

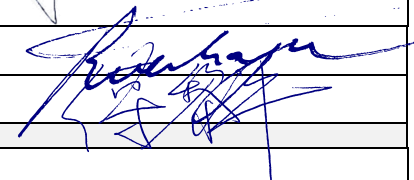
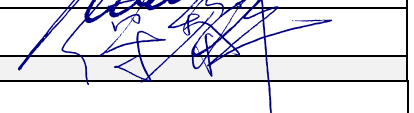




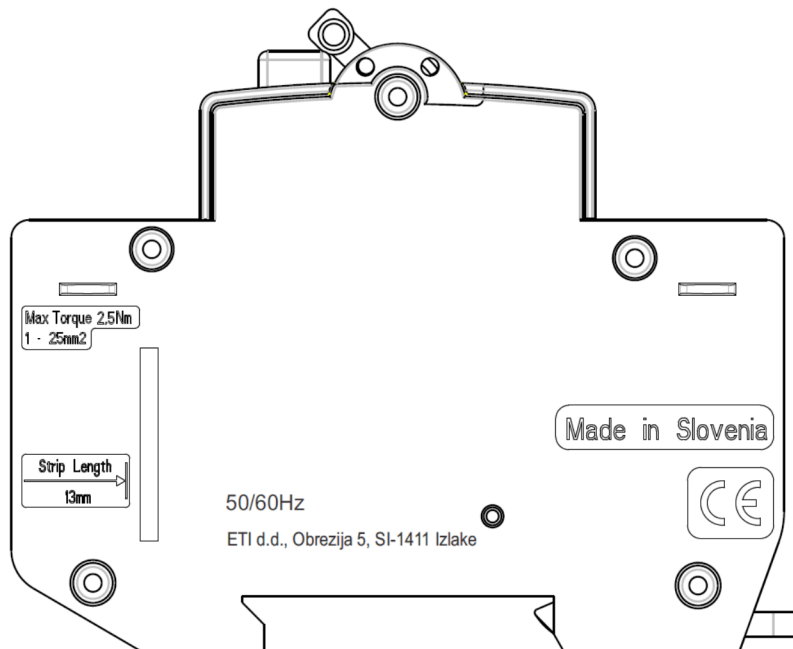
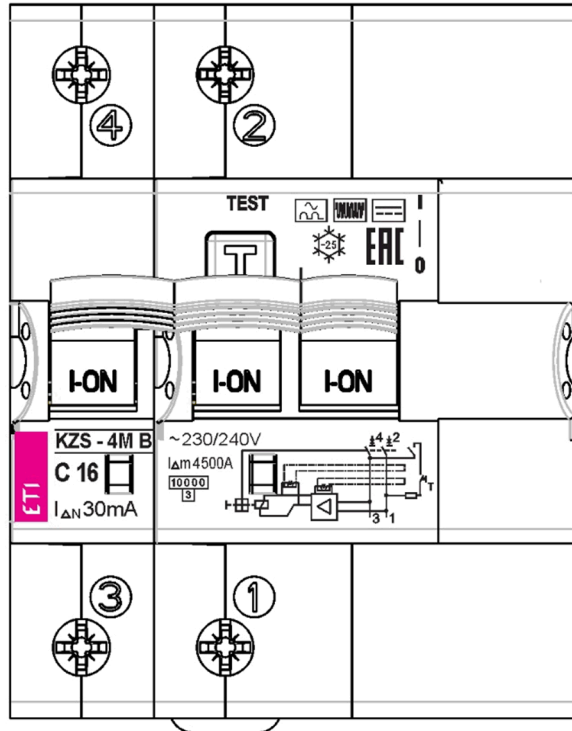
TEST REPORT IEC 62423 Type F and type B residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs)	
Report Number.....	2217690.50
Date of issue	2018-01-08
Total number of pages.....	175
Applicant's name	ETI Elektroelement d.o.o.
Address	Obrezija 5, SI-1411 Izlake, Slovenia
Test specification:	
Standard.....	IEC 62423:2009 (Second Edition) used in conjunction with IEC 61009-1:2010 (Third Edition) +A1:2012 +A2:2013 IEC 61009-2-1:1991 (First Edition) or IEC 61009-2-2:1991 (First Edition)
Test procedure.....	CB Scheme
Non-standard test method.....	N/A
Test Report Form No.	IEC62423B
Test Report Form(s) Originator....	OVE
Master TRF	Dated 2014-04
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This report is not valid as a CB Test Report unless signed by an approved CB Testing Laboratory and appended to a CB Test Certificate issued by an NCB in accordance with IECEE 02.	
General disclaimer:	
The test results presented in this report relate only to the object tested. This report shall not be reproduced, except in full, without the written approval of the Issuing CB Testing Laboratory. The authenticity of this Test Report and its contents can be verified by contacting the NCB, responsible for this Test Report.	
Test item description	Type B residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBO's)
Trade Mark	ETI
Manufacturer.....	ETI Elektroelement d.o.o., Obrezija 5, SI-1411 Izlake, Slovenia
Model/Type reference	KZS-4M B
Ratings	6A, 10A, 13A, 16A, 20A, 25A, 32A, 40A; 230V / 240V B- type, C-type, type A, type B, see more details on page 5

Testing procedure and testing location:		
<input checked="" type="checkbox"/>	CB Testing Laboratory:	DEKRA Certification B.V.
Testing location/ address		Meander 1051, 6825 MJ Arnhem, The Netherlands
<input type="checkbox"/>	Associated CB Testing Laboratory:	
Testing location/ address		
Tested by (name + signature).....		
Approved by (name + signature).....		
<input type="checkbox"/>	Testing procedure: TMP/CTF Stage 1:	
Testing location/ address		
Tested by (name + signature).....		
Approved by (name + signature).....		
<input checked="" type="checkbox"/>	Testing procedure: WMT/CTF Stage 2:	
Testing location/ address		ETI Elektroelement d.o.o., Obrezija 5, SI-1411 Izlake, Slovenia
Tested by (name + signature).....		B. Pesan  A. Petrušič 
Witnessed by (name + signature)		R. Verhagen 
Approved by (name + signature).....		F. Fu 
<input type="checkbox"/>	Testing procedure: SMT/CTF Stage 3 or 4:	
Testing location/ address		
Tested by (name + signature).....		
Witnessed by (name + signature)		
Approved by (name + signature).....		
Supervised by (name + signature)		

<p>List of Attachments (including a total number of pages in each attachment):</p> <p>European group differences and national differences test report: 116 pages EMC test report (issued by SIQ Slovenia): 69 pages</p>	
<p>Summary of testing:</p>	
<p>Tests performed (name of test and test clause):</p> <p>Type test according to IEC 62423:2009 used in conjunction with IEC 61009-1:2010+A1:2012+A2:2013 / IEC 61009-1:2013 Ed. 3.2 (Simplified test procedure). For details see page 8-13.</p>	<p>Testing location:</p> <p>ETI Elektroelement d.o.o. Obrezija 5 SI-1411 Izlake Slovenia</p> <p>Tests specific for type B (Seq D): DEKRA Certification B.V. Meander 1051 6825 MJ, Arnhem The Netherlands</p> <p>Short-circuit tests (Seq C1/C2/D1/E1/F0/F1): ICEM-TC Celovška cesta 1 SI-2351 Kamnica Slovenia</p> <p>EMC testing (Seq H, I, J): SIQ Ljubljana Varnost in elektromagnetika Mašera-Spasičeva ulica 10 SI-1000 Ljubljana Slovenia</p>
<p>Summary of compliance with National Differences</p> <p>List of countries addressed:</p> <p>N/A</p> <p><input checked="" type="checkbox"/> The product fulfils the requirements of IEC 62423:2009 used in conjunction with IEC 61009-1:2010 + A1:2013 + A2:2013 EN 62423:2012 used in conjunction with EN 61009-1:2012 + A1:2014 + A2:2014 + A11:2015 + A12:2016</p>	

Copy of marking plate

The artwork below may be only a draft. The use of certification marks on a product must be authorized by the respective NCBs that own these marks.



Test item particulars..... :	
Type of RCBO	:
- type (A)/ B.....	: Yes
- type (A)/ F.....	: No
Time delay	: Without
Method of operating	: Independent of (char. A) / dependent on the line voltage (char. B)
Type of installation	: Fixed installation
Number of poles	: 2
Protection against external influences	: enclosed / unenclosed
Method of mounting	: surface / flush / panel board / distribution board
Method of connection	:
Instantaneous tripping current	: B / C / D
Rated current (I_n)	: 6 A, 10 A, 13 A, 16 A, 20 A, 25 A, 32 A, 40 A
Rated residual operating current ($I_{\Delta n}$)	: 30 mA, 100 mA, 300 mA
Rated voltage (U_n)	: 240 V
Rated impulse withstand voltage (U_{imp}).....	: 4 kV
Rated frequency (Hz).....	: 50/60 Hz
Rated short-circuit capacity (I_{CN})	: 10000 A
Rated residual making and breaking capacity ($I_{\Delta M}$) :	4500 A
Nature of supply	: a.c.
Type of terminal	: Pillar terminal
Classification of RCBOs functionally dependent on the line voltage:.....	:
Opening automatically in case of failure of the line voltage.....	: No
- reclosing automatically when the line voltage is restored.....	: No
- not reclosing automatically when the line voltage is restored.....	: Yes
Not opening automatically in case of failure of the line voltage.....	: Yes
- able to trip in a hazardous situation arising on failure of line voltage.....	: No
- not able to trip in a hazardous situation arising on failure of line voltage.....	: Yes

<p>Possible test case verdicts:</p> <ul style="list-style-type: none"> - test case does not apply to the test object: N/A - test object does meet the requirement: P (Pass) - test object does not meet the requirement: F (Fail) 	
<p>Testing.....:</p> <p>Date of receipt of test item: 06/2017</p> <p>Date (s) of performance of tests.....: 06/2017 – 11/2017</p>	
<p>General remarks:</p> <p>"(See Enclosure #)" refers to additional information appended to the report. "(See appended table)" refers to a table appended to the report.</p> <p>Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.</p> <p>Projects performed under the IECEE CB-Scheme CTF procedure, are fully in line with the procedures and requirements of the IECEE CB-Scheme, but do not fall under DEKRA Netherland's laboratory accreditation, according to ISO/IEC 17025, by the Dutch Accreditation Council.</p>	
<p>Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:</p>	
<p>The application for obtaining a CB Test Certificate includes more than one factory location and a declaration from the Manufacturer stating that the sample(s) submitted for evaluation is (are) representative of the products from each factory has been provided</p>	<p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> Not applicable</p>
<p>When differences exist; they shall be identified in the General product information section.</p>	
<p>Name and address of factory (ies): ETI Elektroelement d.o.o.</p> <p style="text-align: right;">Obrezija 5 SI-1411 Izlake Slovenia</p>	

General product information:

Type B residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBO's), Type reference: KZS-4M B

Reference list:

KZS-4M B			
Rated current (A)	Rated voltage (V)	ETI Code number	
		B	C
		$I_{\Delta n}$ 30 mA	
6	240	002174511	002174531
10	240	002174512	002174532
13	240	002174513	002174533
16	240	002174514	002174534
20	240	002174515	002174535
25	240	002174516	002174536
32	240	002174517	002174537
40	240	002174518	002174538
		$I_{\Delta n}$ 100 mA	
6	240	002174611	002174631
10	240	002174612	002174632
13	240	002174613	002174633
16	240	002174614	002174634
20	240	002174615	002174635
25	240	002174616	002174636
32	240	002174617	002174637
40	240	002174618	002174638
		$I_{\Delta n}$ 300 mA	
6	240	002174811	002174831
10	240	002174812	002174832
13	240	002174813	002174833
16	240	002174814	002174834
20	240	002174815	002174835
25	240	002174816	002174836
32	240	002174817	002174837
40	240	002174818	002174838