ZERTIFIKAT ◆ CERTIFICATE ◆ 認證證書 ◆ СЕРТИФИКАТ ◆ CERTIFICADO ◆ CERTIFICAT

Product Service

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

**No. B 105620 0059 Rev. 00**

**Holder of Certificate:** **Zhejiang Tengen Electric Co., Ltd.**
Sulv Industrial Area, Liushi Town
325604 Yueqing City
PEOPLE'S REPUBLIC OF CHINA

**Certification Mark:**

**Product:** **Contactors**

The product was tested on a voluntary basis and complies with the essential requirements.
The certification mark shown above can be affixed on the product. It is not permitted to alter the certification mark in any way. In addition, the certification holder must not transfer the certificate to third parties. This certificate is valid until the listed date, unless it is cancelled earlier.
All applicable requirements of the Testing, Certification, Validation and Verification Regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

**Test report no.:** 64105213049206A

**Valid until:** 2030-06-08

**Date,** 2026-01-07

( Martin Ma )


TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

Product Service

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

**No. B 105620 0059 Rev. 00**

**Model(s):** **TGEVC1-aaabccdefg**

**TG denotes company characteristic code**
**EV denotes new energy**
**C denotes contactor**
**1 denotes design code**
**aaa denotes current, aaa can be 50, 100, 150, 200, 250, 300, 350, 400, 500, 600**
- **50: Rated operational current is 50A**
- **100: Rated operational current is 60A**
- **150: Rated operational current only for the rating with rated voltage of 100VDC is 150A**
- **200: Rated operational current only for the rating with rated voltage of 100VDC is 200A**
- **250: Rated operational current only for the rating with rated voltage of 100VDC is 250A**
- **300: Rated operational current only for the rating with rated voltage of 100VDC is 300A**
- **350: Rated operational current only for the rating with rated voltage of 100VDC is 350A**
- **400: Conventional free air thermal current is 400A**
- **500: Conventional free air thermal current is 500A**
- **600: Conventional free air thermal current is 600A**

**b denotes contact polarity, b can be W or blank**
- **W: Without polarity**
- **Blank: With polarity**

**cc denotes rated control supply voltage, cc can be 12, 24, 48 or blank**
- **12: 12VDC**
- **24: 24VDC**
- **48: 48VDC**
- **Blank: 12-36VDC**

**d denotes energy-saving module, d can be P, K or blank**
- **P: Dual-coil energy-saving panel**
- **K: Wide voltage**
- **Blank: Single coil, without energy-saving plate**

**e denotes auxiliary contact, e can be A, C or Z**
- **A: 1NO**
- **C: 1NC**
- **Z: 1CO**

**f denotes coil lead-out method, f can be B or blank**
- **B: Lead wire+terminal**
- **blank: With lead wire**

**g denotes mounting type, g can be Y or blank**
- **Y: Horizontal installation**
- **Blank: Vertical installation**


TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

Product Service

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

**No. B 105620 0059 Rev. 00**

## Parameters:

| | |
|---|---|
| Main circuit | |
| Utilization Category: | DC-1 |
| Number of Poles: | 1 |
| Overvoltage Category: | II |
| Type of insulation between coil(s) and contacts | Basic insulation only for TGEVC1-600 series, TGEVC1-500 series, TGEVC1-400 series, TGEVC1-100 series, TGEVC1-50 series<br>N/A for TGEVC1-350 series, TGEVC1-300 series, TGEVC1-250 series, TGEVC1-200 series, TGEVC1-150 series |
| Pollution Degree: | 2 specified by manufacturer for TGEVC1-600 series, TGEVC1-500 series, TGEVC1-400 series, TGEVC1-350 series, TGEVC1-300 series, TGEVC1-250 series, TGEVC1-200 series, TGEVC1-150 series<br>3 (internal 2) for TGEVC1-100 series, TGEVC1-50 series |
| Rated prospective short-circuit current "r" (kA) | Same as Iq |
| Type of co-ordination | Type 2 |
| Auxiliary circuit | |
| Number of circuits: | 1 NO or 1NC or 1CO |
| Utilization category: (AC, DC, current and voltage): | DC-12 1A 30VDC for TGEVC1-350 series, TGEVC1-300 series, TGEVC1-250 series, TGEVC1-200 series, TGEVC1-150 series, TGEVC1-100 series, TGEVC1-50 series<br>DC-13 2A 30VDC for TGEVC1-600 series, TGEVC1-500 series, TGEVC1-400 series |
| Control circuit | |
| Rated control supply voltage Us: | 12/24/12-36VDC for TGEVC1-600 series, TGEVC1-500 series, TGEVC1-400 series<br>12/24/48/12-36VDC for TGEVC1-350 series, TGEVC1-300 series, TGEVC1-250 series, TGEVC1-200 series, TGEVC1-150 series<br>12/24/48VDC for TGEVC1-100 series, TGEVC1-50 series |

**Remark:**

Table 1: Detail information for different models

| Series | Rated insulation voltage Ui (V) | Rated operational voltage Ue (VDC) | Rated impulse withstand voltage Uimp (kV) | Rated operational current Ie (A) | Conventional free air thermal current Ith (A) | Rated conditional short-circuit current Iq |
|---|---|---|---|---|---|---|
| TGEVC1-600 | 1500 | 750 | 8 | 200 | 600 | 10kA specified by |



TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

TÜV®

Product Service

# CERTIFICATE

## No. B 105620 0059 Rev. 00

| | | | | | | |
|---|---|---|---|---|---|---|
| TGEVC1-500 | 1500 | 750 | 8 | 200 | 500 | manufacturer |
| TGEVC1-400 | 1500 | 750 | 8 | 200 | 400 | |
| TGEVC1-350 | 250 | 100 | 2.5 | 350 | 500 | 18kA for rated current 500A, 3kA for rated current 15A specified by manufacturer |
| | 1500 | 1500 | 8 | 15 | 15 | |
| TGEVC1-300 | 250 | 100 | 2.5 | 300 | 500 | |
| | 1500 | 1500 | 8 | 15 | 15 | |
| TGEVC1-250 | 250 | 100 | 2.5 | 250 | 500 | |
| | 1500 | 1500 | 8 | 15 | 15 | |
| TGEVC1-200 | 250 | 100 | 2.5 | 200 | 500 | |
| | 1500 | 1500 | 8 | 15 | 15 | |
| TGEVC1-150 | 250 | 100 | 2.5 | 150 | 500 | |
| | 1500 | 1500 | 8 | 15 | 15 | |
| TGEVC1-100 | 700 | 630 | 6 | 60 | 135 | 5kA specified by manufacturer |
| TGEVC1-50 | 700 | 630 | 6 | 50 | 135 | |

The below contact rating specified by manufacturer for TGEVC1-100 series, TGEVC1-50 series, TGEVC1-600 series, TGEVC1-500 series, TGEVC1-400 series:

| Item of test | Utilization category | Rated voltage | Rated current | Time constant | Number of operating cycles |
|---|---|---|---|---|---|
| For TGEVC1-100 series, TGEVC1-50 series | | | | | |
| Verification of rated making and breaking capacities | DC-1 | 700VDC | 25A | 1.05ms | 50 |
| Verification of conventional operational performance | DC-1 | 700VDC | 25A | 1.11ms | 2000* |
| For TGEVC1-600 series, TGEVC1-500 series, TGEVC1-400 series | | | | | |
| Verification of rated making and breaking capacities | DC-1 | 1000VDC | 150A | 1.07ms | 50 |
| | DC-1 | 1200VDC | 120A | 1.05ms | 50 |
| | DC-1 | 1500VDC | 100A | 1.04ms | 50 |
| Verification of conventional operational performance | DC-1 | 1000VDC | 150A | 1.07ms | 2000* |
| | DC-1 | 1200VDC | 120A | 1.05ms | 2000* |
| | DC-1 | 1500VDC | 100A | 1.04ms | 2000* |
| The numbers with “*” in this table stand for the numbers specified by manufacturer. | | | | | |


TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

TÜV®

Product Service

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

## No. B 105620 0059 Rev. 00

The below resistive load specified by manufacturer for TGEVC1-350 series, TGEVC1-300 series, TGEVC1-250 series, TGEVC1-200 series, TGEVC1-150 series:

| Test voltage | Test current | Type of load | Cycles | On/Off time | Ambient Temp. |
|---|---|---|---|---|---|
| 1000VDC | 300A | Resistive load | 500breaks | 1s/9s | 85°C |

**Tested according to:**

EN IEC 60947-4-1:2019
EN 60947-1:2007/A2:2014
EN IEC 60947-1:2021
EN 60947-5-1:2017


TÜV SÜD Product Service GmbH • Certification Body • Ridlerstraße 65 • 80339 Munich • Germany

TÜV®