Low Profile (means Lower product height)

Z - 3.25mm standoff

UA - Input voltage minimum is 34.5V

Ratings:
(optional)

Model	Input (dc)	Output (dc)	
	V	V	A
PKB 4318 PIOB	36-75	1.2	30
PKB 4418 PIOA	36-75	1.5	30

Additional information (if necessary)



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Ref. Certif. No.

DK-85332-M2-UL

Ratings:

PKB 4418 PI*	36-75	1.8	25	
PKB 4619 PI*	36-75	2.5	25	
PKB 4510 PI*	36-75	3.3	15	
PKB 4610 PI*	36-75	3.3	20	
PKB 4810 PI*	36-75	3.3	25	
PKB 4417 PI*	36-60	3.6	8	
PKB 4711 PI*	36-75	5	15	
PKB 4713 PI*	36-75	12	6	
PKB 4913 PI*	38-75	12	7.5	
PKB 4715 PI*	38-75	15	5	
PKB 4317Y PI*	36-60	3.6	9	
PKB 4717 PI*	36-75	7.2	10.5	
PKB 5610 PI*	18-60	3.3	20	
PKB 5711 PI*	18-60	5	15	
PKB 5713 PI*	18-60	12	6.25	
PKB 5410 PI*	18-62.5	3.3	12.1	
PKB 4110C PI*	36-75	3.3	40	
PKB 4111C PI*	36-75	5.0	28	
PKB 4113C PI*	36-75	12	12	
PKB 4110D PI*	36-75	3.3	40	
PKB 4111D PI*	36-75	5.0	30	
PKB 4313D PI*	36-75	12	25	
PKB 4718LC PI*	36-75	1.2	60	
PKB 4918HC PI*	36-75	1.5	60	
PKB 4118GC PI*	36-75	1.8	60	
PKB 4513 PI*	36-75	12	4	
PKB 4318N PI*	36-75	1	30	
PKB 4513 PINBOVLC	30-60	12	4	
PKB 4111A PI*	36-75	5	125W	
PKB 4910A PI*	36-75	3.3	100W	
PKB 4111A SIOT	36-75	5	125W	
PKB 4518NC PI*	36-75	1	50	
PKB 4216C PI*	36-75	15-33	6.6	
PKB 4211D PI*	36-75	5	40	
PKB 4213D PI*	36-75	12	22	
PKB 4413D PI*	36-60	12	450W	
PKB 4313DA*	36-75	12	32.5A	390W
PKB 4413DA*	36-75	12	34A	408W
PKB 4217ND*	36-75	10	25A	
PKB 4313DA PIOA	36-75	12	32.5A	
PKB 4413D PIHSUALA	34.5-60	12	450W	

Additional Information:

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

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

- Add new model PKB 4413D PIHSUALA.
- Add two suffixes.

Additional information (if necessary)



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