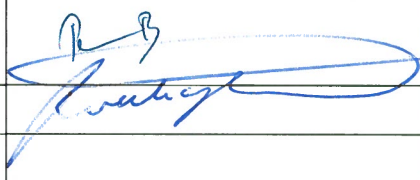




Test Report issued under the responsibility of:



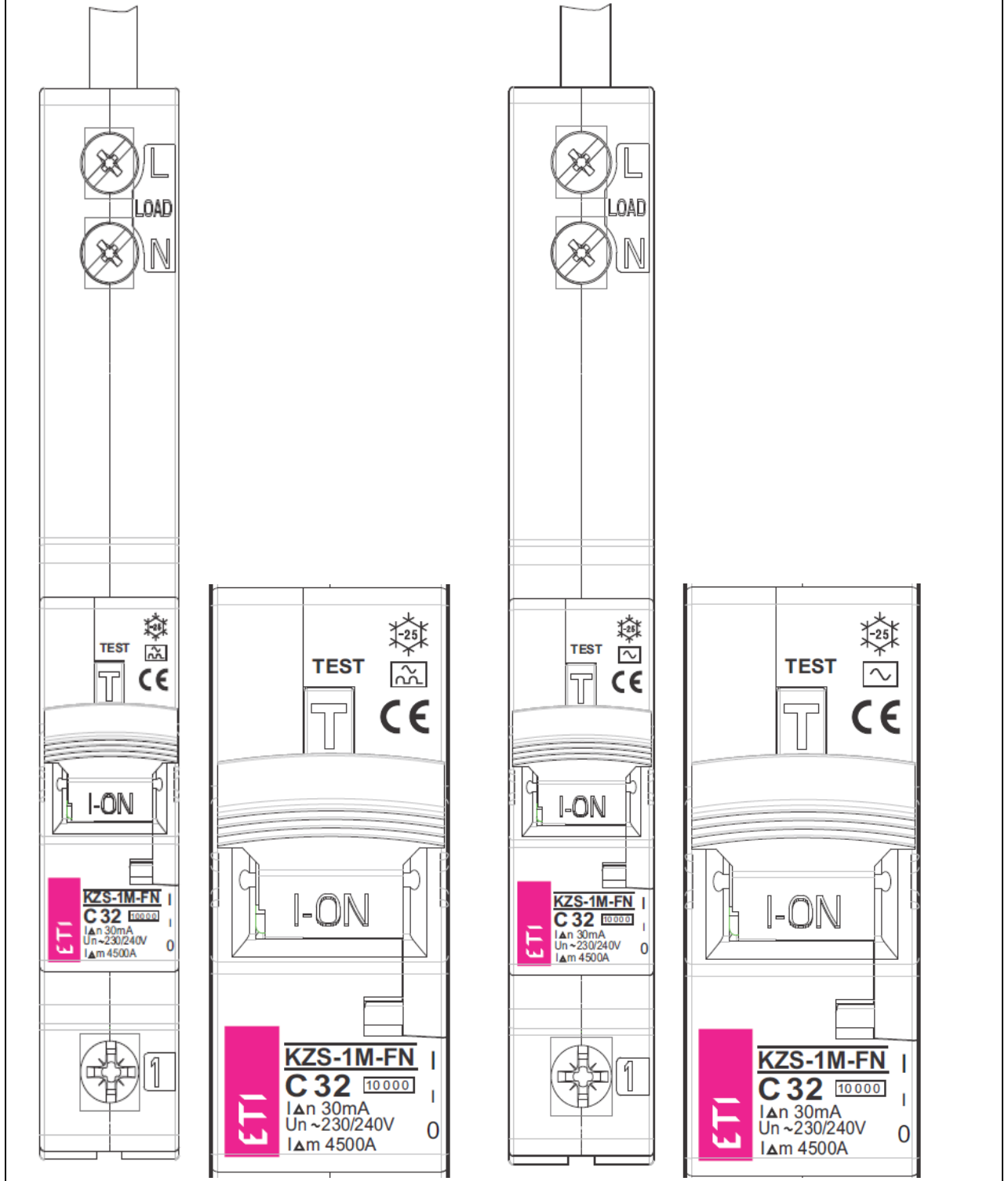
TEST REPORT IEC 61009-1 Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs) Part 1: General rules	
Report Number	2189638.50
Date of issue	18 July 2016
Total number of pages	129
Applicant's name	ETI Elektroelement d.d.
Address	Obrezija 5, SI-1411 Izlake, Slovenia
Test specification:	
Standard	IEC 61009-1:2010 (Third Edition) +A1:2012 +A2:2013 used in conjunction with 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.	IEC61009_1E
Test Report Form(s) Originator	OVE
Master TRF	Dated 2014-01
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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.	
Test item description	Residual current operated circuit-breakers with integral overcurrent protection for household and similar uses (RCBOs)
Trade Mark	ETI
Manufacturer	ETI Elektroelement d.d., Obrezija 5, SI-1411 Izlake, Slovenia
Model/Type reference	KZS-1M FN
Ratings	6 A, 10 A, 13 A, 16 A, 20 A, 25 A, 32 A / B, C / 230 V, 240 V / 1p+N (uninterrupted) / 30 mA, Type A, AC

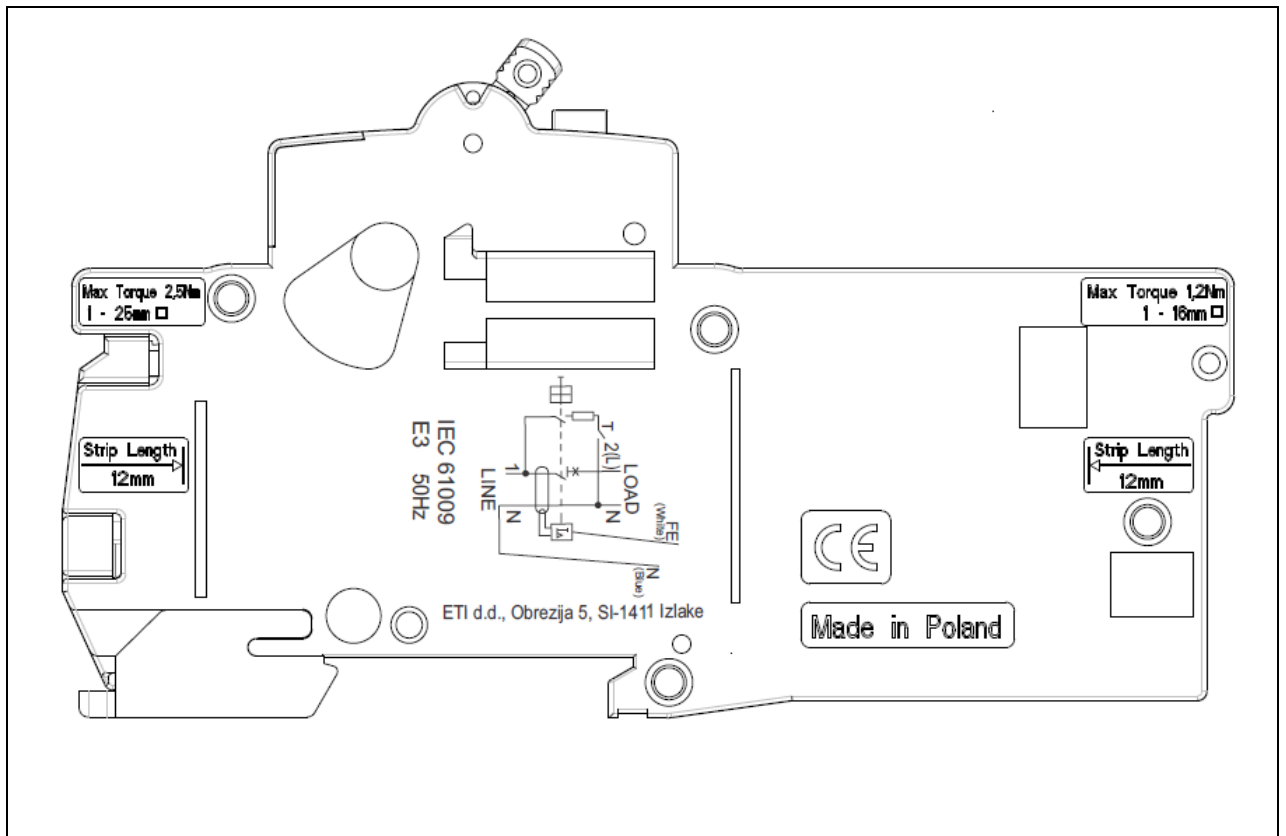
Testing procedure and testing location:		
<input type="checkbox"/>	CB Testing Laboratory:	
Testing location/ address.....:		
<input type="checkbox"/>	Associated CB Testing Laboratory:	
Testing location/ address.....:		
Tested by (name + signature).....:		
Approved by (name + signature).....:		
<input type="checkbox"/>	Testing procedure: TMP	
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.d., Obrezija 5, SI-1411 Izlake, Slovenia ICEM-TC, Celovška cesta 1, SI-2351 Kamnica, Slovenia
Tested by (name + signature).....:		B. Pesan 
Witnessed by (name + signature).....:		R. Verhagen
Approved by (name + signature).....:		
<input type="checkbox"/>	Testing procedure: SMT	
Testing location/ address.....:		
Tested by (name + signature).....:		
Approved by (name + signature).....:		
Supervised by (name + signature)....:		

List of Attachments (including a total number of pages in each attachment): EMC test report issued by SIQ Ljubljana, Slovenia: 84 pages	
Summary of testing:	
Tests performed (name of test and test clause): Type test according to IEC 61009-1: 2010+A1:2012+A2:2013 / IEC 61009-1:2013 Ed. 3.2 (Simplified test procedure), for details see page 8, 9.	Testing location: ETI Elektroelement d.d.; Obrezija 5; SI-1411 Izlake Slovenia Short-circuit tests performed at: ICEM-TC Celovška cesta 1 SI-2351 Kamnica Slovenia
Summary of compliance with National Differences List of countries addressed: Australia, New Zealand <input checked="" type="checkbox"/> The product fulfils the requirements of AS/NZS 61009.1:2015	

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 Certification Bodies that own these marks.





Test item particulars	
Type of RCBO	AC / A
Time delay	without
Method of operating	dependent on the line voltage
Type of installation	fixed installation
Number of poles	Two (1p+N, uninterrupted neutral)
Protection against external influences	Enclosed
Method of mounting	panel board / distribution board
Method of connection	not associated with the mechanical mounting
Instantaneous tripping current	B / C
Rated current (I_N).....	6 A, 10 A, 13 A, 16 A, 20 A, 25 A, 32 A
Rated residual operating current ($I_{\Delta N}$).....	0,03 A
Rated voltage (U_N).....	230 V / 240 V
Rated impulse withstand voltage (U_{imp}).....	4 kV
Rated frequency (Hz)	50 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
Possible test case verdicts:	
- 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)
Testing	
Date of receipt of test item	
Date (s) of performance of tests..... 02/2016 to 04/2016	

General remarks:

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 testing laboratory.

"(see Enclosure #)" refers to additional information appended to the report.

"(see appended table)" refers to a table appended to the report.

Throughout this report a comma / point is used as the decimal separator.

Name and address of factory (ies).....: **ETI Polam Sp. z.o.o.**

ul. Jana Pawła II 18

06-100 Pułtusk

Poland

General product information:

Residual current operated circuit-breakers
 With integral overcurrent protection
 For household and similar uses
 (RCBO's)

Type

KZS-1M FN

KZS-1M FN is voltage dependent 1p+N (with uninterrupted neutral) RCBO (in residual current detection part), types A and AC.

Both types (Type A and AC) are same in construction and uses identical residual current detection electronics (electronics is identical for A and AC). The difference is only on the marking plate.

Reference list:

KZS-1M FN					
Rated current (A)	Rated voltage (V)	ETI Code number			
		Type AC		Type A	
		Characteristic B	Characteristic C	Characteristic B	Characteristic C
6	230/240	002175501	002175521	002175581	002175591
10	230/240	002175502	002175522	002175582	002175592
13	230/240	002175503	002175523	002175583	002175593
16	230/240	002175504	002175524	002175584	002175594
20	230/240	002175505	002175525	002175585	002175595
25	230/240	002175506	002175526	002175586	002175596
32	230/240	002175507	002175527	002175587	002175597