

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50436999

Blatt *Sheet*
0001

Ihr Zeichen <i>Client Reference</i>	Unser Zeichen <i>Our Reference</i>	Ausstellungsdatum	<i>Date of Issue</i>
G.J.Q.	01-DY-50253865 001	28.05.2019	(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*

Refer to latest revision
of the annex list of factories

Prüfzeichen *Test Mark*



Type Approved
Safety
Regular Production
Surveillance

www.tuv.com
ID 1419089355

Geprüft nach *Tested acc. to*

EN 61009-1:2012+A1+A2+A11+A12

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

Lizenzentgelte - Einheit *License Fee - Unit*

Earth Leakage Circuit Breaker (RCBOs)

Type Designation	: 1) HDB3WHPLE 2) HDB3WHPLEA (HIMEL)	8 1
Number of Poles	: 1P+N	
Rated Voltage (Ue)	: AC 240V; 50/60Hz	
Rated Current (In)	: 6/10/16/20/25/32/40A	
Instantaneous Tripping Current	: C/D-type	
Behaviour in Presence of d.c.		
Components	: Type AC	
Rated Residual Operating Current	: 30mA	
Rated Short-circuit Capacity (Icn)	: 1) 4,5kA 2) 3,0kA	
Rated Service Short-circuit Capacity (Ics)	: Same as Icn	
Rated Residual Making and Breaking Capacity	: 3000A	
Rated Insulation Voltage (Ui)	: 500V	

Continued on page 0002

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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 50436999

Blatt *Sheet*
0002

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

Unser Zeichen *Our Reference*
01-DY-50253865 001

Ausstellungsdatum *Date of Issue*
28.05.2019
(day/mo/yr)

Genehmigungsinhaber *License Holder*

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

Prüfzeichen *Test Mark*



Geprüft nach *Tested acc. to*

EN 61009-1:2012+A1+A2+A11+A12

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

Lizenzentgelte - Einheit *License Fee - Unit*

Earth Leakage Circuit Breaker (RCBOs)

Continuation from page 0001

Rated Impulse Withstand Voltage (Uimp) : 4,0kA
Method of Operation : Functionally Dependent of Line Voltage
Time-delay : General type
Ambient Temperature Limits : -25°C to +40°C
Suitability of Isolation : Yes
Pollution Degree : 2

ANLAGE (Appendix): 1

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Fax: +49 221 806-3935 http://www.tuv.com/safety

Zertifizierungsstelle



Jie Zhang

Anlage Fertigungsstättenliste
/Attachment List of Factories



R 50436999 0001

Anlagenrevision / Annex revision

1

1 DELIXI ELECTRIC LTD

Delixi High Tech Industrial Park,
PO Box -
Zhejiang Province 325604
P. R. China

2 DELIXI ELECTRIC (WUHU) LTD

Wuhu Machinery Industrial Park,
Wuhu city, Anhui Province 241100
P. R. China

Dieser Anhang ersetzt den Vorgänger vom/
This annex replaces the previous annex dated

Datum / Date 28.05.2019

Zertifizierungsstelle
/ Certification Body

A blue circular stamp from TÜV Rheinland LGA Products GmbH is placed over a handwritten signature. The signature is written in black ink and appears to be "Jie Zhang". The stamp contains the text "TÜV Rheinland LGA Products GmbH" and "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 : 28.05.2019
Our ref. : DY 01
Your ref.: G.J.Q.

Ref : R TÜV-Mark Approval

Type of Equipment : RCBOs
Model Designation : See Certificate
Certificate No. : R 50436999 0001
Report No. : 50253865 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 50437002 0001

Report No.: 50253865 001

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

Product: Earth Leakage Circuit Breaker
(RCBOs)

Identification: Type Designation: HDB3wHPLE HDB3wHPLEA (HIMEL)

Serial No. : Engineering sample

Remark: Issued in conjunction with TÜV Rheinland license
R 50436999 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.

Date 28.05.2019

Certification Body



Jie Zhang

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 : 28.05.2019
Our ref. : DY 01
Your ref.: G.J.Q.

Ref : AN Certificate of Conf. Low Voltage D.

Type of Equipment : RCBOs
Model Designation : See Certificate
Certificate No. : AN 50437002 0001
Report No. : 50253865 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

PHOTO DOCUMENTATION

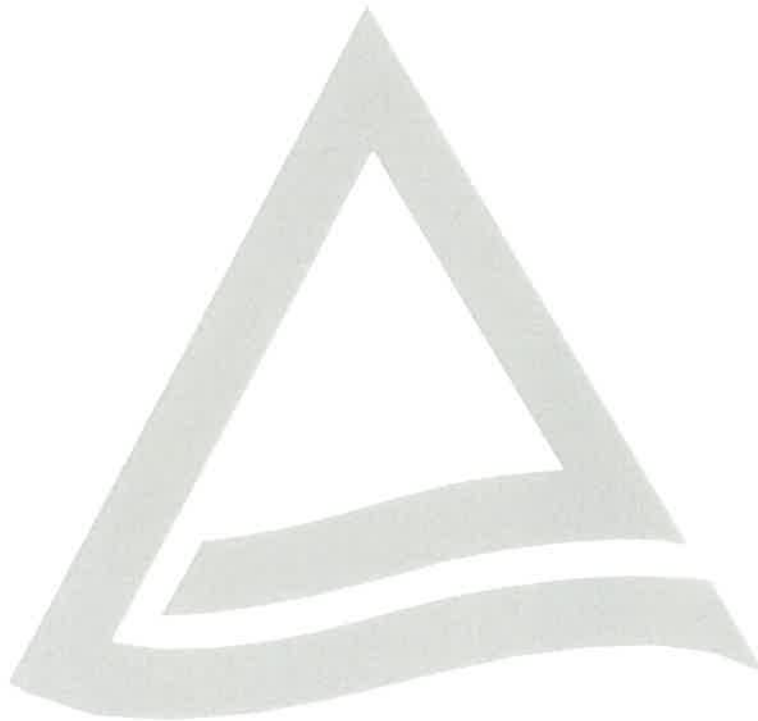
50253865 001

for

RCBOs

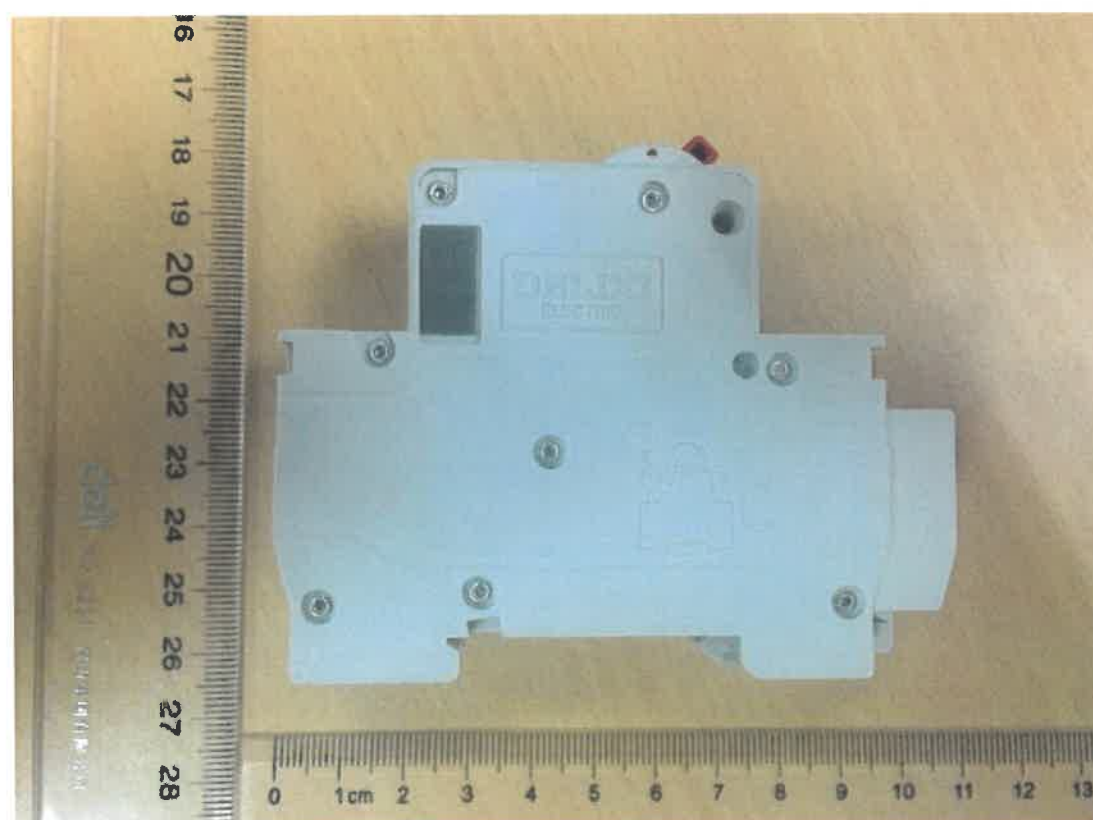
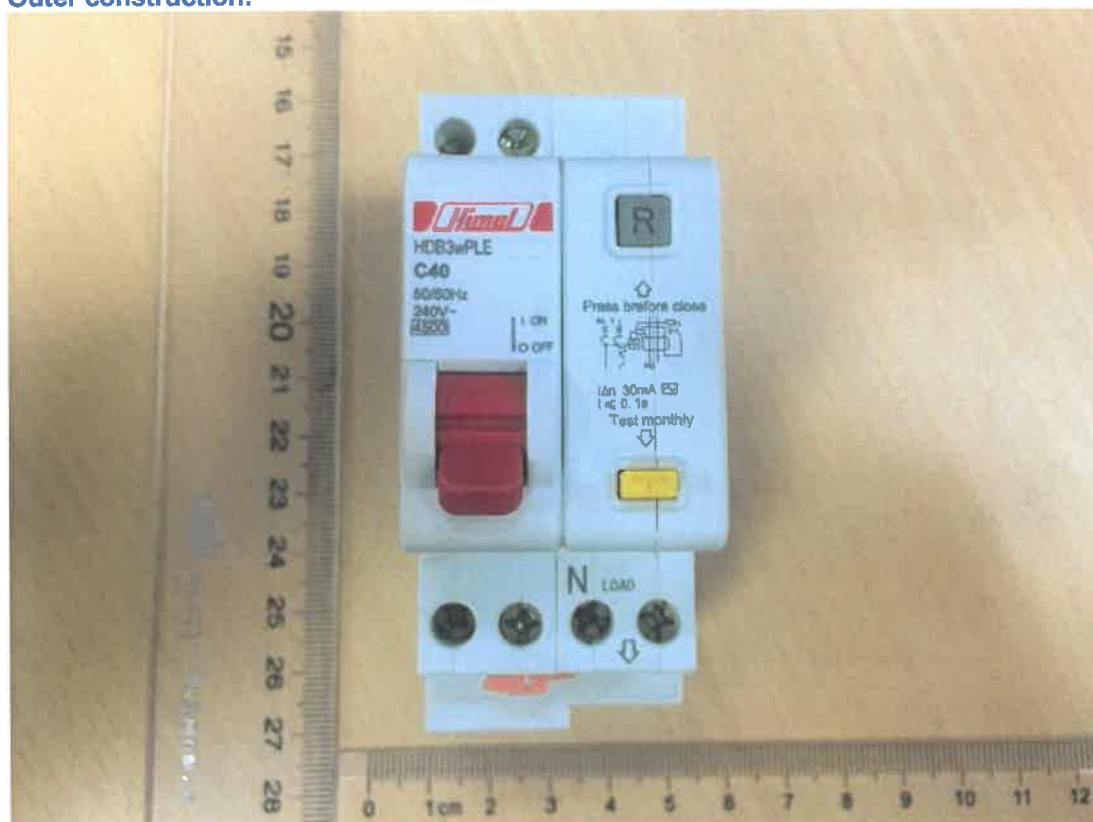
HDB3wPLE; HDB3wPLEA

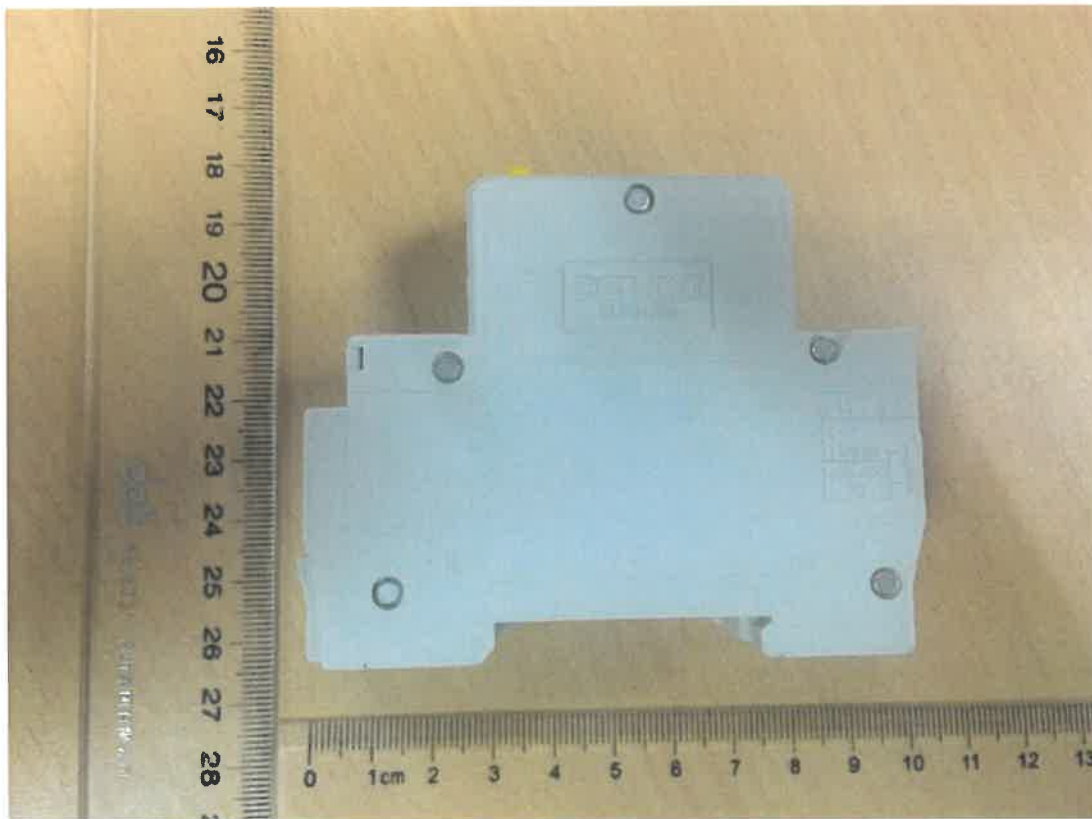
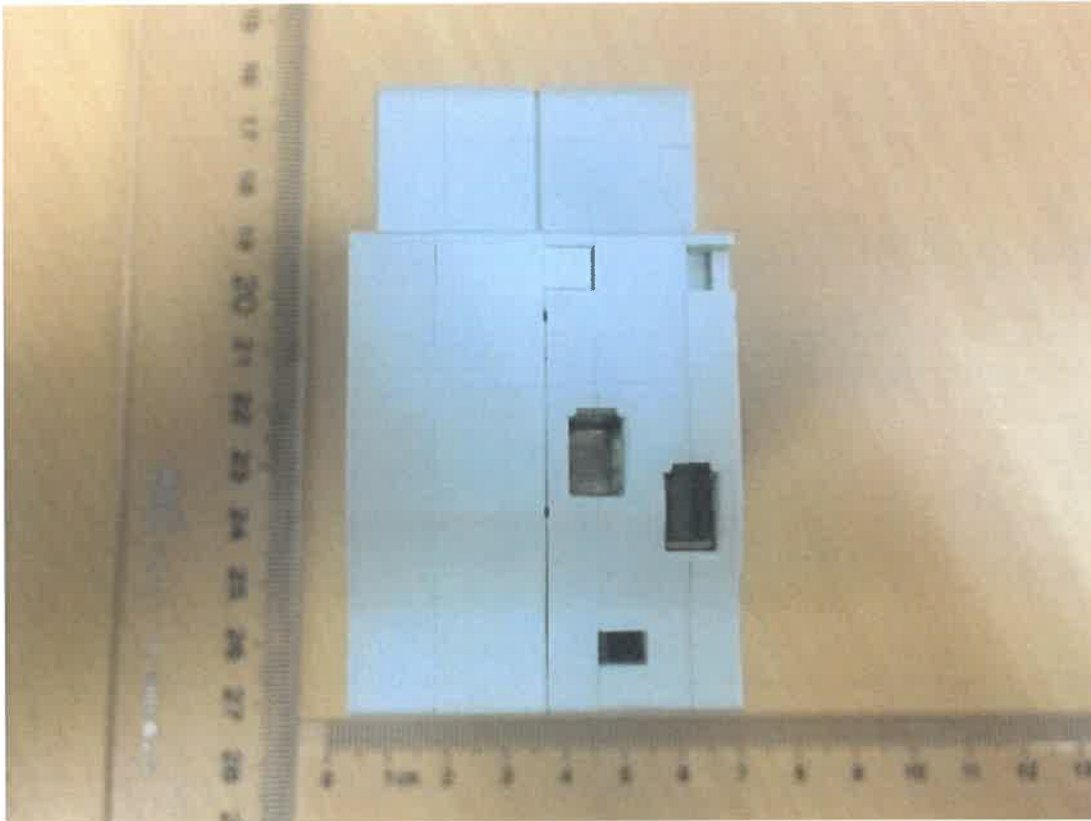
DELIXI ELECTRIC LTD

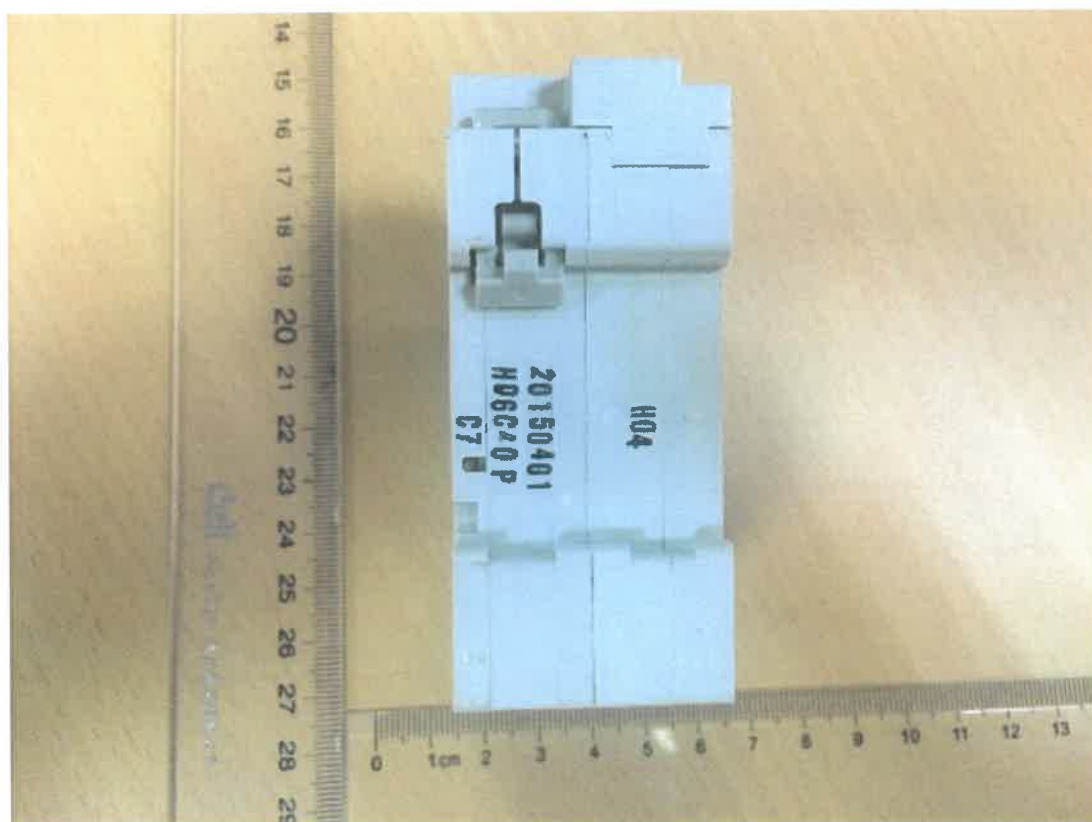
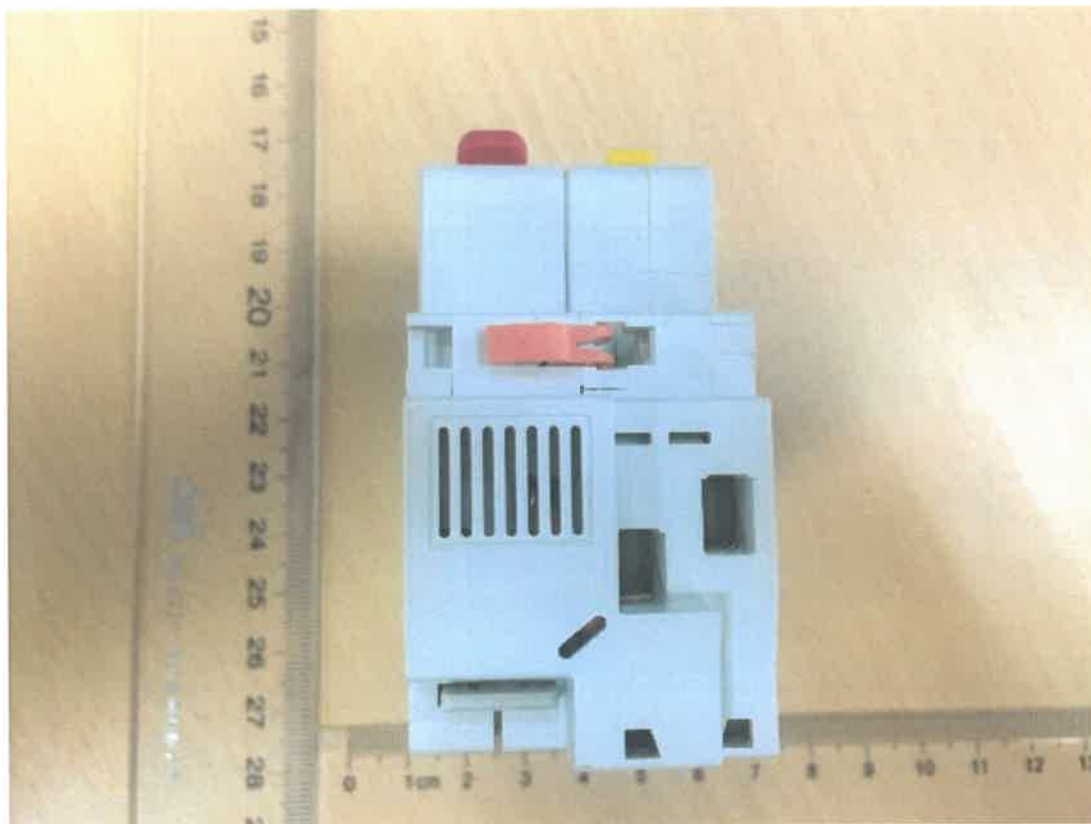


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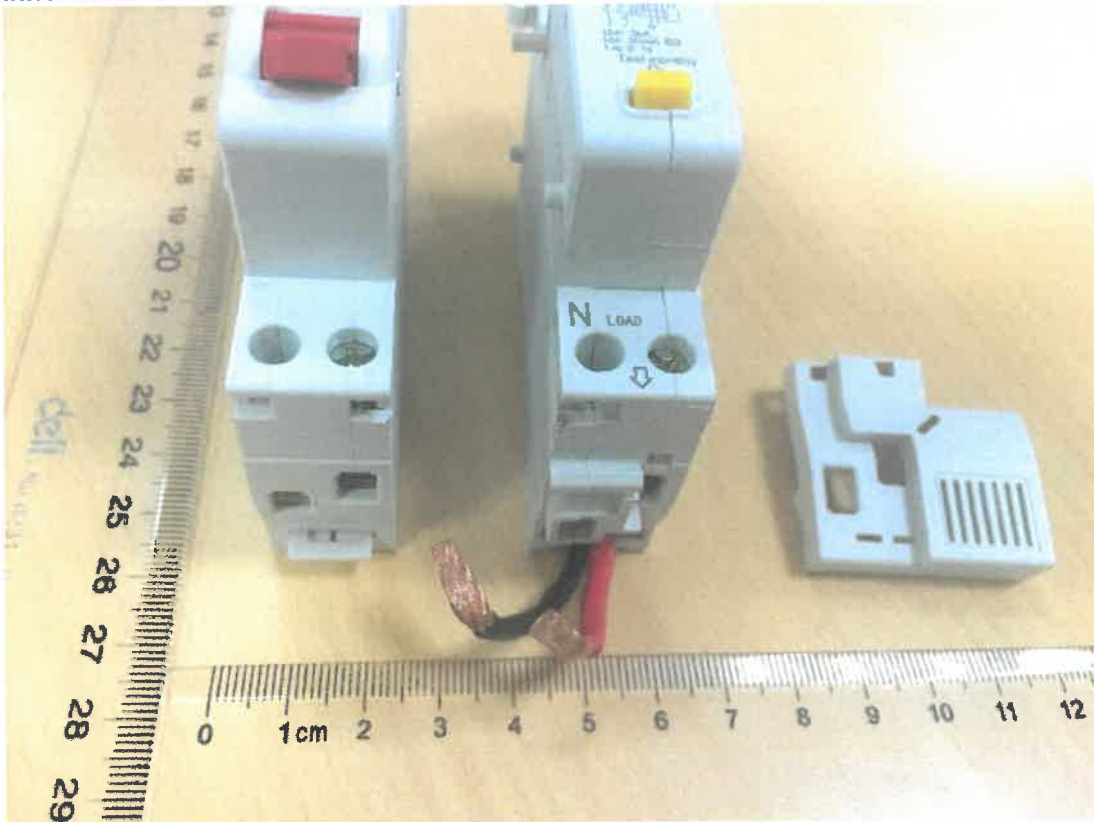
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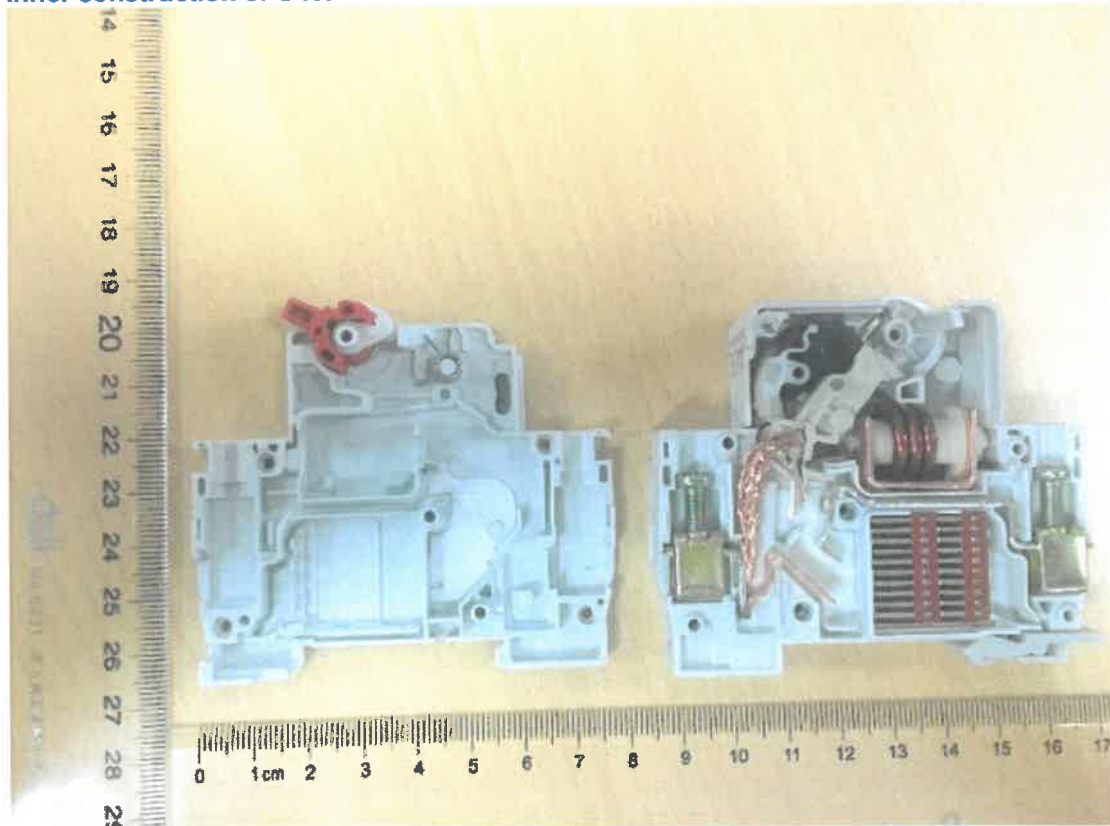


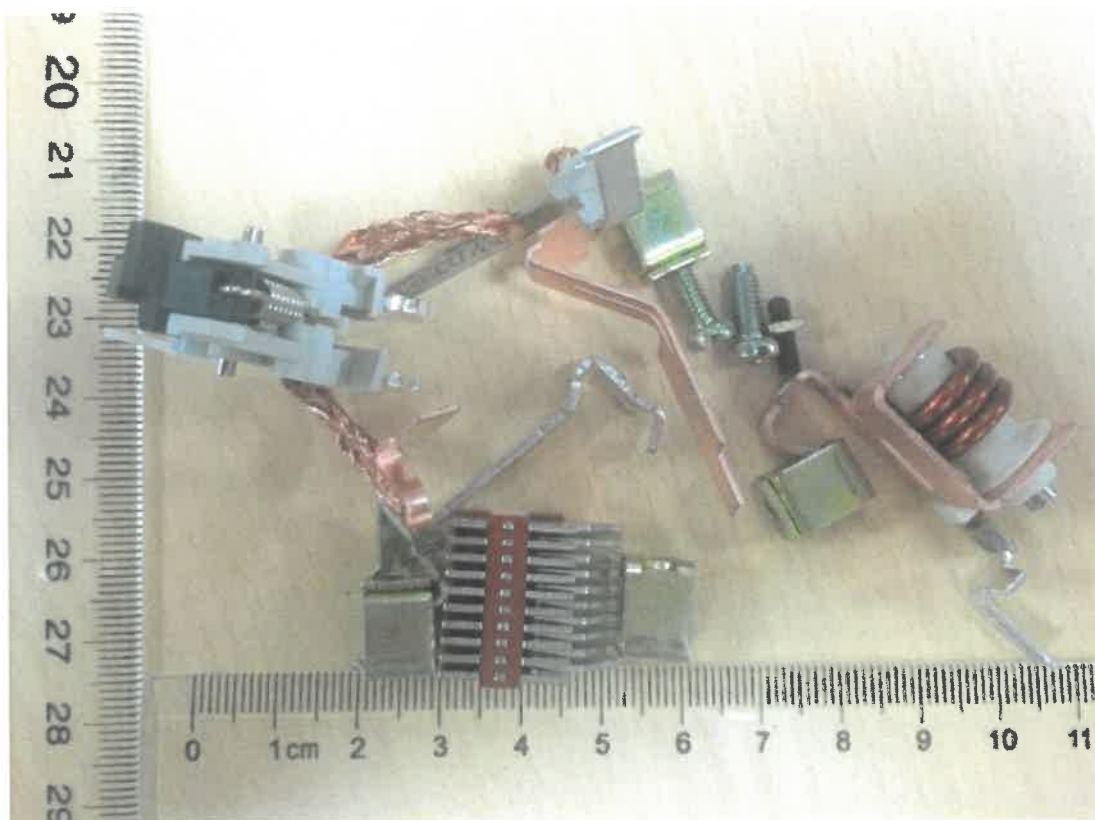
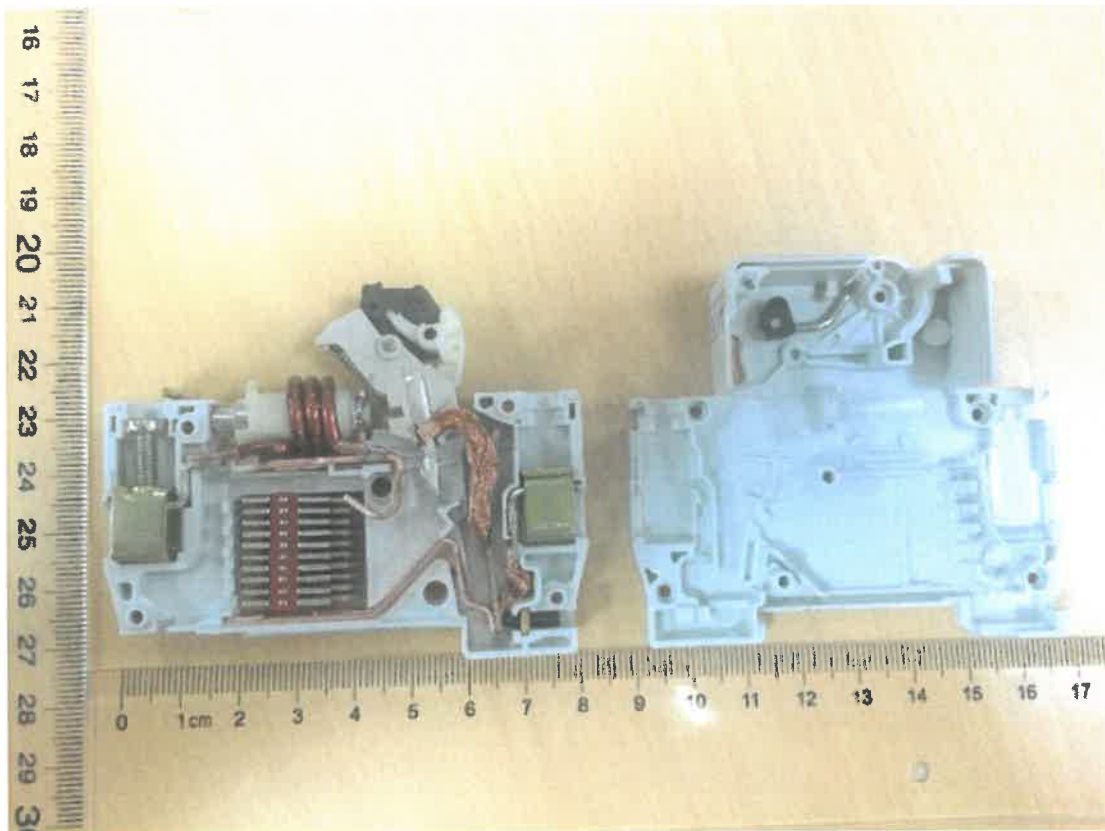


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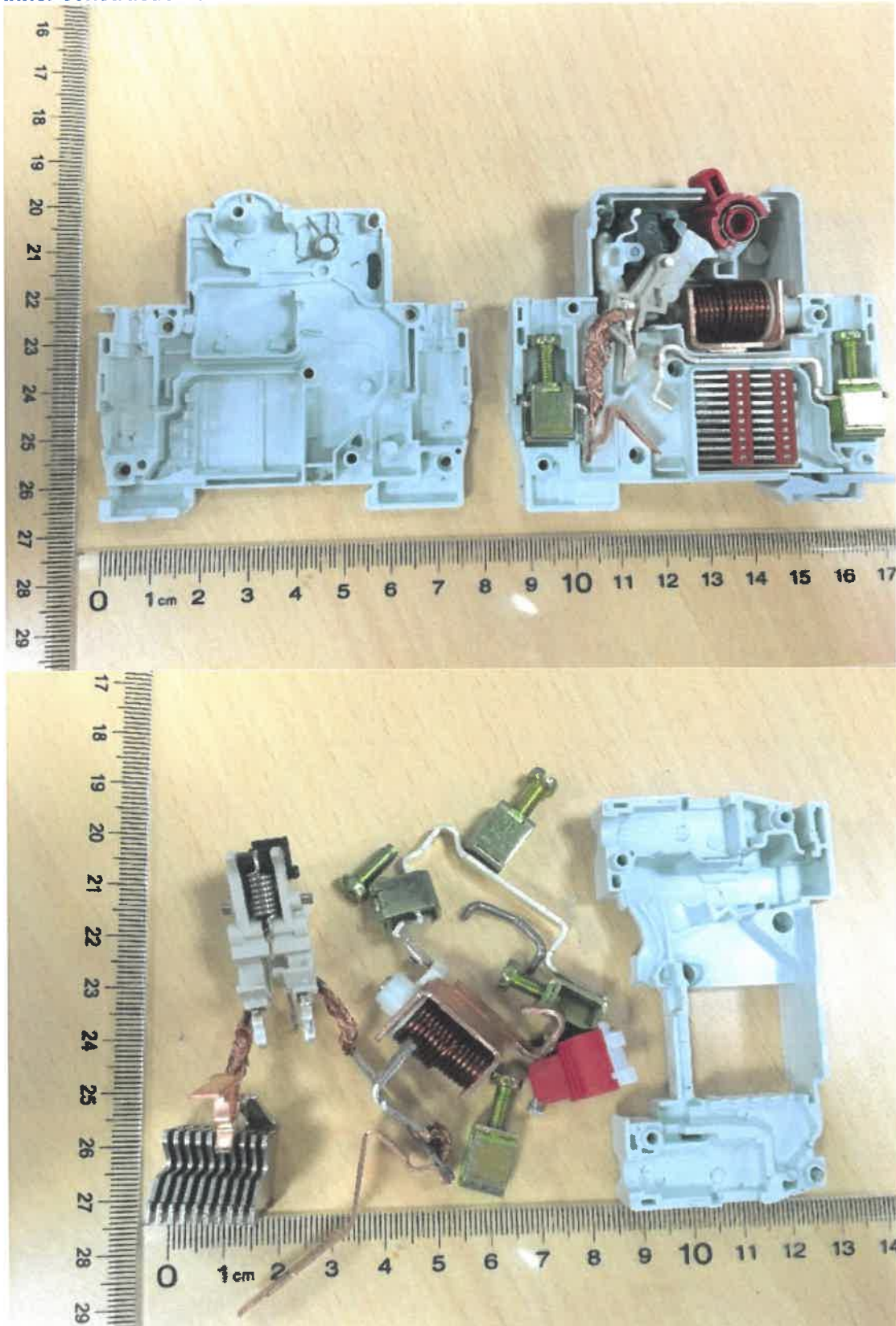


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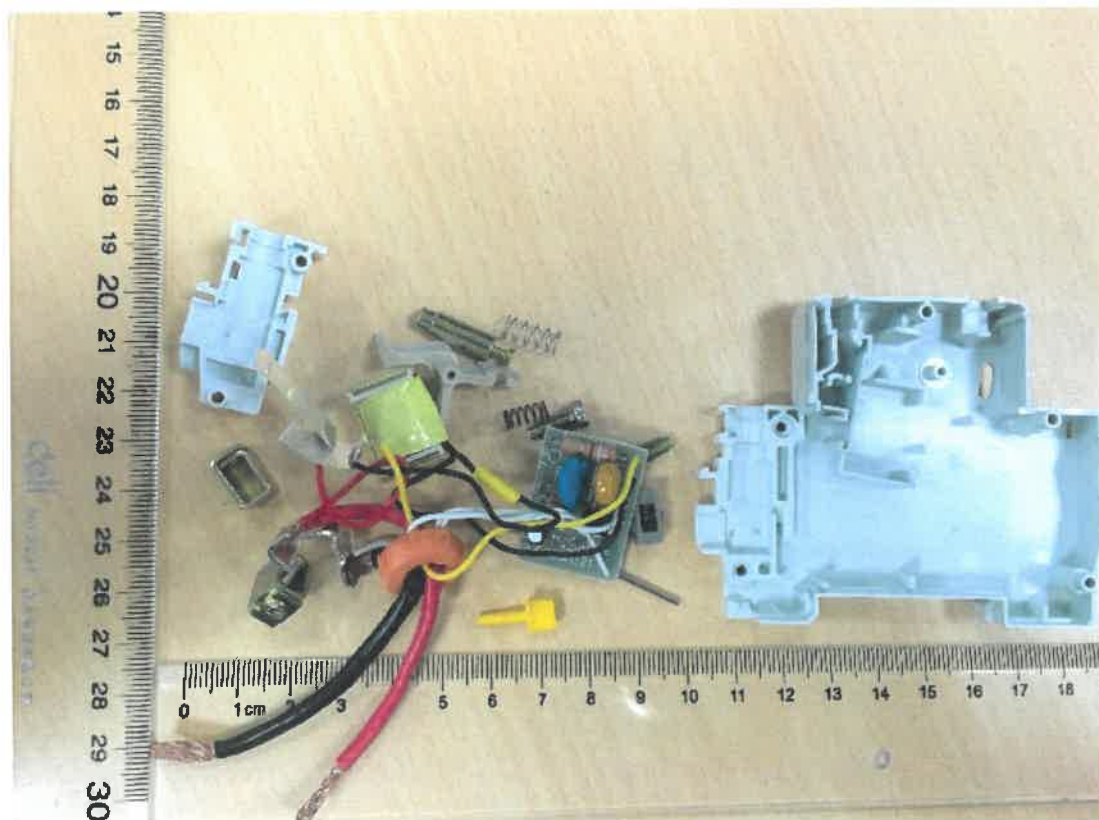
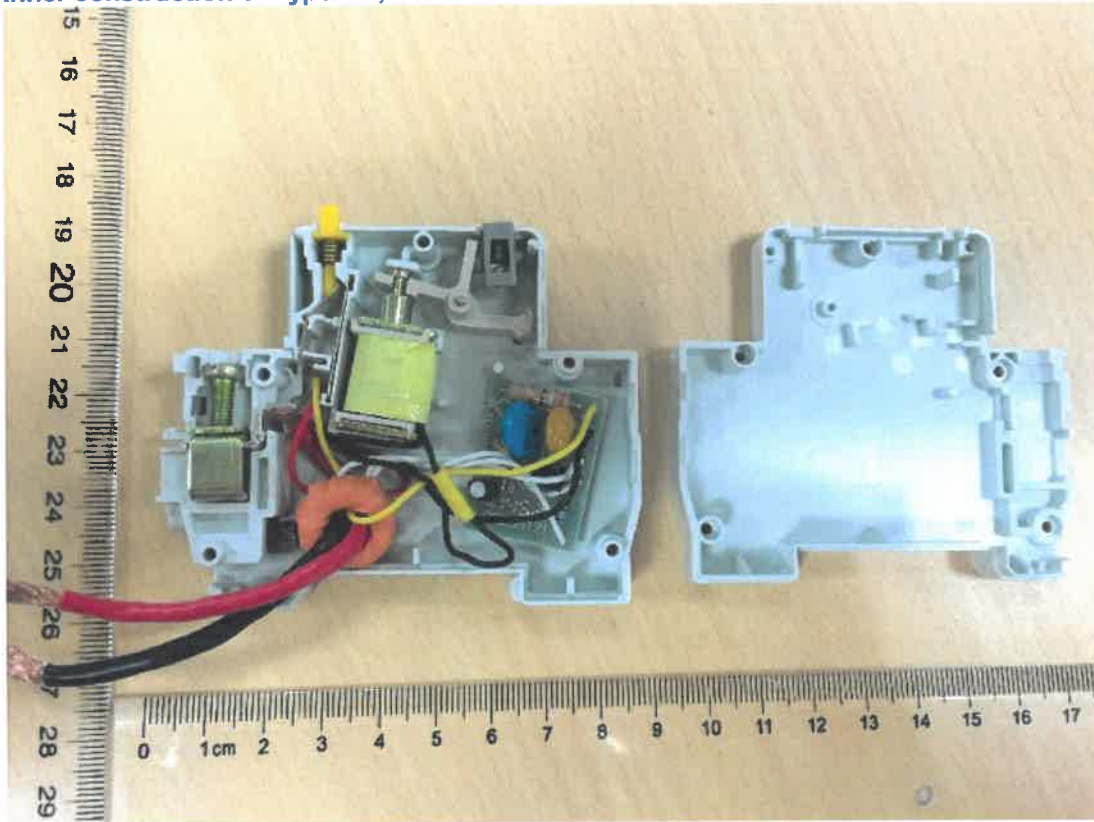


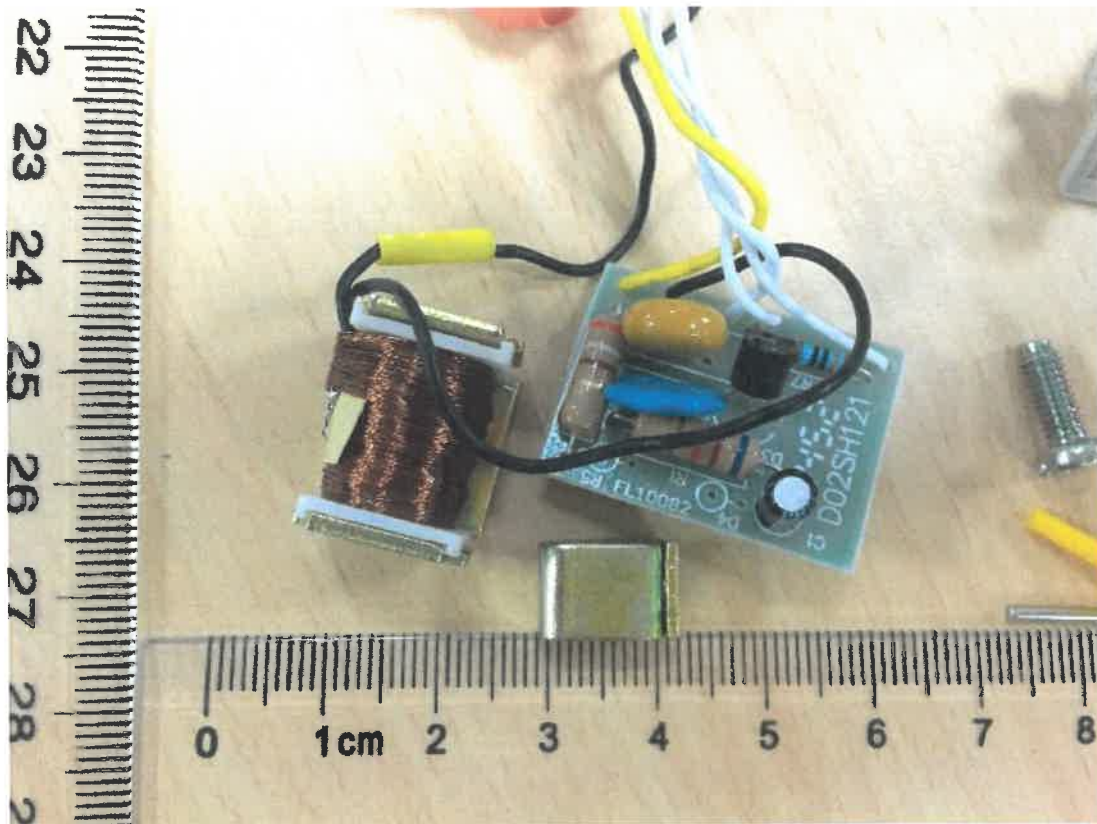


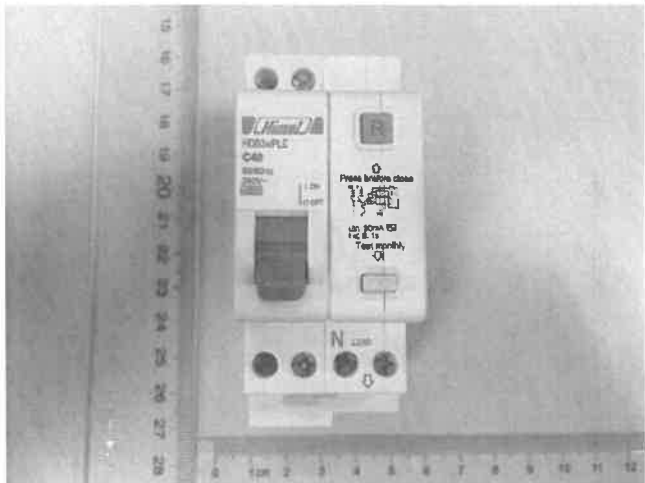
Inner construction of D6:



Inner construction of Type AC, 30mA:





Prüfbericht-Nr.: Test Report No.:	50253865 001	Auftrags-Nr.: Order No.:	244120147	Seite 1 von 9 Page 1 of 9
Kunden-Referenz-Nr.: Client Reference No.:	N/A	Auftragsdatum: Order date:	03.02.2019	
Auftraggeber: Client:	DELIXI ELECTRIC LTD / Delixi High Tech Industrial Park, Liushi Town, Yueqing City, Zhejiang Province, China 325604			
Prüfgegenstand: Test item:	RCBOs			
Bezeichnung / Typ-Nr.: Identification / Type No.:	HDB3wPLE; HDB3wPLEA			
Auftrags-Inhalt: Order content:	Type approval			
Prüfgrundlage: Test specification:	EN 61009-1: 2012+A1+A2+A11+A12			
Wareneingangsdatum: Date of receipt:	03.02.2019			
Prüfmuster-Nr.: Test sample No.:	N/A			
Prüfzeitraum: Testing period:	N/A			
Ort der Prüfung: Place of testing:	TÜV Rheinland (Shanghai) Co., Ltd.			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shanghai) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von / tested by:		kontrolliert von / reviewed by:		
11.05.2019 Ding Ye/ PE		11.05.2019 Wencai Zhang / TC		
Datum Date	Name / Stellung Name / Position	Unterschrift Signature	Datum Date	Name / Stellung Name / Position
				
Sonstiges / Other: The models HDB3wPLE and HDB3wPLEA were identical as previous tested models DZ47PLE and DZ47PLEA in test report 15074156 001 except the brand name and types..The construction inspection was done and marking label was checked again.				
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:		Prüfmuster vollständig und unbeschädigt Test item complete and undamaged		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested				
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.				

Certificate No. R 50436999 0001 **Our Reference** 01-DY-50253865 001 **Appendix No.** 1

Constructional Data Form for RCBOs EN 61009

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: HDB3wPLE; HDB3wPLEA
Kind of device: Residual current operated circuit-breaker with integral overcurrent protection (RCBOs)

Information/rated values for the switching element:

Type Reference	HDB3wPLE; HDB3wPLEA
Contact material	Moving Contact: TP2 (In:6-25A); AgCW40(In: 32-40A) Fixed Contact: AgC4
Number of poles	1P+N
Current paths (Number of overcurrent protected pole)	One overcurrent protected pole and interrupted neutral
Rated operational voltage Ue	240V
Nature of supply	AC
Frequency	50 Hz
Rated current In	6; 10; 16; 20; 25; 32; 40A
Instantaneous tripping current	C/D-type
Adjusting the residual operating current	Single value
Rated residual operating current IΔn	30mA
Rated short-circuit capacity Icn	4,5kA(HDB3WPLE); 3,0kA (HDB3WPLEA)
Rated service short-circuit capacity Ics	Same as Icn
Rated residual making and breaking capacity IΔm	500 A
Rated insulation voltage	500 V
Rated impulse withstand voltage	4,0 kV
Method of operation	Functionally dependent of line voltage
Functionally dependent of line voltage	Not opening automatic (trip in case harzard)
Type of installation	Fixed installation and fixed wiring
Resistance to unwanted tripping due to volt. surge	Normal resistance (General type)
Behaviour in presence of d.c. components	Type AC
Time-delay	General type
Degree of protection	IP20
Protection against external influence	Unenclosed type
Method of mounting	Panel Board type (on rail)

TÜV Rheinland Group

License holder

25.04.2019

Date

Signature

Name

Company Stamp and Signature

Certificate No. R 50436999 0001 Our Reference 01-DY-50253865 001 Appendix No. 1

Constructional Data Form for RCBOs EN 61009

Page 2 of 4

I2t characteristic (energy limit class)	1
Range of ambient air temperature	-25...40 °C
Method of connection	Not associated with mechanical mounting
Overvoltage category	II
Suitability of isolation	Yes
Pollution degree	2

TÜV Rheinland Group

25.04.2019

Date

Signature

License holder

Name

Company Stamp and Signature

Certificate No. R 50436999

0001

Our Reference

01-DY-50253865 001

Appendix No. 1

Constructional Data Form for RCBOs EN 61009

Page 3 of 4

Terminals /connection:

Type Reference	HDB3wPLE; HDB3wPLEA
Number of poles	1P+N
Terminal designation	Load; N, N
Type of Terminal/% copper	Pillar terminal / - %
Material/plating of the terminals	Zn plated steel
Material/plating of the screw	Zn plated steel
Material/plating of the washer	Zn plated steel
Tightening torque (Nm)	1,2Nm (over 3,6mm up to and including 4,1mm)
Type of conductor	Rigid or flexible
Required preparation of conductor	No
Rigid Conductor size (mm ²)	Min. 1 to 2,5 (< 13 A) ... Max. 4 to 16 (32 - 50 A) mm ²
Flexible Conductor size (mm ²)	Min. 1 to 2,5 (< 13 A) ... Max. 4 to 16 (32 - 50 A) mm ²
Number of conductors per terminal	1

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

TÜV Rheinland Group
License holder

25.04.2019

Date

Signature

Name

Company Stamp and Signature

Certificate No. R 50436999

0001

Our Reference

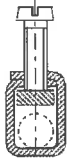
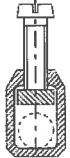
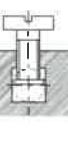
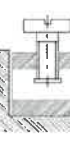
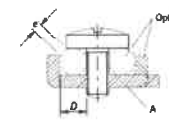
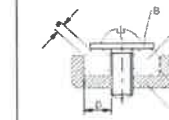
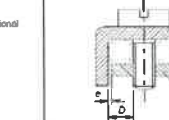
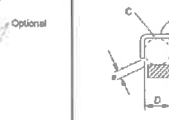
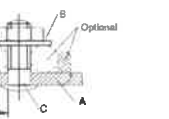
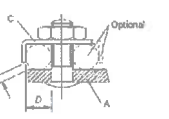
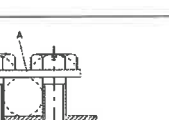
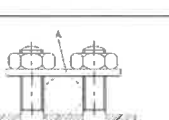
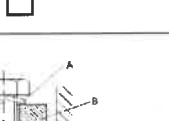
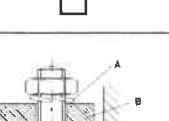
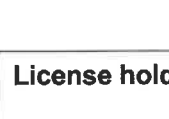
01-DY-50253865 001

Appendix No. 1

Constructional Data Form for RCBOs EN 61009

Page 4 of 4

Terminal Figure

Pillar terminal	☒	☐	☐	☐	☐	☐	☐	☐
								
Screw terminal	☐	☐	☐	☐	☐	☐	☐	☐
								
Stud terminal	☐	☐	☐	☐	☐	☐	☐	☐
								
Saddle terminal	☐	☐	☐	☐	☐	☐	☐	☐
								
Lug terminal	☐	☐	☐	☐	☐	☐	☐	☐
								

TÜV Rheinland Group

25.04.2019

Date

Signature

License holder

Name

Company Stamp and Signature