

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50426961

Blatt *Sheet*
0001

Ihr Zeichen *Client Reference*
G.J.Q.

Unser Zeichen *Our Reference*
01-DY-50216420 001

Ausstellungsdatum *Date of Issue*
16.01.2019 (day/mo/yr)

Genehmigungsinhaber *License Holder*

DELIXI ELECTRIC LTD
Delixi High Tech Industrial Park,
Liushi Town, Yueqing City,
Zhejiang Province 325604
P. R. China

Fertigungsstätte *Manufacturing Plant*

DELIXI ELECTRIC LTD
Delixi High Tech Industrial Park,
Liushi Town, Yueqing City,
Zhejiang Province 325604
P. R. China

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

EN 60898-1:2003+A1+A11+A12+A13

**Zertifiziertes Produkt (Geräteidentifikation)
*Certified Product (Product Identification)***

**Lizenzentgelte - Einheit
*License Fee - Unit***

Circuit Breaker (Miniature Circuit-breaker)

Type Designation	: HDB3wHN (DELIXI)	8
Nature of Supply	: AC	
Instantaneous Tripping Current	: B/C/D-Type	
Number of Poles	: 1P/1P+N/2P/ 3P/3P+N/4P	
Rated Operation Voltage	: 240/415V(1P) 240V(1P+N) 415V(2P/3P/3P+N/4P)	
Rated Frequency	: 50/60Hz for AC	
Service short-circuit capacity	: 6,0kA	
Rated Short-circuit Capacity	: 6,0kA	
Energy Limit Class	: Class 3	
Rated Current	: 1/2/3/4/5/6/8/10/13/16/20/ 25/32/40/50/63A(B/C/D-Type)	
Rated insulation voltage	: 500V	
Rated Impulse Withstand Voltage	: 4,0kV	
Degree of protection	: IP20	
Suitability of isolation	: Yes	
Pollution degree	: 2	

8

ANLAGE (Appendix): 1

Dem Zertifikat liegt unsere Prüf- und Zertifizierungsordnung zugrunde und es bestätigt die Konformität des Produktes mit den oben genannten Standards und Prüfgrundlagen. Zusätzliche Anforderungen in Ländern, in denen das Produkt in Verkehr gebracht werden soll, müssen zusätzlich betrachtet werden. Die Herstellung des zertifizierten Produktes wird überwacht.
This certificate is based on our Testing and Certification Regulation and states the conformity of the product with the standards and testing requirements as indicated above. Any additional requirements in countries where the product is going to be marketed have to be considered additionally. The manufacturing of the certified product is subject to surveillance.

TÜV Rheinland LGA Products GmbH, Tillystraße 2, 90431 Nürnberg

Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

Zertifizierungsstelle



Jie Zhang

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50426961

Blatt *Sheet*
0002

Ihr Zeichen *Client Reference*
G.J.Q.

Unser Zeichen *Our Reference*
01-DY-50216420 001

Ausstellungsdatum *Date of Issue*
16.01.2019 (day/mo/yr)

Genehmigungsinhaber *License Holder*
DELIXI ELECTRIC LTD
Delixi High Tech Industrial Park,
Liushi Town, Yueqing City,
Zhejiang Province 325604
P. R. China

Fertigungsstätte *Manufacturing Plant*
DELIXI ELECTRIC (WUHU) LTD
Wuhu Machinery Industrial Park,
Wuhu city, Anhui Province 241100
P. R. China

Prüfzeichen *Test Mark*



Type Approved
Safety
Regular Production
Surveillance

www.tuv.com
ID 1419065306

Geprüft nach *Tested acc. to*
EN 60898-1:2003+A1+A11+A12+A13

**Zertifiziertes Produkt (Geräteidentifikation)
*Certified Product (Product Identification)***

**Lizenzentgelte - Einheit
*License Fee - Unit***

Circuit Breaker (Miniature Circuit-breaker)

as page 0001

Addition

Name of Factory : See above

Address of Facotry: See above

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Tel.: +49 221 806-1371 e-mail: cert-validity@de.tuv.com
Fax: +49 221 806-3935 http://www.tuv.com/safety

Zertifizierungsstelle



Jie Zhang

DELIXI ELECTRIC LTD
Mr. Guo Jianquan
-
Delixi High Tech Industrial Park,
Liushi Town, Yueqing City,
Zhejiang Province 325604
P. R. China

Date : 16.01.2019
Our ref. : DY 01
Your ref.: G.J.Q.

Ref : R TÜV-Mark Approval

Type of Equipment : Miniature Circuit-breaker
Model Designation : See Certificate
Certificate No. : R 50426961 0001
Report No. : 50216420 001

Dear Mr. Guo Jianquan,

The above specified equipment has been tested and found to be in accordance with the relevant requirements.

Please find enclosed your certificate as specified above.

If cancellation of the certificate is submitted by 15 November in a given year, no fee will be charged for the following year.

The certificate is issued with the reservation that the license holder applies all information required in § 6 of the ProdSG related to name and address of the manufacturer or his authorized representative / importer, including their respective contact addresses on the product prior to marketing of the product in the European Economic Area.

With kind regards,

Certification Body


Jie Zhang

cc: DELIXI ELECTRIC LTD

Enclosure

证书的详细资料请登陆www.tuvdotcom.com查阅,或拨打我司客服热线800 999 3668 / 400 883 1300咨询

C E R T I F I C A T E



of Conformity Low Voltage Directive 2014/35/EU

Registration No.: AN 50427160 0001

Report No.: 50216420 001

Holder: **DELIXI ELECTRIC LTD**
Delixi High Tech Industrial Park,
Liushi Town, Yueqing City,
Zhejiang Province 325604
P. R. China

Product: Circuit Breaker
(Miniature Circuit-breaker)

Identification: Type Designation: HDB3WHN (DELIXI)

Serial No. : Engineering sample

Remark: Issued in conjunction with TÜV Rheinland license
R 50426961 0001-0002.

This certificate of conformity is based on an evaluation of a sample of the above mentioned product. Technical Report and documentation are at the Licence Holder's disposal. This is to certify that the tested sample is in conformity with Annex I of Council Directive 2014/35/EU, referred to as the Low Voltage Directive. This certificate does not imply assessment of the series-production of the product and does not permit the use of a TÜV Rheinland mark of conformity. The holder of the certificate is authorized to use this certificate in connection with the EC declaration of conformity according to Annex IV of the Directive.

Certification Body

Date 16.01.2019

A blue ink signature of Jie Zhang is written over a circular blue stamp. The stamp contains the text 'TÜV Rheinland LGA Products GmbH' and 'Zertifizierungsstelle' around a central logo.

TÜV Rheinland LGA Products GmbH - Tillystraße 2 - 90431 Nürnberg

CE The CE marking may be used if all relevant and effective EC Directives are complied with. **CE**

DELIXI ELECTRIC LTD
Mr. Guo Jianquan
-
Delixi High Tech Industrial Park,
Liushi Town, Yueqing City,
Zhejiang Province 325604
P. R. China

Date : 16.01.2019
Our ref. : DY 01
Your ref. : G.J.Q.

Ref : AN Certificate of Conf. Low Voltage D.

Type of Equipment : Miniature Circuit-breaker
Model Designation : See Certificate
Certificate No. : AN 50427160 0001
Report No. : 50216420 001

Dear Mr. Guo Jianquan,

We herewith confirm that a sample of the above mentioned technical equipment has been tested and was found to be in accordance with the relevant requirements.

Enclosed please find your Certificate of Conformity.

We appreciate your kind support and would like to offer our assistance and continuous services in the future.

With kind regards,

Certification Body


Jie Zhang

CC: DELIXI ELECTRIC LTD

Enclosure

证书的详细资料请登陆www.tuvdotcom.com查阅,或拨打我司客服热线800 999 3668 / 400 883 1300咨询

Certificate No. R 50426961 0001-0002 **Our Reference** 01-DY-50216420 001 **Appendix No.** 1

Constructional Data Form (CDF) for Circuit-breaker (EN60898)

Page 1 of 4

Applicant: DELIXI ELECTRIC LTD
(full address): Delixi High Tech Industrial Park, Liushi Town, Yueqing City, Zhejiang Province 325604, P.R. China
Factory 1: DELIXI ELECTRIC LTD
(full address): Delixi High Tech Industrial Park, Liushi Town, Yueqing City, Zhejiang Province 325604, P.R. China
Factory 2: DELIXI ELECTRIC (WUHU) LTD
(full address): Wuhu Machinery Industrial Park, Wuhu city, Anhui Province 241100, P.R. China
Type or Model Number: HDB3wHN
Kind of device: Miniature Circuit-breakers (MCB)

Information/rated values for the switching element:

Type designation	HDB3wHN		
Contact material	Moving Contact: TY3 Fixed Contact: AgC4/CuC1(D)		
Interrupting medium	Air		
Nature of supply	AC 50/60Hz		
Number of poles	1P	1P+N	2P/3P/3P+N/4P
Number of protection pole	//	1 protection pole	2P: 2 protection pole; 3P/3P+N: 3 protection pole 4P: 4 protection pole
Rated operational voltage Ue a.c.	240V/415V	240V	415V
Rated current In	1/2/3/4/5/6/8/10/13/16/20/25/32/40/50/63A		
Instantaneous tripping current	B/C/D-type		
Rated short-circuit capacity Icn a.c.	6,0kA		
Rated short-circuit capacity Icn d.c.	- kA		
Service short-circuit capacity Ics a.c.	Same as Icn		
Service short-circuit capacity Ics d.c.	- kA		
Rated making and breaking capacity on an individual pole Icn1	Same as Icn		
Rated insulation voltage	500 V		
Rated impulse withstand voltage	4,0 kV		
Degree of protection	IP20		
Protection against external influence	Unenclosed type		
Method of mounting	Flush-type (on rail)		
Range of ambient air temperature	30 °C		
Method of connection	Not associated with mechanical mounting		

TÜV Rheinland Group

License holder

04.01.2019

Date

Signature

Name

Company Stamp and Signature

Certificate No. R 50426961 0001-0002 Our Reference 01-DY-50216420 001 Appendix No. 1

Constructional Data Form (CDF) for Circuit-breaker (EN60898)

Page 2 of 4

Overvoltage category	II
Suitability of isolation	Yes
Pollution degree	2
I2t characteristic (energy limit class)	3

Terminals /connection:

Type designation	HDB3wHN
Number of poles	1P, 1P+N, 2P, 3P, 3P+N, 4P
Terminal designation; main circuit (AC)	1, N, 2, N, 3, 3,N, 4,N
Terminal designation; main circuit (DC)	-
Terminal designation; control circuit	-
Type of Terminal/% main circuit	Pillar terminal / - %
Type of terminal/% control circuit	- / - %
Type of conductor main circuit	Rigid or flexible
Type of conductor control circuit	-
Required preparation of conductor	No
Rigid Conductor size (mm ²)	Min. 1 to 2,5 (< 13 A) ... Max. 4 to 16 (32 - 50 A)
Flexible Conductor size (mm ²)	Min. 1 to 2,5 (< 13 A) ... Max. 4 to 10 (32 - 50 A)
Number of conductors per terminal	1
Stripping length (mm)	Max.: 8,0 mm
Tightening torque; main circuit (Nm)	1,2Nm (over 3,6mm up to and including 4,1mm)
Tightening torque; control circuit (Nm)	-
Material/plating terminal; main circuit	Zn Planted Cold-Roll Steel
Material/plating terminal; control circuit	-
Material/plating of the screw	Zn Planted Cold-Roll Steel
Material/plating of the washer	-

TÜV Rheinland Group

04.01.2019

Date


 Signature

License holder

Name

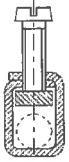




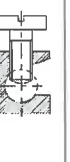
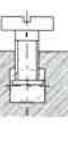
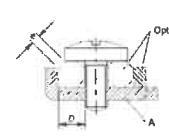
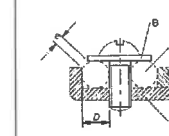
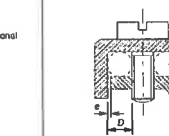
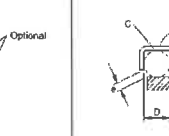

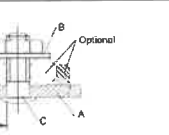



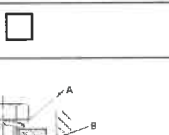
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Constructional Data Form (CDF) for Circuit-breaker (EN60898)

Page 3 of 4

Terminal Figure

Pillar terminal	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
								Other
Screw terminal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
					<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stud terminal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Saddle terminal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lug terminal	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
			<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

TÜV Rheinland Group

License holder

04.01.2019

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Signature

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Constructional Data Form (CDF) for Circuit-breaker (EN60898)

Page 4 of 4

Plastic insulating parts:

Part name	Manufacturer	Material name (particle)	CTI	Flame class	Material Group
Base & Cover	HEXING LTD	PA6	175	GWT: 960°C	IIIa
(alternate)	Shanghai Geranbo Precise Mould Factory	PA6	175	GWT: 960°C	IIIa
(alternate)	Jianda Electrical Appliance (Kunshan) Co., Ltd.	PA6	175	GWT: 960°C	IIIa
(alternate)	Zhejiang Yabo Electric Appliance Co., Ltd.	PA6	175	GWT: 960°C	IIIa
Handle	HEXING LTD	PC	175	GWT: 650°C	IIIa
(alternate)	Shanghai Geranbo Precise Mould Factory	PC	175	GWT: 650°C	IIIa
(alternate)	Jianda Electrical Appliance (Kunshan) Co., Ltd.	PC	175	GWT: 650°C	IIIa
(alternate)	Zhejiang Yabo Electric Appliance Co., Ltd.	PC	175	GWT: 650°C	IIIa

Other information: N/A

TÜV Rheinland Group

04.01.2019

Date

Signature

License holder

Name

Company Stamp and Signature

PHOTO DOCUMENTATION

50216420 001

for

Miniature Circuit-breaker

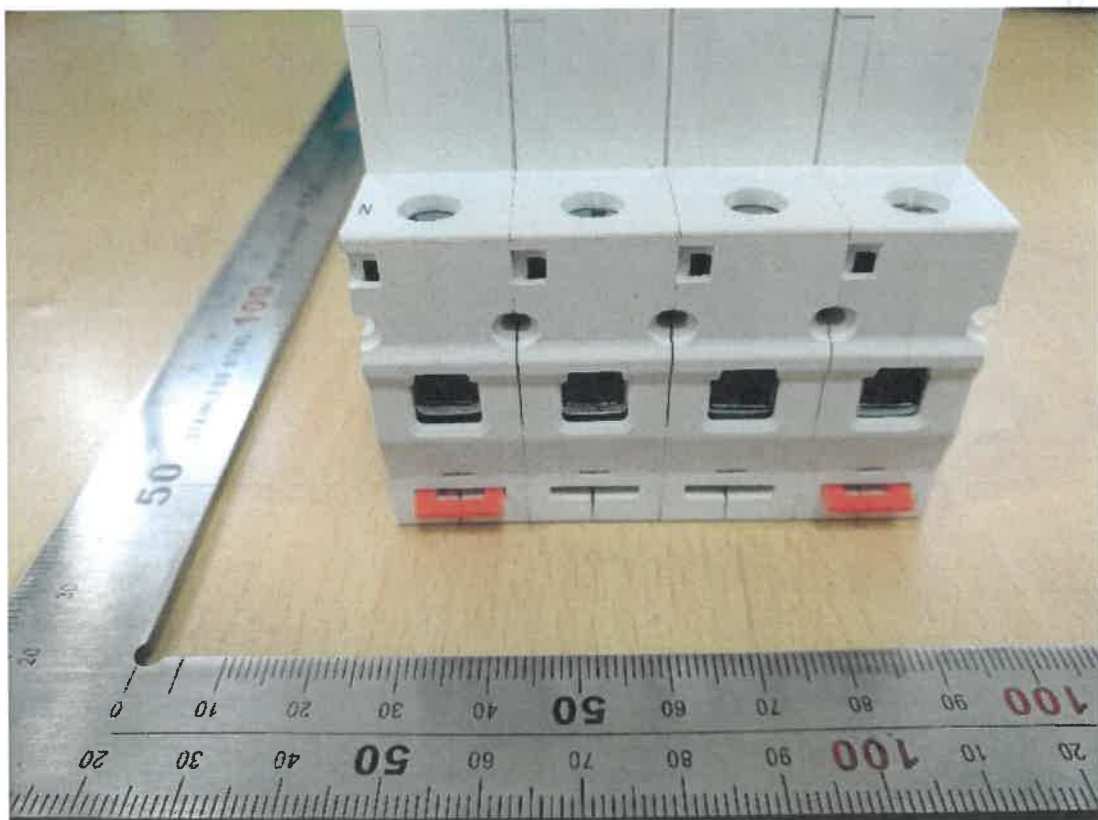
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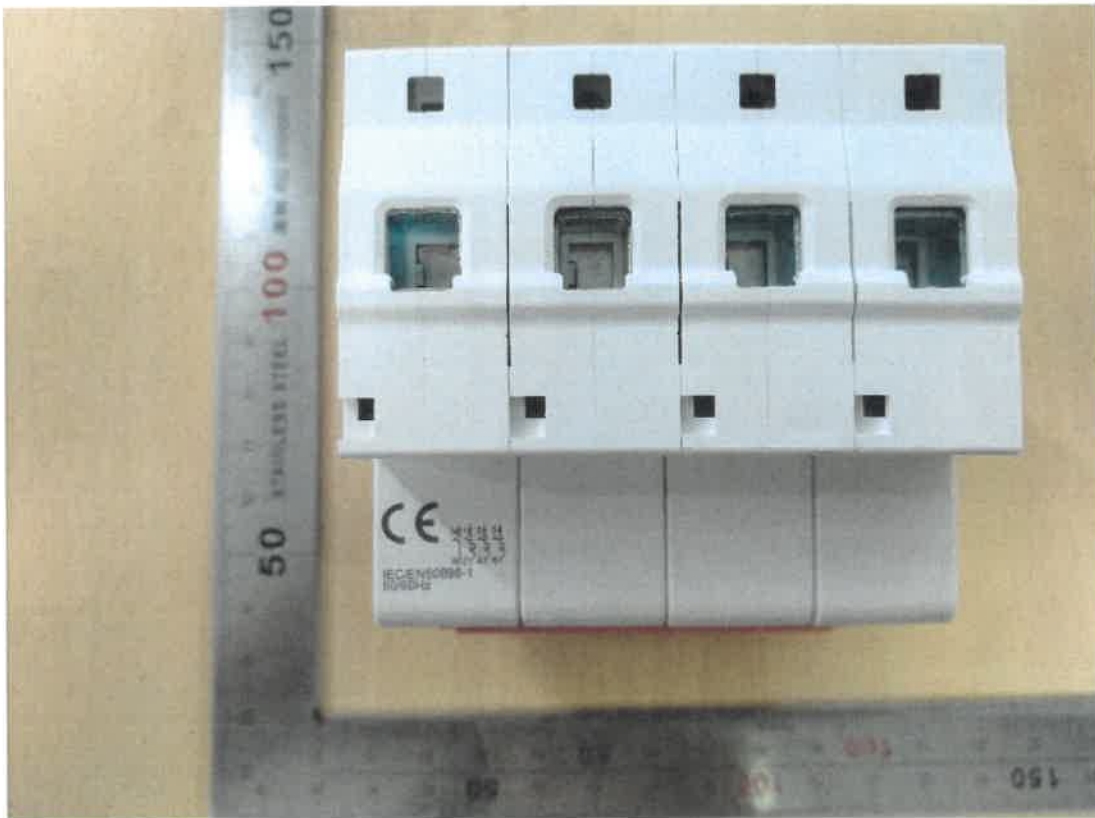
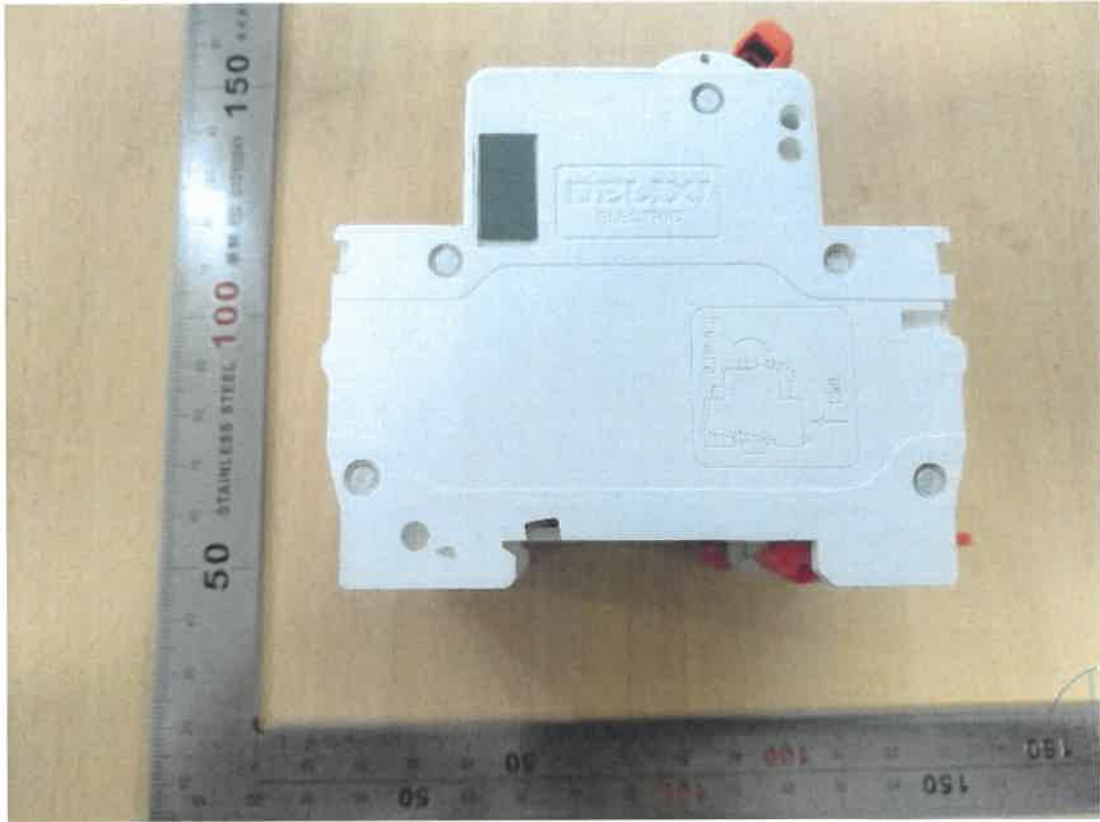
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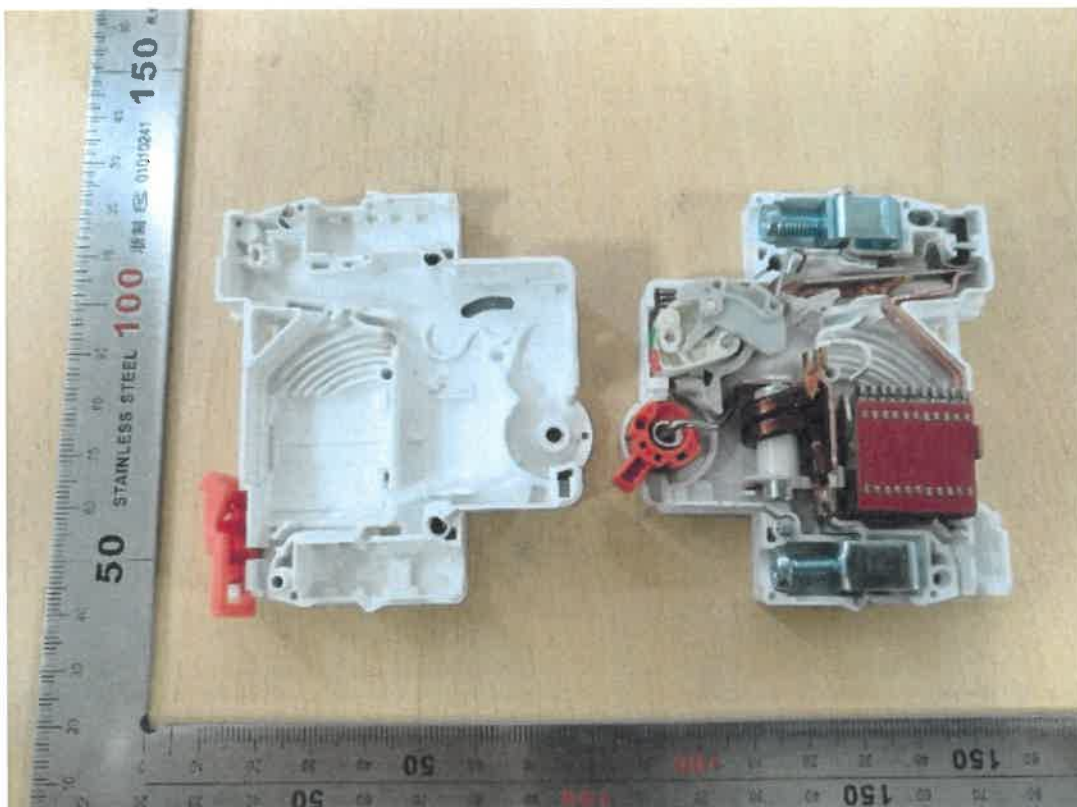
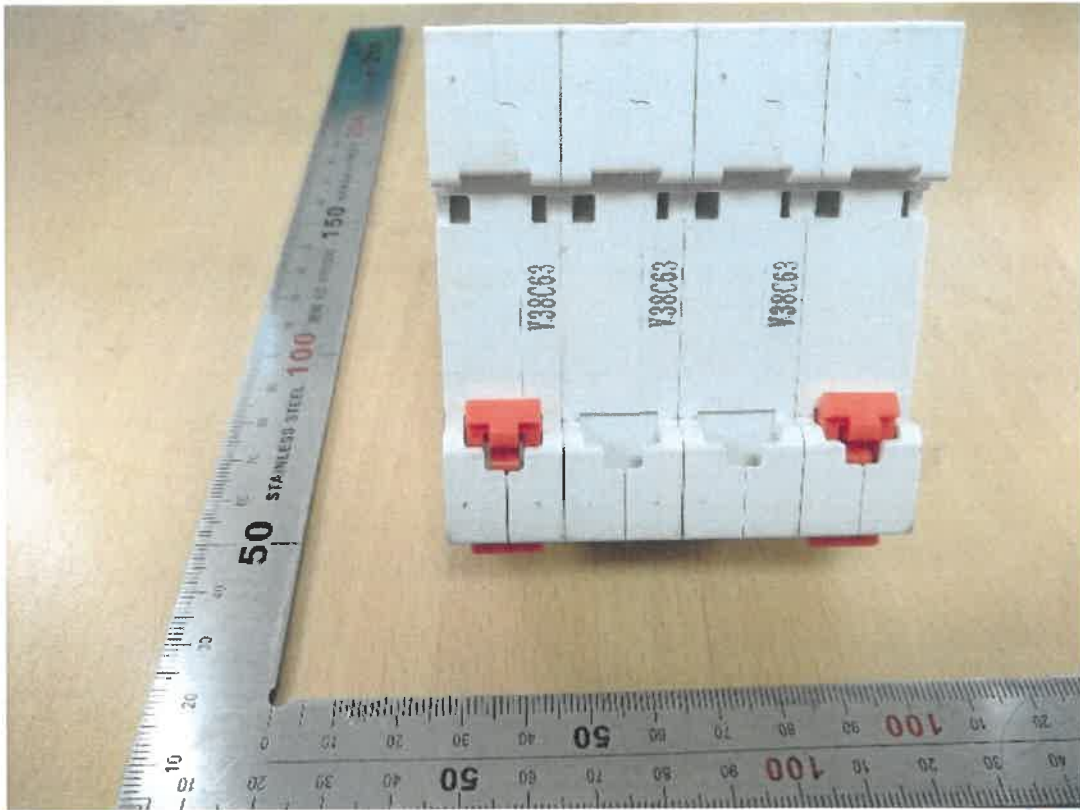


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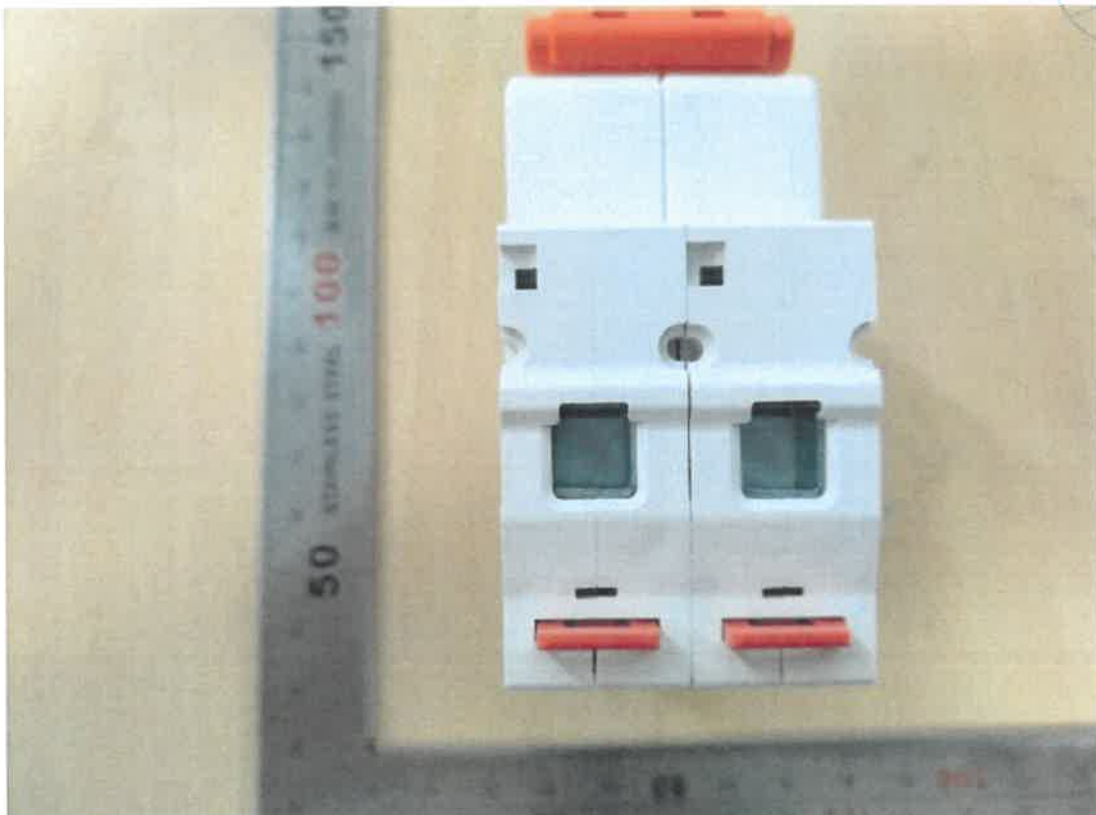
Construction of C63 4P

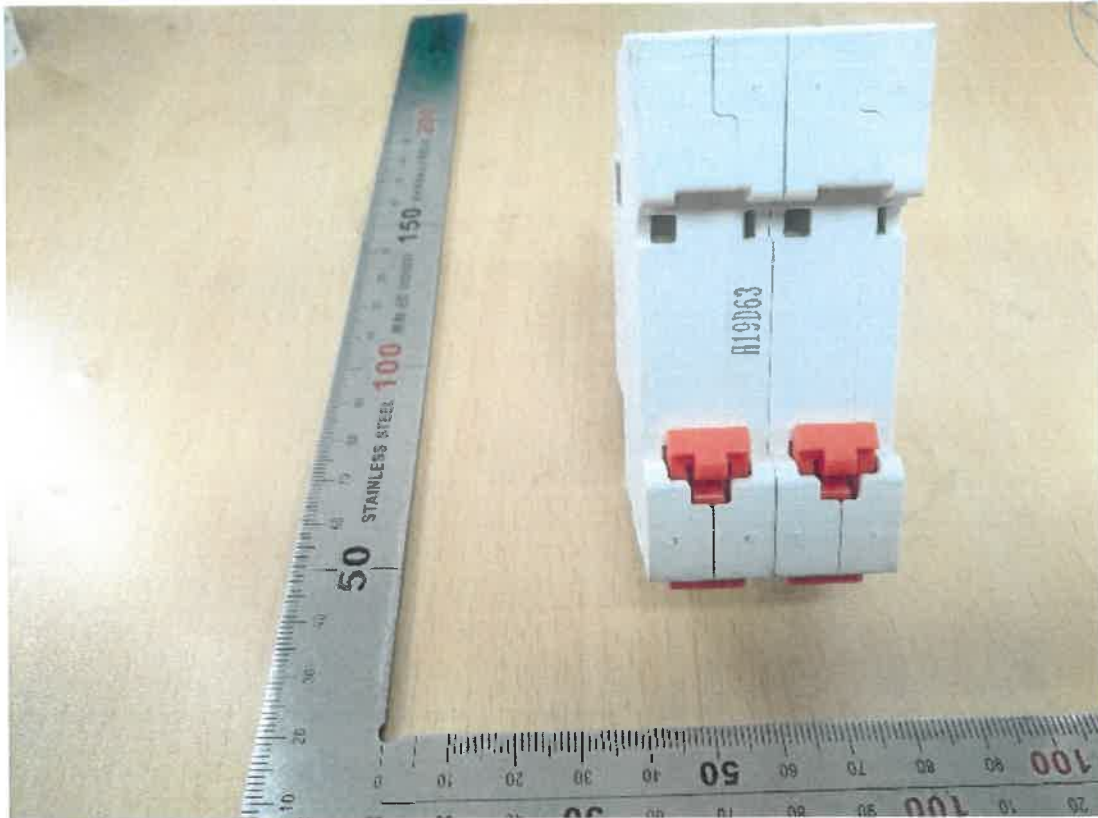
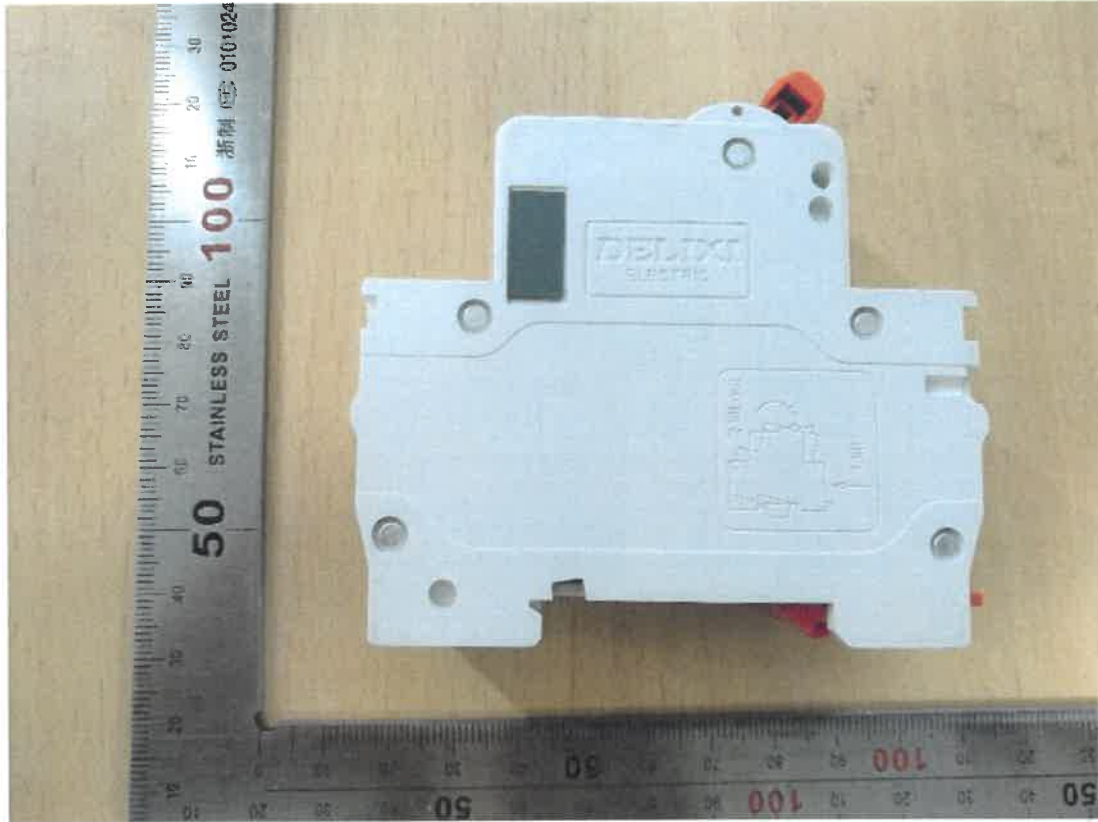


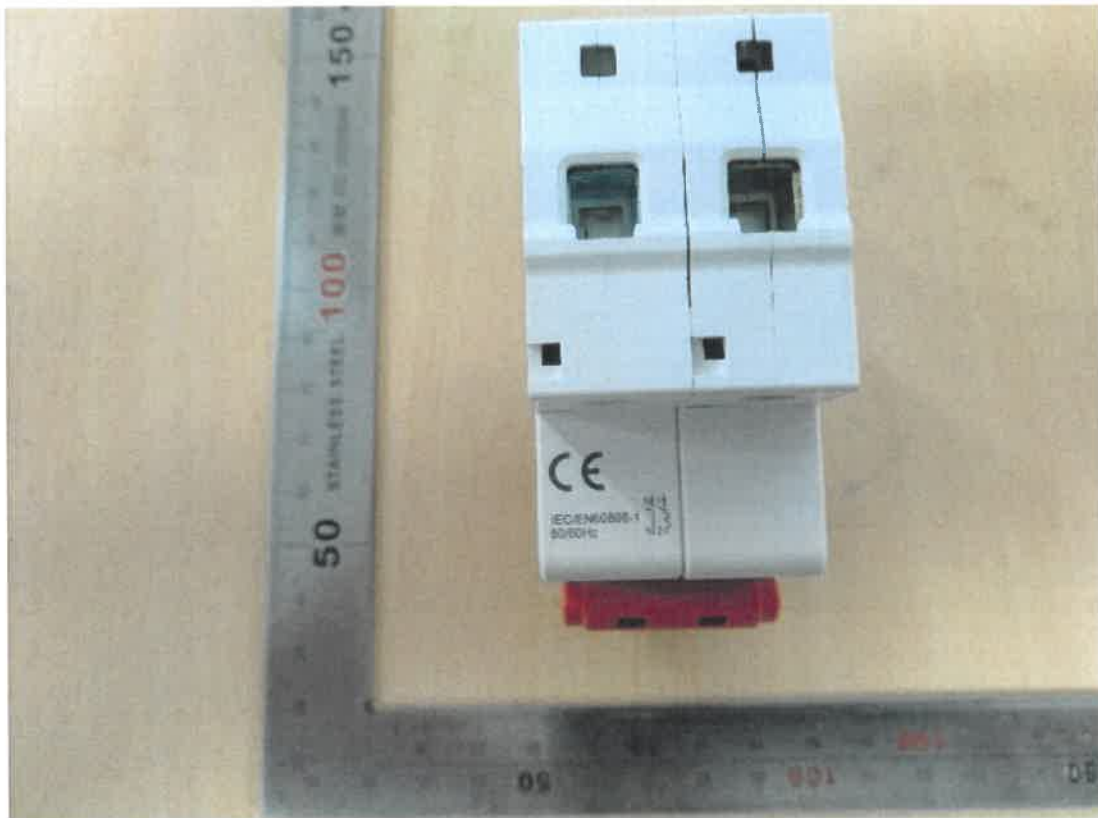
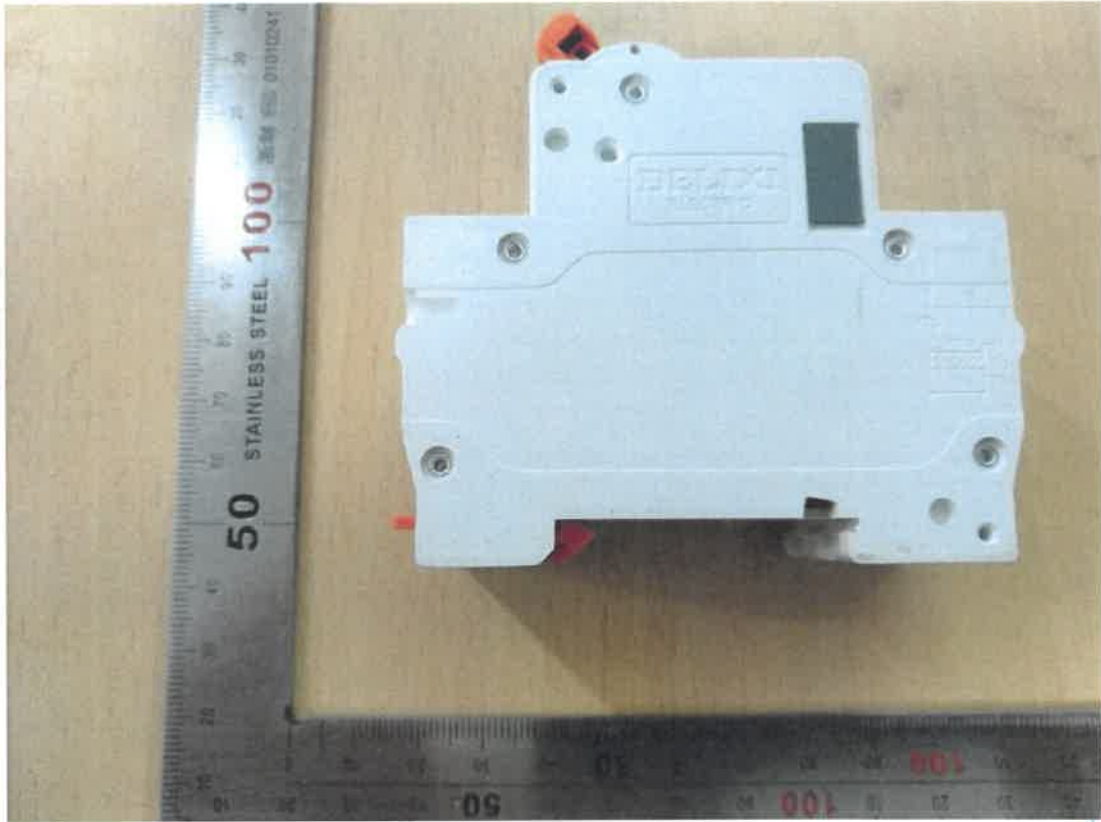


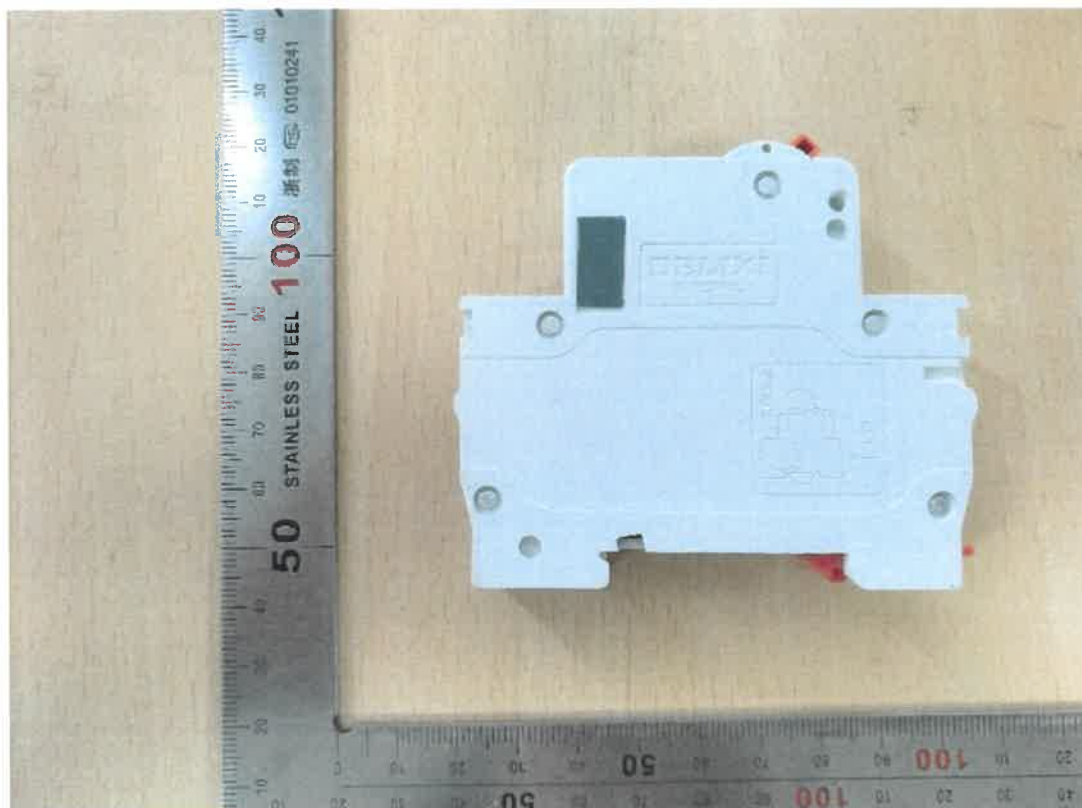


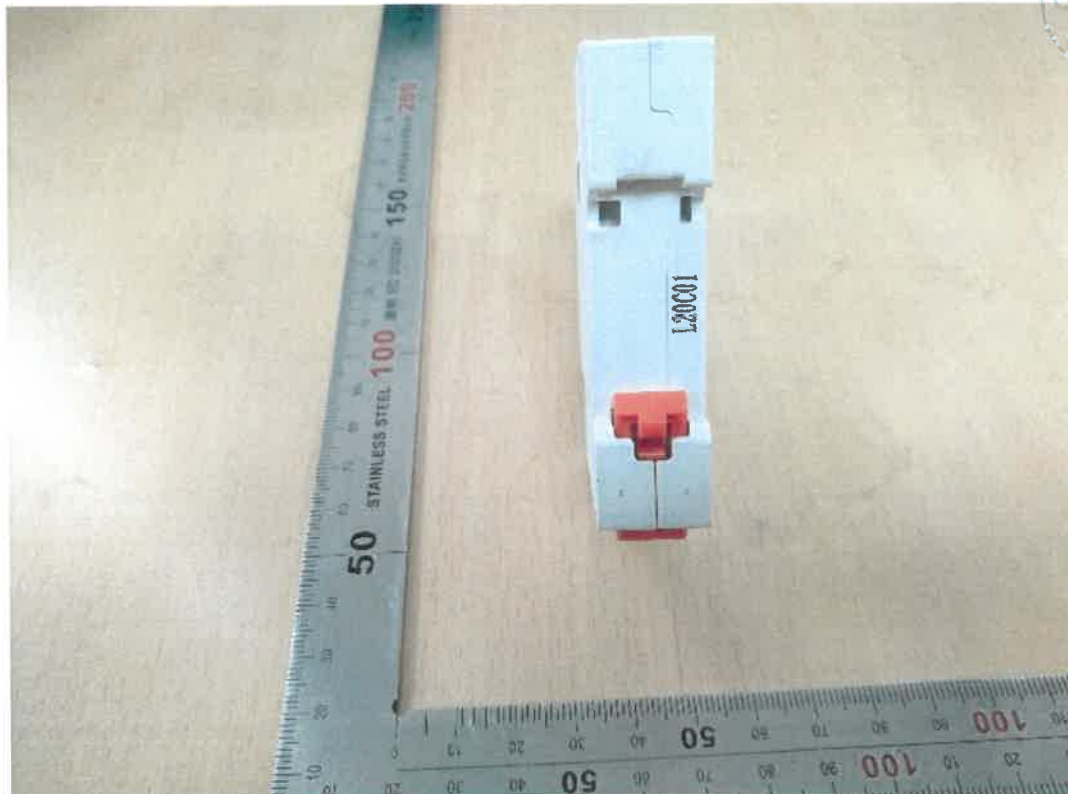
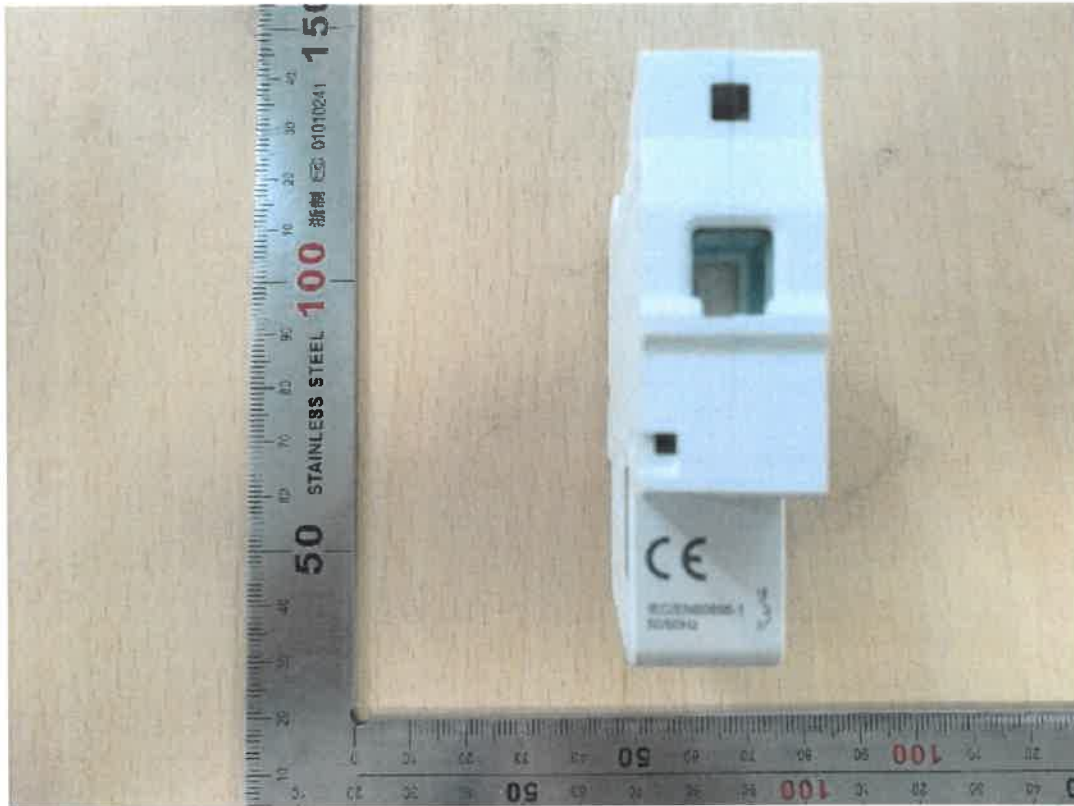
Appearance of C63 2P



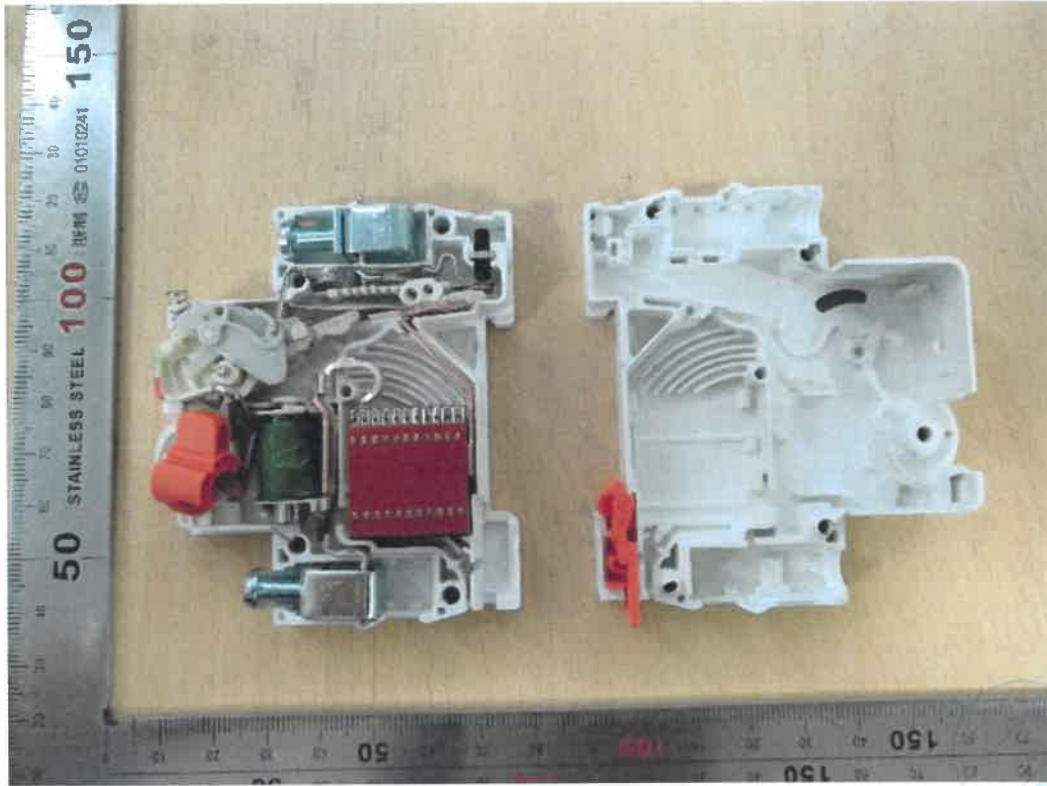








Construction C1 1P



End