



®

丹东科亮电子有限公司  
Dandong Keliang Electron Co.,Ltd

# 资质文件

**KELIANG**  
Dandong KELIANG ELECTRON CO.,LTD

# 合作伙伴 Cooperation partner



ABB电机股份有限公司  
Shanghai ABB Motor Co., Ltd



西门子电气  
Siemens Electric (China) Co., Ltd



万高(南通)电机制造有限公司  
WEG (Nantong) Motor  
Manufacturing Co., Ltd.



通用电气电能转换技术(上海)有限公司  
GE Power Conversopm Technology(Shanghai),Ltd



SEW电机(苏州)有限公司  
SEW Electric (Suzhou) Co., Ltd



诺德(中国)传动设备有限公司  
Nord (China) transmission  
equipment co., LTD



大同(上海)有限公司  
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东元电机股份有限公司  
TECO Electric &  
Machinery Co., Ltd.



康明斯发电机技术(中国)有限公司  
Cummins Generator Technologies  
(China) Co., Ltd.



利莱森玛电机科技有限公司  
Leroy Somer Motor  
Technology Co., Ltd.



上海马拉松革新电气有限公司  
Shanghai Marathon Innovation  
Electric Co., Ltd.



镇江中船现代发电设备有限公司  
Zhenjiang Zhongchuan Modern Power  
Generation Equipment Co., Ltd.



格兰富水泵苏州有限公司  
Grundfos Pumps Suzhou Co., Ltd.



赛莱默水处理系统(沈阳)有限公司  
Xylem water treatment system  
(shenYang)CO.LTD in China



南阳防爆集团有限责任公司  
Nanyang Explosion Protection  
Group Co., Ltd.



中船重工

中船重工电机股份有限公司  
CSIC Electric Technology Co., Ltd.  
Taiyuan Branch



西安西玛电机(集团)有限公司  
Xi' an Xima Electric (Group) Co., Ltd.



浙江金龙电机股份有限公司  
Zhejiang Golden Dragon  
Electric Co., Ltd.



佳木斯电机股份有限公司  
JIAMUSI ELECTRIC MACHINE CO.,LTD.  
Jiamusi Electric Co., Ltd.



上海电机有限公司  
Shanghai Electric Co., Ltd.



河北电机股份有限公司  
Hebei Electric Motor Co.,Ltd  
Hebei Electric Co., Ltd.



兰州兰电机股份有限公司  
Lanzhou Electric Co., Ltd.



卧龙电气集团股份有限公司  
Wolong Electric Group Co., Ltd.



雷勃电气(无锡)有限公司  
Regal Beloit (WuXi) Company.,Ltd



Huali Group

山东华力电机集团股份有限公司

SHANDONG HURLI ELECTRIC MOTOR GROUP CO., LTD  
Shandong Huali Electric Co., Ltd.



中国中车 南车株洲电机有限公司  
CSR ZHUZHOU ELECTRIC CO.,LTD  
CSR Zhuzhou Electric Co., Ltd.



江苏大中电机股份有限公司  
JiangSu DaZhong Electric Motor CO.,LTD

Jiangsu Dazhong Electric Co., Ltd.



Nanjing Turbine & Electric Machinery Changfeng New Energy Co., Ltd.



中国中车 四方车辆研究所有限公司  
SIFANG ROLLING STOCK RESEARCH INSTITUTE CO.,LTD.

## 企业简介

丹东科亮电子有限公司成立于 2001 年 5 月。公司主营业务包括制造、销售电子产品、自动控制设备、仪器仪表、系统集成等。厂房面积近 13000 平方米。我公司是目前国内较大的以电动机保护配套产品开发、生产、销售为主的专业企业。公司通过了质量/环境/职业健康安全管理体系认证，产品通过 UL、ATEX、BV、IECEX、CE、ROHS 以及防爆电气产品认证。2009 年公司被认定为高新技术企业，并先后获得“国家火炬计划项目”、“上海电机协会名优产品”、“辽宁省守合同重信用企业”、“安全生产先进单位”、“工商企业免检单位”以及“年度增长最快工业企业”等荣誉称号。

公司产品畅销国内，远销德国、西班牙等国家和地区，产品市场占有率居于同行业前列。2009 年“科亮”商标获得“辽宁省著名商标”称号。

## Enterprise profile

Established in May 2001, Dandong Keliang Electron Co., Ltd. specializes in the manufacturing and sales of electronic products, automatic control equipment and instruments, system integration, etc. Its plant area is nearly 13,000 m<sup>2</sup>.

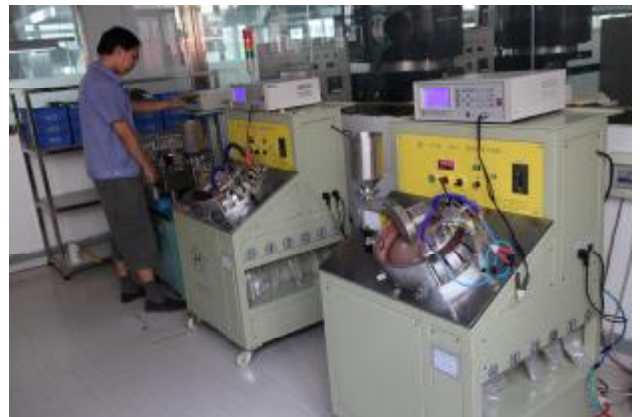
At present, the company is a large professional enterprise specializing in development, production and sales of motor-protection auxiliary products in China. It has passed Quality/Environment/Occupation Health Safety Management System Certification, and the products have passed UL, ATEX, BV, IECEX, CE, ROHS and explosion-proof

electrical product certification. It was rated as high-tech enterprise in 2009 and was awarded with the titles including “Contract-honoring and Faith-keeping Enterprise in Liaoning Province”, “Shanghai motor association,famous quality products” “Excellent Organization in Work Safety”, “One of Industrial and Commercial Enterprises Exempted from Inspection”, “Industrial Enterprise with Fastest Annual Growth”, etc. The products are sold well not only in China but also in other countries and regions such as Germany and Spain, and its market share is among the tops in the industry. Its trademark “Keliang” was honored with the title “Famous Trademark in Liaoning Province” in 2009.

厂房 Plant rendering



## 生产线体与相关设备 Production lines and related equipment





高低温交变湿热试验箱

High and low temperature alternating hot and humid test chamber



卧式检定炉

Horizontal calibration furnace



真空浸漆机

Vacuum varnished machine



雷击浪涌发生器

Lightning surge generator



恒温制冷槽

Constant temperature cooling tank



能量色散光谱仪

Energy dispersive spectrometer

## 目录 CONTENTS

1. UL 认证证书 UL certificate
2. ATEX 认证证书 ATEX certificate
3. BV 认证证书 BV certificate
4. IEC EX 认证证书 IEC EX certificate
5. CE 认证证书 CE certificate
6. 质量管理体系认证证书 Quality mangement system certificate
7. 环境管理体系认证证书 Environment management system certificate
8. 职业健康安全证书 Oecupational health safety management system certificate
9. 西门子设计改善确认证书 Certificate of IP rating design improvement for  
Siemens PT100 sensor
10. 上海 ABB 合格供应商证书 Qualified supplier of ABB shanghai motors
11. 国家火炬计划项目证书 Certificate of national torch plan project
12. 行业名优产品证书 Industry famous quality products certificate
13. 辽宁省著名商标 Liaoning province famous trademark

## Certificate of Compliance

Certificate Number: 081808 - E318736  
Report Reference: E318736 - March 31st, 2008  
Issue Date: 2008 August 18

Page 1 of 1



*Issued to:* Dandong Keliang Electron Co Ltd

3 GANQUAN RD, DANDONG FRONTIER COOPERATION AREA  
JINQUAN INDUSTRIAL DISTRICT  
DANDONG, LIAONING 11 8009 CHINA

*This is to certify that  
representative samples of*

**Component - Thermal Protectors for motor**  
Thermal Protectors for motor, series MK1

*Have been investigated by Underwriters Laboratories Inc.® in  
accordance with the Standard(s) indicated on this Certificate.*

*Standard(s) for Safety:*

UL 2111, Overheating Protection for Motors, First Edition, with Revisions dated  
January 27, 2006  
CSA C22.2 No. 77-95, Standard for Motors with Inherent Overheating Protection,  
Seventh Edition, with Revisions dated 2004

*Additional Information:*

N/A

Only those products bearing the UL Recognized Component Marks for the U.S. and Canada should be considered as being covered by UL's Recognition and Follow-Up Service and meeting the appropriate U.S. and Canadian requirements.

The UL Recognized Component Mark for the U.S. generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark, , may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Marking" for the individual recognitions. The UL Recognized Component Mark for Canada consists of the UL Recognized Mark for Canada, , and the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory.

**Look for the UL Recognized Component Mark on the product**

Issued by: *Rose Zhou*

Reviewed by: *Frank Zhang*

Rose Zhou, Customer Service Prof III

Frank Zhang, Associate Project Engineer

UL CCIC

UL CCIC

Any information and documentation involving UL Mark services are provided on behalf of Underwriters Laboratories Inc. (UL) or any authorized licensee of UL.  
For questions in China you may call 86-512-6886401-66741.



## CERTIFICATE OF COMPLIANCE

**Certificate Number** 20170120-E326107  
**Report Reference** E326107-20090828  
**Issue Date** 2017-JANUARY-20

**Issued to:** DANDONG KELIANG ELECTRON CO LTD  
3 GANQUAN RD, DANDONG INDUSTRIAL PARK  
JINQUAN INDUSTRIAL DIST, DANDONG  
LIAONING 118009 CHINA


**This is to certify that representative samples of** COMPONENT - HEATERS, SPECIALTY  
SEE ADDENDUM PAGE.

Have been investigated by UL in accordance with the Standard(s) indicated on this Certificate.

**Standard(s) for Safety:** Electric Heating Appliances, UL 499  
Heater Elements, C22.2 No. 72-10

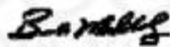
**Additional Information:** See the UL Online Certifications Directory at [www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's Certification and Follow-Up Service.

The UL Recognized Component Mark generally consists of the manufacturer's identification and catalog number, model number or other product designation as specified under "Marking" for the particular Recognition as published in the appropriate UL Directory. As a supplementary means of identifying products that have been produced under UL's Component Recognition Program, UL's Recognized Component Mark:  may be used in conjunction with the required Recognized Marks. The Recognized Component Mark is required when specified in the UL Directory preceding the recognitions or under "Markings" for the individual recognitions.

Recognized components are incomplete in certain constructional features or restricted in performance capabilities and are intended for use as components of complete equipment submitted for investigation rather than for direct separate installation in the field. The final acceptance of the component is dependent upon its installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.



Bruce Matzenholz, Director North American Certification Program  
ULLLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at <http://ul.com/about/locations>

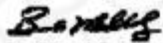


## CERTIFICATE OF COMPLIANCE

Certificate Number 20170120-E326107  
Report Reference E326107-20090828  
Issue Date 2017-JANUARY-20

This is to certify that representative samples of the product as specified on this certificate were tested according to the current UL requirements.

Component Silicone Rubber Heater Models BQ304, DBQ03, HBQ15, ZJJ04, ZJJ03, ZJJ15, BQ3YY, ZJJYY, DBQYY, HBQYY, GXYY, KBQYY (YY = 03-15)



Bruce Mahesholz, Director North American Certification Program  
UL LLC

Any information and documentation involving UL Mark services are provided on behalf of UL LLC (UL) or any authorized licensee of UL. For questions, please contact a local UL Customer Service Representative at [ul@ul.com](mailto:ul@ul.com) or [www.ul.com](http://www.ul.com)



## CERTIFICATE OF COMPLIANCE

Certificate Number 20160331-E318734  
Report Reference E318734-20160331  
Issue Date 2016-MARCH-31

Issued to: DANDONG KELIANG ELECTRON CO LTD  
3 Ganquan Rd  
Dandong Industrial Park  
Jinquan Industrial Dist  
Dandong  
Liaoning 118009 CHINA

This is to certify that  
representative samples of

COMPONENT - THERMISTOR-TYPE DEVICES  
Thermistor-type devices, Positive Temperature Coefficient  
(PTC) Sensing Thermistor, Model MZ6 Series,  
Models - MZ6-100, MZ6-105, MZ6-110, MZ6-115,  
MZ6-120, MZ6-125, MZ6-130

Have been investigated by UL in accordance with the  
Standard(s) indicated on this Certificate.

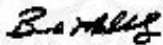
Standard(s) for Safety: UL 1434, Thermistor-Type Devices  
CSA E60730-1 Annex J, Automatic Electrical Controls for  
Household and Similar Use, Part 1 General Requirements

Additional Information: See the UL Online Certifications Directory at  
[www.ul.com/database](http://www.ul.com/database) for additional information

Only those products bearing the UL Certification Mark should be considered as being covered by UL's  
Certification and Follow-Up Service.

Recognized components are incomplete in certain constructional features or restricted in performance  
capabilities and are intended for use as components of complete equipment submitted for investigation rather  
than for direct separate installation in the field. The final acceptance of the component is dependent upon its  
installation and use in complete equipment submitted to UL LLC.

Look for the UL Certification Mark on the product.



Bruce Mahesholz, Director North American Certification Program  
ULLLC

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contact a local UL Customer Service Representative at [info@ul.com](mailto:info@ul.com) or [www.ul.com](http://www.ul.com)







## [1] TYPE EXAMINATION CERTIFICATE

[2] Component Intended for use on/in an Equipment or Protective System Intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

[3] Type Examination Certificate Number: Nemko 11ATEX1013U Issue 2

[4] Product: Temperature sensor

[5] Manufacturer: Dandong Keliang Electron Co.,Ltd.

[6] Address: No.3 Ganquan Road, Jinqian Industrial Zone, Dandong Liaoning. P.R. China

[7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

[8] Nemko AS certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014.

The examination and test results are recorded in confidential report no. D0001335-01

[9] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012/A11:2013 and EN 60079-7:2007

[10] The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system

[11] This TYPE EXAMINATION CERTIFICATE relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate

[12] The marking of the product shall include the following:



II 2 G

Ex e IIC Gb

Oslo, 2017-06-20

Geir Hørthe  
Certification Manager



## [13] Schedule

[14] **TYPE EXAMINATION CERTIFICATE No**      **Nemko 11ATEX1013U**      **Issue 2**

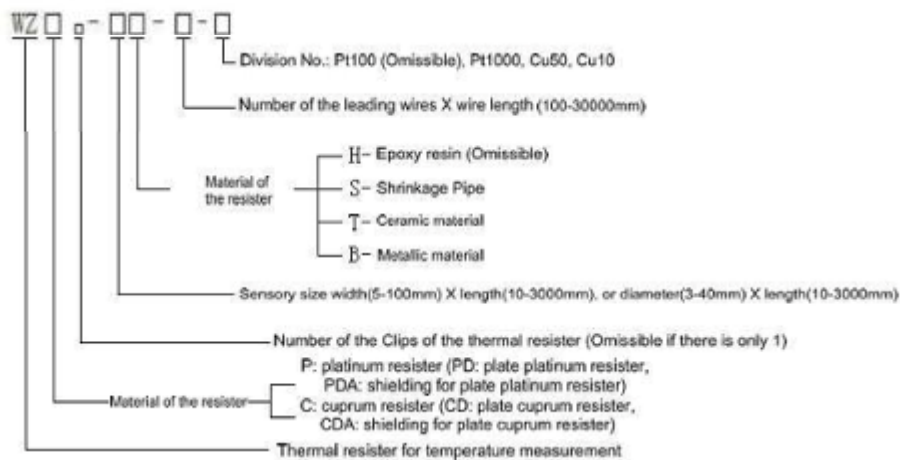
[15] **Description of Product**

This Certificate comprises three types of temperature sensors.  
 Temperature sensor, WZP6×18B-3×1000 (Bearing type), consists of one Pt100 measuring element in a stainless steel protection tube.  
 Type WZP8×60-3×1000 (Plate type) and WZP8×60-2×1000 (Plate type) consists of one Pt100 measuring element in a glass fabric laminate plate.  
 For the connection to external circuits the sensor is equipped with a cable with 2 or 3 conductors.

**Type Designations**

WZP6×18B-3×1000 (Bearing type)  
 WZP8×60-3×1000 (Plate type)  
 WZP8×60-2×1000 (Plate type)

**Type designation key:**



Operating/Temperature measuring range:  
 For platinum thermal resistance: -50°C to 180°C

**Electrical Data**  
 Maximum voltage: 24VDC  
 Maximum current: 1mA

**IP Code:**  
 IP54 (measuring head)

**Routine tests**  
 Dielectric strength test according to Clause 7.1 of EN 60079-7.



**[16] Report No. D0001335-01  
Descriptive Documents**

| Number      | Title                           | Rev | Date       |
|-------------|---------------------------------|-----|------------|
| 06301002/01 | WZP8x60-3x1000 Assembly drawing | 1   | 2016-08-10 |
| 06401041    | Seat sheet /cover sheet         | 1   | 2011-08-22 |
| 06406011    | Label                           | 1   | 2009-11-05 |
| 06301025    | WZP8x60-2x1000 Assembly drawing | 1   | 2011-10-19 |
| 06401041    | Seat sheet /cover sheet         | 1   | 2011-08-22 |
| 06406010    | Label                           | 1   | 2009-11-05 |
| 06303000    | WZP8x60-2x1000 Assembly drawing | 1   | 2011-10-19 |
| 06402117    | Housing                         | 1   | 2009-11-05 |
| 06403081    | Cover                           | 1   | 2009-11-05 |
| 06404110    | Spring                          | 1   | 2009-11-05 |
| 06403082    | Bolt for assembling             | 1   | 2009-11-05 |
| 06406012    | Label                           | 1   | 2009-11-05 |

**Certificate History and Associated Nemko Reports**

| Issue | Date       | Report      | Description   |
|-------|------------|-------------|---|
| 0     | 2012-06-18 | 179447      | Prime Certificate released  |
| 1     | 2014-11-12 | D0001335    | Update to standard EN 60079-0: 2009   |
| 2     | 2017-06-20 | D0001335-01 | Update to standard EN 60079-0: 2012. Extended operating temperature to -50°C ~180°C |

**[17] Schedule of Limitations for Utilization of the Component**

1. The electrical connection should be connected to approved unit according to application or to terminal box according to requirements at the connecting site.
2. For the bearing type temperature measuring sensor, the installation of the sensor shall be carried out carefully to avoid bending stress as well as damage of cable and insulation.
3. For the bearing type temperature measuring sensor, the protecting tube of the sensor shall be installed in such a way, that it is protected over it's total length.
4. The sensors can only be connected to measuring equipment prepared for PT100 sensors.
5. Operating temperature: -50°C ~180°C

**[18] Essential Health and Safety Requirements**

Essential Health and Safety Requirements (EHSRs) are covered by the standards listed at item 9



Marine & Offshore

Certificate number: 27809/B0 BV

File number: AP 4308

Product code: 3812H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

[www.veristar.com](http://www.veristar.com)

## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**Dandong Keliang Electron Co., Ltd.**

Liaoning - CHINA

*for the type of product*

**TEMPERATURE SENSORS / PROBES / TRANSDUCERS**

Platinum resistance temperature sensor, WZP Model

**Requirements:**

- Bureau Veritas Rules for the Classification of Steel Ships,
- Bureau Veritas Rules for the Classification of Offshore Units,
- IEC 60751 (2008).

EC Code: 31

*This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 23 Oct 2022**

**For Bureau Veritas Marine & Offshore,**

At BV SHANGHAI, on 23 Oct 2017,

Jennifer Zhang



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site [www.veristar.com](http://www.veristar.com). Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarnb.com/veristarnb/jsp/viewPublicPdfTypec.jsp?id=dd3mq10zl>  
BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)





## IECEX Certificate of Conformity

### INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEX Scheme visit [www.iecex.com](http://www.iecex.com)

|                     |  |             |   |
|---------------------|--|-------------|---|
| Certificate No.:    | IECEX PRE 14.0010U   | Issue No: 1 | <u>Certificate history:</u><br>Issue No. 1 (2017-06-21)<br>Issue No. 0 (2014-11-12) |
| Status:             | Current  | Page 1 of 5 |   |
| Date of Issue:      | 2017-06-21   |             |   |
| Applicant:          | Dandong Keliang Electron Co.,Ltd.<br>No.3 Ganquan Road, Jinquan Industrial Zone, Dandong Liaoning<br>China |             |   |
| Equipment:          | WZ Series Temperature sensor   |             |   |
| Optional accessory: |  |             |   |
| Type of Protection: | Increased safety   |             |   |
| Marking:            | Ex e IIC Gb  |             |   |

Approved for issue on behalf of the IECEX  
Certification Body:

Bjorn Spongsveen

Position:

Certification Manager

Signature:  
(for printed version)

Date:

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the [Official IECEX Website](http://www.iecex.com).

Certificate issued by:

DNV Nemko Presafe AS  
Gautadalleen 30  
P.O.Box 73 Blindern  
0314 Oslo  
Norway





## IECEX Certificate of Conformity

Certificate No: IECEX PRE 14.0010U Issue No: 1  
Date of Issue: 2017-06-21 Page 2 of 5  
Manufacturer: Dandong Keliang Electron Co.,Ltd.  
No.3 Ganquan Road, Jinquan Industrial Zone, Dandong Liaoning  
China

Additional Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEX Quality system requirements. This certificate is granted subject to the conditions as set out in IECEX Scheme Rules, IECEX 02 and Operational Documents as amended.

### STANDARDS:

The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements  
Edition:6.0  
IEC 60079-7 : 2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:4

*This Certificate does not indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

### TEST & ASSESSMENT REPORTS:

*A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in*

#### Test Report:

CN/CGM/ExTR13.0024/01 NO/PRE/ExTR14.0055/00 NO/PRE/ExTR14.0055/01

#### Quality Assessment Report:

NO/NEM/QAR14.0002/00



## IECEX Certificate of Conformity

Certificate No: IECEX PRE 14.0010U

Issue No: 1

Date of Issue: 2017-06-21

Page 3 of 5

### Schedule

#### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

WZ Series Temperature sensor

Operating temperature / Temperature measuring range: -50°C to 180°C

Maximum voltage: 24VDC  
Maximum current: 1mA

See Annex.

SPECIFIC CONDITIONS OF USE: NO

#### Schedule of Limitations

1. The electrical connection should be connected to approved unit according to application or to terminal box according to requirements at the connecting site.
2. For the bearing type temperature measuring sensor, the installation of the sensor shall be carried out carefully to avoid bending stress as well as damage of cable and insulation.
3. For the bearing type temperature measuring sensor, the protecting tube of the sensor shall be installed in such a way, that it is protected over it's total length.
4. The sensors can only be connected to measuring equipment prepared for PT100 sensors.
5. Operating temperature: -50°C ~ 180°C



## IECEX Certificate of Conformity

Certificate No: IECEX PRE 14.0010U

Issue No: 1

Date of Issue: 2017-06-21

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**DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

Update to standard EN 60079-0: 2012. Extended operating temperature to -50°C ~180°C



## IECEX Certificate of Conformity

Certificate No: IECEX PRE 14.0010U

Issue No: 1

Date of Issue: 2017-06-21

Page 5 of 5

Additional information:

Annex:

ANNEX TO IECEX PRE 14.0010U.pdf



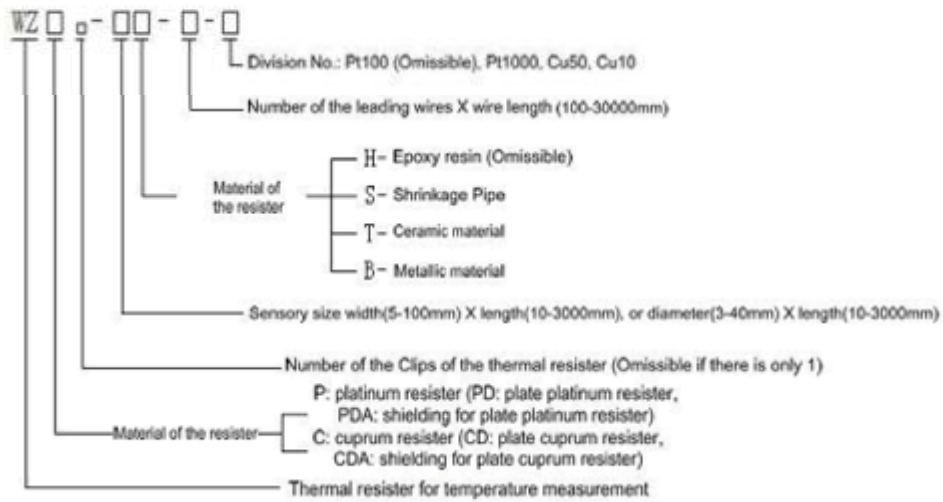
## ANNEX to IECEx Certificate of Conformity

IECEx PRE 14.0010U Issue 1

Page 1 of 1

### ANNEX to Certificate of Conformity IECEx PRE 14.0010U Issue 0.

#### Type designation



# CERTIFICATE



**BEIJING BEMTC** certifies that the products specified below are in compliance with the mentioned technical standards. This is to confirm that the products are in compliance with the technical requirements related to **CE**-Marking.

For bringing the products into circulation on the **EU** market, further provisions have been fulfilled in accordance with the Directive: 73/23/EEC, 93/68/EEC

**Manufacturing plant:**

**DANDONG KELIANG ELECTRON.CO.,LTD**  
Add: Room 202, Building 41, District E,  
Development Zone, Dandong, Liaoning,  
P.R.China P.C: 118000

**Description of equipment:**

**BQ/KBQ Type Electric Motor  
Anti-Condensation Heater**

**Tested in accordance to:**

**EN60519-1:2003      EN60204-1:2000  
EN60529:2000**

This ce consulting certificate shall only be valid with the conditions stated above!

File No: **TCCE01087**

Test report No: 20050425010

BEIJING dated 9. Oct 2005

Head of certification body



## CERTIFICATE



**BEIJING BEMTC** certifies that the products specified below are in compliance with the mentioned technical standards. This is to confirm that the products are in compliance with the technical requirements related to **CE-Marking**.

For bringing the products into circulation on the **EU** market, further provisions have been fulfilled in accordance with the Directive 73/23/EEC、93/68/EEC、89/336/EEC、92/31/EEC

**Manufacturing plant:**

**DANDONG KELIANG ELECTRON.CO.,LTD**  
Add: Room 202, Building 41, District E,  
Development Zone, Dandong, Liaoning,  
P.R.China P.C: 118000

**Description of equipment:**

**GRB Type Electric Motor Superheat  
Protection Apparatus**

**Tested in accordance to:**

|                  |                  |
|------------------|------------------|
| EN60519-1:2003   | EN60947-1:2001   |
| EN60204-1:2000   | EN60529:2000     |
| EN61000-6-2:2001 | EN61000-6-4:2001 |

This ce consulting certificate shall only be valid with the conditions stated above!

File No: **TCCE01086**

Test report No: 20050422023

BEIJING dated 9, Oct 2005

Head of certification body







European Certifying Organization

ECO s.p.a.

## CERTIFICATE OF CONFORMITY

according to the requirements established in the point 1, annex IV of EMC Directive

Registration no: 714I060611

**Holder:** DANDONG KELIANG ELECTRON CO., LTD.  
No.3, Ganquan Road, Jinquan Industrial Zone, Dandong, Liaoning,  
P.R.China

**Manufacturer:** DANDONG KELIANG ELECTRON CO., LTD.  
No.3, Ganquan Road, Jinquan Industrial Zone, Dandong, Liaoning,  
P.R.China

**Product:** THERMAL RESISTANCE SENSOR

**Model:** WZ

**Technical File:** no. KL-CE-2011A dated 2011/12/20

### Reference Standards

EN 60751:2008  
EN 60730-2-9:2002

**Conclusion:** This assessment is based on an evaluation of the technical info of the above mentioned product and it is to certify that the technical file has been made in compliance with the items established in the point 1, annex IV of 2004/108/EC (EMC Directive).

Place and date of issue

Faenza, ITALY  
2011/12/28



Authorized Signatory

*Gianluca Camporesi*  
ECO CERTIFICAZIONI S.p.A. - ECO  
Via Mengolina, 33  
FAENZA (RA)  
Gianluca Camporesi

### Note:

- any modification to the technical file should be first submitted to ECO to ensure further validity of this document;
- this certificate is issued on voluntary request;
- this certificate can not be considered as an approval of the technical file content;
- the product must be put into the market only in observance of the national rules and standards of the country of use.



# CERTIFICATE

## ATTESTATION CERTIFICATE OF ELECTROMAGNETIC COMPATIBILITY AND LOW VOLTAGE DIRECTIVES

Technical file of the company mentioned below has been observed and audit has been completed successfully.

2014/30/EU Electromagnetic Compatibility Directive and  
2014/35/EU Low Voltage Directives have been taken as references for these processes

Company Name : **Dandong Keliang Electron Co., Ltd.**

Company Address : No.3,Ganquan Road,Jinquan Industrial Zone,Dandong,Liaoning,  
P.R.China

Related Directives and Annex : **2014/35/EU Low Voltage Directive**  
**2014/30/EU Electromagnetic Compatibility Directive**

Related Standards : **EN 55014-1:2011;EN 60335-1:2014;EN 60947-8:2003+A2:2012**  
**EN 60204-1:2006+A1:2009;EN 60947-7-1:2009**

Product Name : **Overtemperature Protection Thermoswitch**

Report No and Date : **ESC-DDKL-201711-27E**

Product Brand/Model/Type : **MK1,MK2,ZMK1,ZMK2**

Certificate Number : **M.2017.201.N2459**

Initial Assessment Date : **28.11.2017**

Registration Date : **29.11.2017**

Reissue Date/No : **-**

Expiry Date : **28.11.2022**

The validity of the certificate can be checked through [www.udem.com.tr](http://www.udem.com.tr). The CE mark shown on the right can only be used under the responsibility of the manufacturer with the completion of EC Declaration of Conformity for all the relevant Directives. This certificate remains the property of UDEM International Certification Auditing Training Centre Industry and Trade Inc. Co. to whom it must be returned upon request. The above named firm must keep a copy of this certificate for 15 years from the registration of certificate. This certificate only covers the product(s) stated above and UDEM must be notified in case of any changes on the product(s)

Address: Mülhükent Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çankaya – Ankara – TURKEY  
Phone: +90 0312 443 03 90 Fax: +90 0312 443 03 76  
E-mail: [info@udemiftd.com.tr](mailto:info@udemiftd.com.tr) [www.udem.com.tr](http://www.udem.com.tr)



*Y. Bayraktar*  
UDEM International Certification  
Auditing Training Centre Industry  
and Trade Inc. Co.





# CERTIFICATE

## ATTESTATION CERTIFICATE OF ELECTROMAGNETIC COMPATIBILITY AND LOW VOLTAGE DIRECTIVES

Technical file of the company mentioned below has been observed and audit has been completed successfully.

2014/30/EU Electromagnetic Compatibility Directive and  
2014/35/EU Low Voltage Directives have been taken as references for these processes

Company Name : **Dandong Keliang Electron Co., Ltd.**

Company Address : No.3,Ganquan Road,Jinquan Industrial Zone,Dandong,Liaoning,  
P.R.China

Related Directives and Annex : **2014/35/EU Low Voltage Directive**  
**2014/30/EU Electromagnetic Compatibility Directive**

Related Standards : **EN 55014-1:2011;EN 60335-1:2014**  
**EN 60738-1-1:2008;EN 60738-1-3:2008**

Product Name : **PTC-Thermistors**

Report No and Date : **ESC-DDKL-201711-27Y**

Product Brand/Model/Type : **MZ6,ZMZ69**

Certificate Number : **M.2017.201.N2460**

Initial Assessment Date : **28.11.2017**

Registration Date : **29.11.2017**

Reissue Date/No : **-**

Expiry Date : **28.11.2022**



*Signature*  
UDEM International Certification  
Auditing Training Centre Industry  
and Trade Inc. Co.

The validity of the certificate can be checked through [www.udem.com.tr](http://www.udem.com.tr). The CE mark shown on the right can only be used under the responsibility of the manufacturer with the completion of EC Declaration of Conformity for all the relevant Directives. This certificate remains the property of UDEM International Certification Auditing Training Centre Industry and Trade Inc. Co. to whom it must be returned upon request. The above named firm must keep a copy of this certificate for 15 years from the registration of certificate. This certificate only covers the product(s) stated above and UDEM must be notified in case of any changes on the product(s)

Address: Mülükent Mahallesi 2073 Sokak (Eski 93 Sokak) No:10 Çankaya – Ankara – TURKEY  
Phone: +90 0312 443 03 90 Fax: +90 0312 443 03 76  
E-mail: [info@udemltd.com.tr](mailto:info@udemltd.com.tr) [www.udem.com.tr](http://www.udem.com.tr)





## CERTIFICATE OF CONFORMITY OF QUALITY MANAGEMENT SYSTEM

NO. 01015Q10419R2M

This is to certify that the quality management system of

**DANDONG KELIANG ELECTRON CO., LTD.**

NO. 3 GANQUAN ROAD, JINQUAN INDUSTRIAL ZONE, DANDONG, LIAONING.

POSTCODE: 118009 ORGANIZATION CODE: 72843459X

Is in conformity with

**GB/T 19001-2008 / ISO 9001:2008 Standard**

The scope of activities covered by this certificate are defined below:

THE DESIGN, DEVELOPMENT, MANUFACTURING OF PTC THERMISTOR, THERMAL RESISTANCE SENSOR, SPACE HEATER BELT FOR MOTOR, PTC TEMPERATURE-CONTROL MODULE (OVERHEAT PROTECTOR FOR MOTOR), RESETTABLE OVERHEAT THERMO-PROTECTION THERMO-SWITCH (HEAT PROTECTOR) AND INTELLIGENT TEMPERATURE CONTROLLER AND OTHER PRODUCTS

Term of validity of this certificate: from SEP 25, 2015 to SEP 24, 2018 inclusive

**Northeast Audit Co., Ltd.**

NO. 21-1 WENYI ROAD, SHENHE DISTRICT, SHENYANG CITY, LIAONING PROVINCE

Surveillance(1)

Surveillance(2)

Surveillance audits should not exceed 12 months The certificate is invalid without attaching labels on schedule

General Manager

Date: 09/25/2015



MANAGEMENT SYSTEM  
CNAS C010-Q



THE CERTIFICATE INFORMATION IS AVAILABLE ON CNCA OFFICIAL WEBSITE ([www.cnca.gov.cn](http://www.cnca.gov.cn))



## CERTIFICATE OF CONFORMITY OF ENVIRONMENTAL MANAGEMENT SYSTEM

NO. 01016E10131R2M

This is to certify that the environmental management system of

**DANDONG KELIANG ELECTRON CO., LTD.**

NO. 3 GANQUAN ROAD, JINQUAN INDUSTRIAL ZONE DANDONG, LIAONING  
POSTCODE 118009 UNIFIED SOCIAL CREDIT CODE 9121060072843459X7

Is in conformity with the standard

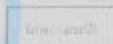
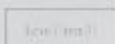
**GB/T 24001-2004 idt ISO14001:2004**

The Environmental Management System applies in the following area:  
THE DESIGN, DEVELOPMENT, MANUFACTURING OF PTC THERMISTOR, THERMAL RESISTANCE  
SENSOR, SPACE HEATER BELT FOR MOTOR, PTC TEMPERATURE-CONTROL MODULE (OVERHEAT  
PROTECTOR FOR MOTOR), RESETTABLE OVERHEAT THERMO-PROTECTION THERMO-SWITCH (HEAT  
PROTECTOR) AND INTELLIGENT TEMPERATURE CONTROLLER AND OTHER  
PRODUCTS AND RELATIVE ACTIVITIES AND LOCATIONS

Term of validity of this certificate: from SEP 09, 2016 to SEP 15, 2018 inclusive

**Northeast Audit Co., Ltd.**

NO. 21-1 WENYI ROAD, SHENHE DISTRICT, SHENYANG CITY, LIAONING PROVINCE



Surveillance audits should not exceed 12 months. The certificate is invalid without attaching labels on schedule.

General Manager

Date: 09/09/2016



中国认可  
国际互认  
管理体系  
MANAGEMENT SYSTEM  
CNAS C010-M

本证书信息可在国家认证认可监督管理委员会官方网站 ([www.cnca.gov.cn](http://www.cnca.gov.cn)) 上查询  
THE CERTIFICATE INFORMATION IS AVAILABLE ON CNCA OFFICIAL WEBSITE ([www.cnca.gov.cn](http://www.cnca.gov.cn))



## CERTIFICATE OF CONFORMITY OF OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM

NO: 01015S10126R2M

This is to certify that the occupational health and safety management system of  
**DANDONG KELIANG ELECTRON CO., LTD.**  
NO. 3 GANQUAN ROAD, JINQUAN INDUSTRIAL ZONE, DANDONG, LIAONING.  
POSTCODE: 118009 ORGANIZATION CODE: 72843459X

Is in conformity with the standard

**GB/T28001-2011**

The scope of activities covered by this certificate are defined as below:  
THE DESIGN, DEVELOPMENT, MANUFACTURING OF PTC THERMISTOR, THERMAL RESISTANCE SENSOR, SPACE HEATER BELT FOR MOTOR, PTC TEMPERATURE-CONTROL MODULE (OVERHEAT PROTECTOR), RESETTABLE OVERHEAT THERMO-PROTECTION THERMO-SWITCH (HEAT PROTECTOR FOR MOTOR) AND INTELLIGENT TEMPERATURE CONTROLLER AND OTHER PRODUCTS AND RELATIVE ACTIVITIES AND LOCATIONS

Term of validity of this certificate: from SEP 25, 2015 to SEP 24, 2018 inclusive

**Northeast Audit Co., Ltd.**

NO. 21-1 WENYI ROAD, SHENHE DISTRICT, SHENYANG CITY, LIAONING PROVINCE



Surveillance audits should not exceed 12 months The certificate is invalid without attaching labels on schedule

General Manager:

Date: 09/25/2015



MANAGEMENT SYSTEM  
CNAS C010-S

THE CERTIFICATE INFORMATION IS AVAILABLE ON CNCA OFFICIAL WEBSITE ([www.cnca.gov.cn](http://www.cnca.gov.cn))

EA-083

## SIEMENS



### 证书 / Certificate

丹东科亮电子有限公司

DanDong Keliang Electron Co.,Ltd.

贵公司的建议

**PT100 传感器 IP 防护等级设计改善**

Your suggestion

**The improvement of PT100 IP protection degree**

为西门子电气传动有限公司 **3i-external** 项目的实施发挥了主动性和积极性。您的参与充分体现了“策略合作”精神。

has displayed the initiative and the enthusiasm for 3i-external Program of Siemens Electrical Drives Ltd. Your participation shows the spirit of "strategy cooperation".

感谢贵公司为 SEDL 的发展做出的重要贡献，  
以此实现我们共同的成功！

特发此证

Thanks to the significant contribution to SEDL development, so that we realize the win-win.

西门子电气传动有限公司 3i 办公室  
3i Office@ Siemens Electrical Drives Ltd

2011 年 10 月 20 日  
Oct. 20<sup>th</sup>, 2011



EA-150

## SIEMENS



## 证书 / Certificate

丹東科亮電子有限公司

Dandong Keliang Electronic Co.Ltd.

貴公司的建議

**消除包裝箱破損隱患**

Your suggestion

**Avoiding Packing Broken Risk**

為西门子電氣傳動有限公司 **3i-external** 項目的實施發揮了主動性和積極性。您的參與充分體現了“策略合作”精神。

has displayed the initiative and the enthusiasm for 3i-external Program of Siemens Electrical Drives Ltd. Your participation shows the spirit of "strategy cooperation".

感謝貴公司為 SEDL 的發展做出的重要貢獻，  
以此實現我們共同的成功！

特發此證

Thanks to the significant contribution to SEDL development, so that we realize the win-win.

西门子電氣傳動有限公司 3i 辦公室  
3i Office@ Siemens Electrical Drives Ltd

2012 年 8 月 26 日

Aug. 26<sup>th</sup>, 2012







丹東科亮電子有限公司

**2006年度合格供應商**

總經理: 

日期: 2006.12.01

上海ABB电机有限公司  
ABB Shanghai Motors Co., Ltd.



## 国家火炬计划项目证书

项目名称: 超小型高灵敏 PTC 热敏电阻

承担单位: 丹东科亮电子有限公司

项目编号: 2010GH010167

批准机关: 中华人民共和国科学技术部

颁证机关: 科学技术部火炬高技术产业开发中心

颁证日期: 二〇一〇年五月



# 名优证书

丹東科亮電子有限公司：

贵公司生产的MZ6型电机用PTC热敏电阻保护器被评为“行业名优产品”（2011年复审通过），有效期为2012年1月1日至2013年12月31日。



# 名优证书

丹東科亮電子有限公司：

贵公司生产的WZPD型电机用埋置式热电阻被评为“行业名优产品”（2011年复审通过），有效期为2012年1月1日至2013年12月31日。



# 名优证书

丹東科亮電子有限公司：

贵公司生产的电机用防潮加热带（BQ、HBQ、KBQ型）被评为“行业名优产品”（2011年复审通过），有效期为2012年1月1日至2013年12月31日。





# 科亮







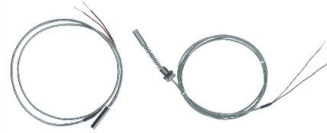


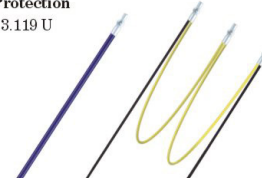
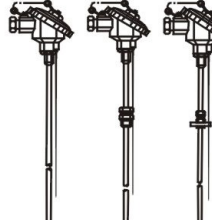






## 丹东科亮电子有限公司

Dandong Keliang Electron Co., Ltd



### 上海电机行业名优产品

|   |  |   |  |
|---|--|---|--|
| <p><b>MZ6型电机保护PTC热敏电阻</b><br/>MZ6 Type PTC-Thermistors For Electric Motor Protection<br/>ZL 2005 1024645.6 CE File No:TCCE01085</p>                                | <p><b>PTC温控模块</b><br/>GRB Type Electric Motor Overheated Protection Apparatus<br/>ZL 2005 20239205.5 ZL 2010 2 0046727.5<br/>CE File No: TCCE01086</p>            | <p><b>自复式保护热敏开关(热保护器)</b><br/>Mk1 Type Overtemperature Protection Thermoswitch<br/>ZL 02 2 10543.3 UL File No:E318736<br/>CE File No:TCCE01085</p>  | <p><b>17AM系列自复式超温过流保护热敏开关(热保护器)</b><br/>AM Resettable Over-temperature- and Over-current Protection Thermal Switch (Thermal Protector)</p>  |
| <p><b>中小低压电机防潮加热带</b><br/>Moisture-resistant Heating Tape for Small/Medium Low-voltage Motor<br/>ZL 2005 2 0091329.X UL File No:E326107 CE File No.:TCCE01087</p>  | <p><b>HBQ型高压电机防潮加热带</b><br/>Moisture-resistant Heating Tape for HBQ High-voltage Motor<br/>ZL2005 2 0091329.X UL File No.: E326107<br/>CE File NO: TCCE01087</p>  | <p><b>热电阻传感器</b><br/>Platinum thermal resistance sensor<br/>ZL 200920015123.7</p>   | <p><b>电机专用热电偶</b><br/>Thermocouple For Special Use of Electric Motor</p>    |
| <p><b>KTY系列硅温度传感器</b><br/>KTY84-1XX Silicon Temperature Sensor</p>    | <p><b>防爆电机防潮加热带</b><br/>Explosion-proof Type Electric Motor Anti-Condensation Heater<br/>ZL 2004 2 0070284.3</p>    | <p><b>BWZPM隔爆型湿度传感器</b><br/>Explosion-proof Type Platinum Resistance Sensor<br/>CJEx06.090</p>    | <p><b>ZM26增安型电机保护PTC热敏电阻</b><br/>ZM26 Explosion-proof Type PTC-Thermistors For Electric Motor Protection<br/>CJEx04.3.119 U</p>           |
| <p><b>ZMK增安型自复式超温保护热敏开关(热保护器)</b><br/>ZMK Explosion-proof Type Overtemperature Protection Thermoswitch<br/>CJEx04.3.118 U</p>                                    | <p><b>智能型温度控制仪</b><br/>KLB Type Temperature Control Instrument</p>    | <p><b>WZP系列装配铂电阻</b><br/>WZP series assembled platinum resistance</p>   | <p><b>温度变送器</b><br/>Temperature transmitter</p>   |
| <p><b>硅橡胶电热膜</b><br/>Electro-thermal Film of Silicon Rubber</p>    | <p><b>精密控制仪热保护器</b><br/>Precise Controlling Thermal Protector</p>   | <p><b>单相电动机启动开关</b><br/>Single-phase Electric Engine Starting Switch<br/>ZL2005 20232251.3</p>    | <p><b>泄漏报警器</b><br/>Output Alarm<br/>ZL2005 20239203.6</p>    |
| <p><b>电加热器</b><br/>Electric Heater</p>   |  |   |  |

**丹东科亮电子有限公司**  
Dandong Keliang Electron Co., Ltd.

地址:辽宁省丹东产业园区金泉工业区甘泉路3号

电话:(86)0415-6155111 6150777

传真:(86)0415-6150222

网址:www.keliang.com

E-mail:keliang@vip.163.com

邮编:118009

ADD:No.3 Ganquan Road,Jinquan Industrial Zone,  
Dandong,Liaoning.

TEL:0086(0)415 6155111 6150777

FAX:0086(0)415 6150222

E-mail:keliang@vip.163.com

Website:www.keliang.com

Postcode:118009