

# C E R T I F I C A T E



of Conformity  
Low Voltage Directive 2014/35/EU

Registration No.: AN 50499580 0001

Report No.: CN21FCHK 001

Holder: HIMEL HONG KONG LIMITED  
11/F KERRY CTR  
683 KING#S RD QUARRY BAY  
Hong Kong

Product: Residual Current Operated circuit-breakers  
(RCCBs)

Identification: Type Designation: HDB3VR  
(HIMEL)  
Serial No. : Engineering sample

Remark: Issued in conjunction with TÜV Rheinland license  
R 50499578 0001.

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 14.04.2021



Hao Zheng

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

# Zertifikat

# Certificate



Zertifikat Nr. *Certificate No.*  
R 50499578

Blatt *Sheet*  
0001

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

Unser Zeichen *Our Reference*  
01-DY-CN21FCHK 001

Ausstellungsdatum *Date of Issue*  
14.04.2021  
(day/mo/yr)

**Genehmigungsinhaber *License Holder***  
HIMEL HONG KONG LIMITED  
11/F KERRY CTR  
683 KING'S RD QUARRY BAY  
Hong Kong

**Fertigungsstätte *Manufacturing Plant***  
DELIXI ELECTRIC LTD  
Delixi High Tech Industrial Park,  
Liushi Town, Yueqing City,  
325604 Zhejiang  
P.R. China

## Prüfzeichen *Test Mark*



## Geprüft nach *Tested acc. to*

EN 61008-1:2012+A1+A2+A11+A12  
EN 61008-2-1:1994+A11

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

## Lizenzentgelte - Einheit *License Fee - Unit*

### Residual Current Operated circuit-breakers (RCCBs)

Type Designation	: HDB3VR	8
Number of Poles	: 2P 4P	
Rated Operational Voltage (Ue)	: 230-240V 400-415V	
Nature of Supply	: AC 50/60Hz	
Rated Current (In)	: 10/16/20/25/32/40/63A	
Behavior in Presence of d.c.		
Components	: Type A or Type AC	
Time-delay	: General type	
Rated Residual Operating Current:	10mA(2P, In=10/16/20/25A) 30/100/300/500mA	
Rated Making and Breaking Capacity		
Capacity	: 500A or 10In	
Rated Residual Making and Breaking Capacity	: 500A or 10In	
Rated Conditional Short-circuit Current	: 6,0kA	
Rated Conditional Residual Short-circuit Current	: 6,0kA	
Pollution Degree	: 2	
Suitability for Isolation	: Yes	
Range of Ambient Air Temperature:	-25°C - 40°C	

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

HIMEL HONG KONG LIMITED  
Jianquan Guo

11/F KERRY CTR  
683 KING'S RD QUARRY BAY  
Hong Kong

Date : 14.04.2021  
Our ref. : DY 01  
Your ref.: G.J.Q.

**Ref : R TÜV-Mark Approval**

Type of Equipment : RCCBs  
Model Designation : See Certificate  
Certificate No. : R 50499578 0001  
Report No. : CN21FCHK 001

Dear Jianquan Guo,

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.certipedia.com](http://www.certipedia.com)查阅,或拨打我司客服热线800 999 3668 / 400 883 1300咨询

HIMEL HONG KONG LIMITED  
Jianquan Guo

Date : 14.04.2021  
Our ref. : DY 01  
Your ref.: G.J.Q.

11/F KERRY CTR  
683 KING#S RD QUARRY BAY  
Hong Kong

**Ref : AN Certificate of Conf. Low Voltage D.**

Type of Equipment : RCCBs  
Model Designation : See Certificate  
Certificate No. : AN 50499580 0001  
Report No. : CN21FCHK 001

Dear Jianquan Guo,

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.certipedia.com](http://www.certipedia.com)查阅,或拨打我司客服热线800 999 3668 / 400 883 1300咨询

**Certificate No.** R 50499578      0001      **Our Reference** 01-DY- CN21FCHK 001      **Appendix No.** 1

**Constructional Data Form for RCCBs EN 61008**

Page 1 of 3

Applicant: HIMEL HONG KONG LIMITED  
 (full address): 11/F KERRY CTR 683 KING'S RD QUARRY BAY HONGKONG  
 Factory: DELIXI ELECTRIC LTD  
 (full address): Delixi High Tech Industrial Park, Liushi Town, Yueqing City, Zhejiang Province 325604, P.R. China  
 Type or Model Number: HDB3VR  
 Kind of device: Residual current operated circuit-breakers without integral overcurrent protection for household and similar uses (RCCBs)

Information/rated values for the switching element:

Type Reference	HDB3VR	
Contact material	Fixed: CAgC4, Moving: AgSnO2In2O3	
Number of poles	2P	4P
Rated operational voltage Ue	230-240	400-415V
Nature of supply	AC	
Frequency	50/60Hz	
Rated current In	10, 16, 20, 25, 32, 40, 63 A	
Rated residual operating current IΔn	10mA (only for 2P, In=10, 16, 20, 25A); 30, 100, 300, 500 mA	
Rated residual non-operating current IΔno	0,5 IΔn	
Rated making and breaking capacity Im	500A or 10In	
Rated residual making and breaking capacity IΔm	500A or 10In	
Rated insulation voltage	415 V	
Rated impulse withstand voltage	4,0 kV	
Method of operation	Functionally independent of line voltage	
Functionally dependent of line voltage	-	
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 or Type A	
Time-delay	General type	
Degree of protection	IP00	
Rated conditional short-circuit current Inc	6,0 kA (< 25 kA)	
Rated conditional residual short-circuit current IΔc	6,0 kA (< 25 kA)	
Protection against external influence	Enclosed type	
Method of mounting	Surface-type (on rail)	
I2t characteristic (energy limit class)	N/A	
Range of ambient air temperature	-25...40 °C	

**TÜV Rheinland Group**

**License holder**

2021.03.08



Date

Signature

Name

Company Stamp and Signature

**Certificate No.** R 50499578      0001      **Our Reference** 01-DY- CN21FCHK 001      **Appendix No.** 1

**Constructional Data Form for RCCBs EN 61008**

Page 2 of 3

Method of connection	Not associated with mechanical mounting
Overvoltage category	II
Suitability of isolation	Yes
Pollution degree	2

**Terminals /connection:**

Type Reference	HDB3VR	
Number of poles	2P	4P
Terminal designation	1; N, 2; N	1; 3; 5; N; 2; 4; 6; 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)	2,0Nm (over 4,7mm up to and including 5,3mm)	
Type of conductor	Rigid or flexible	
Required preparation of conductor	Yes	
Rigid Conductor size (mm <sup>2</sup> )	Min. 1,0 to Max. 25 mm <sup>2</sup>	
Flexible Conductor size (mm <sup>2</sup> )	Min. 1,0 to Max. 16 mm <sup>2</sup>	
Number of conductors per terminal	1	


**Plastic insulating parts:**

Part name	Manufacturer	Material name (particle)	CTI	Flame class	Material Group
Base	PA6 (GF20)	MOTOMATU Engineering Plastic (Hangzhou) Co., Ltd.	175	GWT: 960°C	IIIa
Cover	PA6 (GF20)	MOTOMATU Engineering Plastic (Hangzhou) Co., Ltd.	175	GWT: 960°C	IIIa
Handle	PA6	CWB	175	GWT: 650°C	IIIa

**Remark:**

For the construction, there may be two alternate position of N phase. N phase may be in the right of product and N phase may be in the left of product. And for more information please refer to photo documentation

**Terminal Figure**

<b>TÜV Rheinland Group</b> 		<b>License holder</b>	
Date 201.03.08	Signature	Name	Company Stamp and Signature



**Constructional Data Form for RCCBs EN 61008**

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"/>
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

2021.07.08

Date

Signature

Name

Company Stamp and Signature