

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50453802

Blatt *Sheet*
0001

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

Unser Zeichen *Our Reference*
01-DY-50253865 002

Ausstellungsdatum *Date of Issue*
11.12.2019 (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*



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) HDB3wPLE	8
	2) HDB3wPLEA (HIMEL)	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		

ANLAGE (Appendix): 1

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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



Hao Zheng

Zertifikat

Certificate



Zertifikat Nr. *Certificate No.*
R 50453802

Blatt *Sheet*
0002

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

Unser Zeichen *Our Reference*
01-DY-50253865 002

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

Fertigungsstätte *Manufacturing Plant*

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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

Remark: Certificate R 50453802 replaces R 50436999.

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.
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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



**Anlage Fertigungsstättenliste
/Attachment List of Factories**



R 50453802 0001

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 11.12.2019

Zertifizierungsstelle
/ Certification Body

Hao Zheng

DELIXI ELECTRIC LTD

Mr. Guo Jianquan

-

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

Date : 11.12.2019

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 50453802 0001

Report No. : 50253865 002

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


Hao Zheng

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 50453803 0001

Report No.: 50253865 002

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: HDB3wPLE HDB3wPLEA (HIMEL)

Serial No. : Engineering sample

Remark: Issued in conjunction with TÜV Rheinland license
R 50453802 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 11.12.2019



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 : 11.12.2019
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 50453803 0001
Report No. : 50253865 002

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



Hao Zheng

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 50453802 0001-0002 **Our Reference** 01-DY-50253865 002 **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 I _{Δn}	30mA
Rated short-circuit capacity I _{cn}	4,5kA(HDB3WPLE); 3,0kA (HDB3WPLEA)
Rated service short-circuit capacity I _{cs}	Same as I _{cn}
Rated residual making and breaking capacity I _{Δm}	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

25.11.2019

Date

Signature

Name

Company Stamp and Signature



Certificate No. R 50453802 0001-0002 **Our Reference** 01-DY-50253865 002 **Appendix No.** 1

Constructional Data Form for RCBOs EN 61009

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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

25.11.2019

Date

Signature

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Certificate No. R 50453802 0001-0002 **Our Reference** 01-DY-50253865 002 **Appendix No.** 1

Constructional Data Form for RCBOs EN 61009

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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

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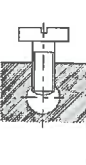
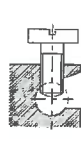
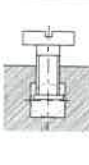
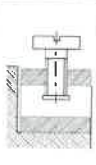
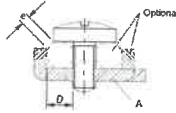
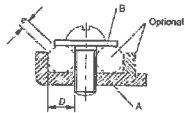
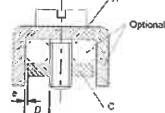
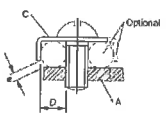
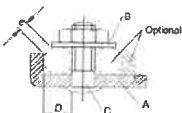
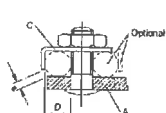
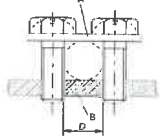
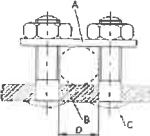
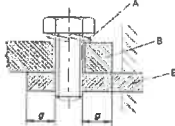
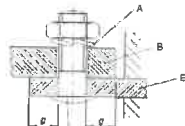
Company Stamp and Signature

Certificate No. R 50453802 0001-0002 Our Reference 01-DY-50253865 002 Appendix No. 1

Constructional Data Form for RCBOs EN 61009

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Terminal Figure

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

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