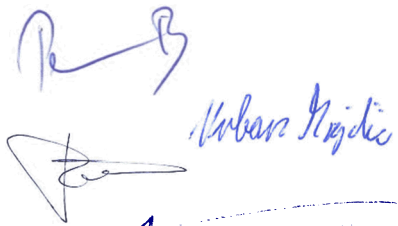
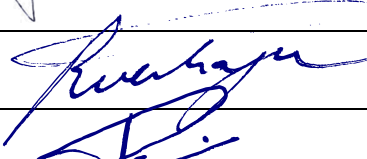





Test Report issued under the responsibility of:



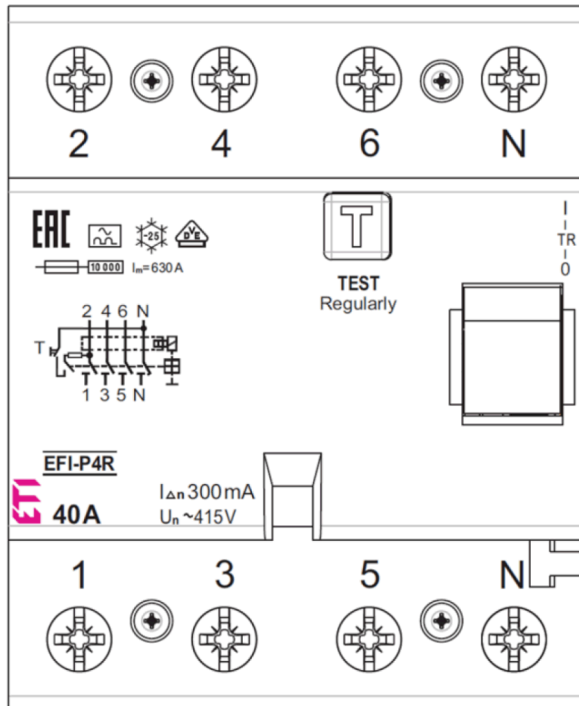
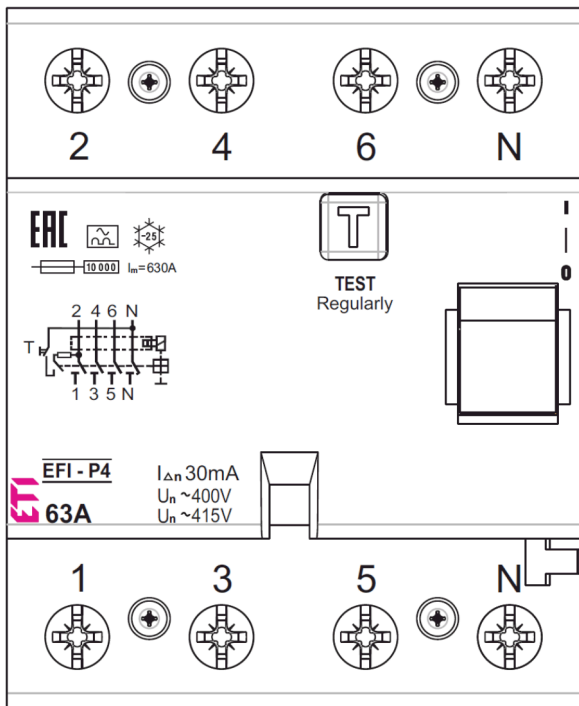
<b>TEST REPORT</b> <b>IEC 61008-1</b> <b>Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs)</b> <b>Part 1: General rules</b>	
<b>Report Number</b> .....	2247906.51
<b>Date of issue</b> .....	2020-07-09
<b>Total number of pages</b> .....	145
<b>Name of Testing Laboratory preparing the Report</b> .....	DEKRA Certification B.V.
<b>Applicant's name</b> .....	ETI Elektroelement d.o.o.
<b>Address</b> .....	Obrezija 5, SI-1411 Izlake, Slovenia
<b>Test specification:</b>	
<b>Standard</b> .....	IEC 61008-1:2010 (Third Edition) +A1:2012 +A2:2013 used in conjunction with IEC 61008-2-1:1990 (First Edition) or IEC 61008-2-2:1990 (First Edition)
<b>Test procedure</b> .....	CB Scheme
<b>Non-standard test method</b> .....	N/A
<b>Test Report Form No.</b> .....	IEC61008_1H
<b>Test Report Form(s) Originator</b> ....	OVE
<b>Master TRF</b> .....	Dated 2015-11
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If this Test Report Form is used by non-IECEE members, the IECEE/IEC logo and the reference to the CB Scheme procedure shall be removed.	
<b>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.</b>	
<b>General disclaimer:</b>	
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.	

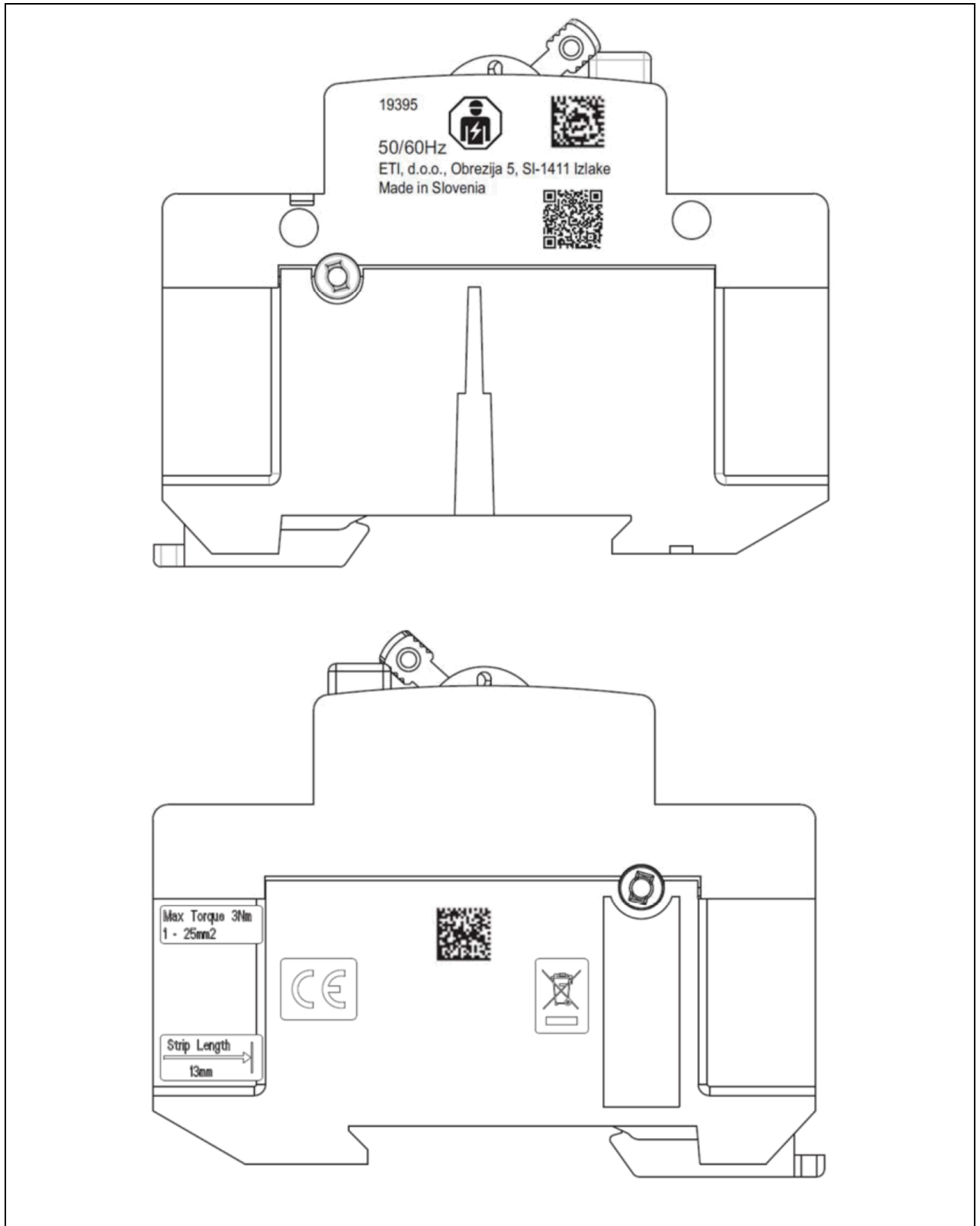
<b>Test item description</b> .....	Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs)	
<b>Trade Mark</b> .....	ETI	
<b>Manufacturer</b> .....	ETI Elektroelement d.o.o., Obrezija 5, SI-1411 Izlake, Slovenia	
<b>Model/Type reference</b> .....	EFI-P4, EFI-P4R	
<b>Ratings</b> .....	16 A, 25 A, 32 A, 40 A, 63 A / 30 mA, 100 mA, 300 mA, 500 mA / Type A, AC / 400 V, 415 V / 4p (3p+N) / 50/60 Hz	
<b>Responsible Testing Laboratory (as applicable), testing procedure and testing location(s):</b>		
<input checked="" type="checkbox"/> <b>CB Testing Laboratory:</b>	DEKRA Certification B.V.	
<b>Testing location/ address</b> .....	Meander 1051, 6825 MJ Arnhem, The Netherlands	
<input type="checkbox"/> <b>Associated CB Testing Laboratory:</b>		
<b>Testing location/ address</b> .....		
<b>Tested by (name, function, signature)</b> .....		
<b>Approved by (name, function, signature)</b> ..		
<b>Testing procedure: CTF Stage 1:</b>		
<b>Testing location/ address</b> .....		
<b>Tested by (name, function, signature)</b> .....		
<b>Approved by (name, function, signature)</b> ..		
<b>Testing procedure: CTF Stage 2:</b>		
<b>Testing location/ address</b> .....	ETI Elektroelement d.o.o., Obrezija 5, SI-1411 Izlake, Slovenia	
<b>Tested by (name + signature)</b> .....	Branko Pesan  Urban Majdič  Andjelko Petrušič	
<b>Witnessed by (name, function, signature)</b> ..	R. Verhagen	
<b>Approved by (name, function, signature)</b> ..	F.S. Strikwerda	
<b>Testing procedure: CTF Stage 3:</b>		
<b>Testing procedure: CTF Stage 4:</b>		
<b>Testing location/ address</b> .....		
<b>Tested by (name, function, signature)</b> .....		
<b>Witnessed by (name, function, signature)</b> ..		
<b>Approved by (name, function, signature)</b> ..		
<b>Supervised by (name, function, signature)</b> :		

<b>List of Attachments (including a total number of pages in each attachment):</b>	
European group differences and national differences test report: 35 pages EMC test report (issued by SIQ Slovenia): 53 pages	
<b>Summary of testing:</b>	
<b>Tests performed (name of test and test clause):</b>	<b>Testing location:</b>
Type test according to IEC 61008-1:2010+A1:2012+A2:2013 (Simplified test procedure). For details see page 10, 11.	Test laboratory 1: <b>DEKRA Certification B.V.</b> Meander 1051 6825 MJ, Arnhem The Netherlands  Test laboratory 2: <b>ETI Elektroelement d.o.o.</b> Obrezija 5 SI-1411 Izlake Slovenia  Test laboratory 3: <b>ICEM-TC</b> Celovška cesta 1 SI-2351 Kamnica Slovenia  Test laboratory 4: <b>SIQ Ljubljana</b> <b>Varnost in elektromagnetika</b> Mašera-Spasičeva ulica 10 SI-1000 Ljubljana Slovenia
<b>Summary of compliance with National Differences (List of countries addressed):</b>	
<input checked="" type="checkbox"/> <b>The product fulfils the requirements of IEC 61008-1:2010 + A1:2012 + A2:2013, EN 61008-1:2012 + A1:2014 + A2:2014 + A11:2015 + A12:2017 used in conjunction with EN 61008-2-1:1994 + A11:1998 and AS/NZS 61008.1:2015</b>	

**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.





<b>Test item particulars</b> .....	
Classification of RCCBs functionally dependent on the / line voltage .....	
Opening automatically in case of failure of the line / voltage.....	
- 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.....	
- 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
Type of RCCB .....	
- type AC .....	Yes
- type A.....	Yes
- independent of the line voltage .....	Yes
- dependent on the line voltage.....	No
- without time delay .....	Yes
- with time delay: type S .....	No
- enclosed.....	No
- unenclosed .....	Yes
- IP number.....	IP 20
- for fixed installation .....	Yes
- for mobile installation.....	No
Number of poles.....	4
Ambient air temperature (°C).....	
Method of mounting .....	On DIN rail (panel board / distribution board)
Method of connection.....	Not associated with mechanical mounting
Rated residual operating current (A).....	30 mA, 100 mA, 300 mA, 500 mA
Rated current (A) .....	16 A, 25 A, 32 A, 40 A, 63 A
Rated voltage (V).....	400 V / 415 V
Rated impulse withstand voltage ( $U_{imp}$ )	4 kV
Nature of supply.....	a.c.
Rated frequency (Hz) .....	50/60 Hz

Rated making and breaking capacity (A)..... : 630 A	
Rated residual making and breaking capacity (A)..... : 630 A	
Rated conditional short-circuit current (A) ..... : 10000 A	
Rated conditional residual short-circuit current (A) ... : 10000 A	
Type of terminal..... : Cage	
<b>Possible test case verdicts:</b>	
- 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)	
<b>Testing</b> .....	
Date of receipt of test item..... : 06/2018 – 07/2019, 06/2020	
Date (s) of performance of tests ..... : 06/2018 – 07/2019, 06/2020 - 07/2020	
<b>General remarks:</b>	
<p>"(see Enclosure #)" refers to additional information appended to the report.  "(see appended table)" refers to a table appended to the report.</p> <p><b>Throughout this report a <input checked="" type="checkbox"/> comma / <input type="checkbox"/> point is used as the decimal separator.</b></p> <p>RCCB's EFI-P4 type AC are the same as RCCB's EFI-P4 type A, only marking plate is different in symbol for type AC or A – test results of EFI-P4 type A also applies for EFI-P4 type AC.</p> <p>This TRF replaces TRF 2224145.51 issued on 2019-10-03. The EFI-P4R types with reset position have been added in this TRF.</p> <p>N.B.: 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>	
<b>Manufacturer's Declaration per sub-clause 4.2.5 of IECEE 02:</b>	
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.....:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> Not applicable
<b>When differences exist; they shall be identified in the General product information section.</b>	
Name and address of factory (ies)..... : ETI Elektroelement d.o.o. Obrezija 5 SI-1411 Izlake Slovenia	

**General product information:**

## EFI-P4 reference list:

Rated current (A)	Rated $I_{\Delta n}$ (A)	ETI Code number	
		Type A	Type AC
16	0,03	002061510	002061610
25	0,03	002061511	002061611
40	0,03	002061512	002061612
63	0,03	002061513	002061613
16	0,1	002061520	002061620
25	0,1	002061521	002061621
40	0,1	002061522	002061622
63	0,1	002061523	002061623
16	0,3	002061530	002061630
25	0,3	002061531	002061631
40	0,3	002061532	002061632
63	0,3	002061533	002061633
16	0,5	002061540	002061640
25	0,5	002061541	002061641
40	0,5	002061542	002061642
63	0,5	002061543	002061643

## EFI-P4R reference list:

Rated current (A)	Rated $I_{\Delta n}$ (A)	ETI Code number	
		Type A	
16	0,03	002061860	
25	0,03	002061861	
40	0,03	002061862	
63	0,03	002061863	
16	0,1	002061870	
25	0,1	002061871	
40	0,1	002061872	
63	0,1	002061873	
16	0,3	002061880	
25	0,3	002061881	
40	0,3	002061882	
63	0,3	002061883	
16	0,5	002061890	
25	0,5	002061891	
40	0,5	002061892	
63	0,5	002061893	

EFI-P4R has a handle with reset position. In all other aspects the products are identical to the EFI-P4.





OD ECS 040-1  
January 2019

Responsible CB



### TEST REPORT SUMMARY

**Report Number**..... : **2247906.51**

**Date of issue**..... : 2020-07-09

**Tested by (name, function, signature):** B. Pesan  
(R&D Laboratory Manager)

**Witnessed by (name, function, signature):** R. Verhagen  
(Project Manager Industrial Safety)

**Approved by (name, function, signature):** F.S. Strikwerda  
(Project Manager Industrial Safety)

**Supervised by (name, function, signature):** -

**Testing Laboratory**..... : **DEKRA Certification B.V.**

**Address** ..... : Meander 1051, 6825 MJ Arnhem, The Netherlands

**Testing procedure**..... :  ENEC  CCA NTR

ENEC based on IEC/IEC CBTC with number: .....

**Customer Testing Procedure**..... :  TMP/CTF Stage 1  WMT/CTF Stage 2  SMT/CTF Stage 3

**Applicant**..... : **ETI Elektroelement d.o.o.**

**Address** ..... : Obrezija 5, SI-1411 Izlake, Slovenia

**Manufacturer**..... : **ETI Elektroelement d.o.o.**

**Address** ..... : Obrezija 5, SI-1411 Izlake, Slovenia

**Product**..... : **Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs)**

**Model/Type reference** ..... : EFI-P4, EFI-P4R

**Trademark**..... : ETI

**Ratings** ..... : 16 A, 25 A, 32 A, 40 A, 63 A / 30 mA, 100 mA, 300 mA, 500 mA / Type A, AC / 400 V, 415 V / 4p (3p+N) / 50/60 Hz

**Certification Scheme** ..... :  ENEC  CCA  Other: \_\_\_\_\_

**Standard(s)**..... : EN 61008-1:2012+A1:2014+A2:2014 used in conjunction with EN 61008-2-1:1994 + A11:1998

The text of the a.m. European Standard was approved by CENELEC is equivalent with the corresponding IEC Publication.

The text of the a.m. European Standard was approved by CENELEC with agreed common modifications and is not equivalent with the corresponding IEC Publication. An EU Deviation Addendum has to be issued.

**This EN test report consists of the following parts:**

IEC Test Report Number..... : IEC61008\_1H 2247906.51

EU Deviation Addendum..... : EU\_GD\_IEC61008\_1H 2247906.51

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