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

Product Service

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

**No. B 047175 0023 Rev. 01**

**Holder of Certificate:** **TE Connectivity Corporation**
2901 Fulling Mill Rd
Middletown PA 17057
USA

**Certification Mark:**

**Product:** **Connector**

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 and certification regulations of TÜV SÜD Group have to be complied. For details see: www.tuvsud.com/ps-cert

**Test report no.:** 705201907802-01

**Valid until:** 2025-08-20

**Date,** 2020-08-21

( 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 047175 0023 Rev. 01

## Model(s):

HD+ Card Edge Series, 8 Beam

HD+ Card Edge Series, 5 Beam

Single Beam Card Edge Series

1XXXXXX-X, 2XXXXXX-X, 3XXXXXX-X, 4XXXXXX-X, 5XXXXXX-X, 6XXXXXX-X, 7XXXXXX-X, 8XXXXXX-X, 9XXXXXX-X,

X= any number (from 0, 1~9) and corresponds to non-safety related functions.

A specific part number can only be use in one product series. Once a part number is defined in one series, it would be never used in any other series any more.

For example: 2343428-1, is only used for HD+ Card Edge Series, 8 Beam.

## Parameters:

| Parameter concerns | Specification for components |
|---|---|
| Rated current (At 25°C): | See table 1 for detail |
| Rated voltage: | See table 1 for detail |
| Number of poles: | See table 1 for detail |
| Rated impulse voltage: | See table 1 for detail |
| Overvoltage category: | II |
| Pollution degree: | For HD+ Card Edge Series, 8 Beam: 1;<br>For others: 2 |
| IP code: | IP00 |
| Temperature range (LLT-ULT): | -55°C to +130°C |
| Termination and connection method: | PCB solder pins |
| With or without breaking capacity: | Without (COC) |
| Number of operating cycles/mechanical endurance: | 200 |



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Product Service

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

**No. B 047175 0023 Rev. 01**

| Table 1 detail information for models | | | | | | |
|---|---|---|---|---|---|---|
| Model | Type of Contact | Maximum No. of Contacts | No. of Contacts with Current | Rated Current A (at 25°C) | Rated Voltage Vac | Rated impulse voltage (kV) |
| HD+ Card Edge Series, 8 Beam | P<br>S | 12<br>14 | 12<br>14 | 55.6<br>3 | 150<br>60 | 1.5<br>0.8 |
| Single Beam Card Edge Series | P | 2×25 | 2×25 | 9.3 | 100 | 0.8 |
| HD+ Card Edge Series, 5 Beam | P<br>S | 2x7<br>2×10 | 2x7<br>2×10 | 31<br>1 | 100<br>32 | 0.8<br>0.5 |
| Note:<br>Note 1. P: Power pin or contact, S: signal pin or contact. | | | | | | |

**Tested according to:** EN 61984:2009

**Production Facility(ies):** 104889, 108050


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## Form

### Data form for electrical and electronic component
Aufbauübersicht für elektrische und elektronische Komponenten

Product Service



| | |
|---|---|
| Applicant / Auftraggeber: | TE Connectivity Corporation<br>2901 Fulling Mill Rd<br>Middletown PA 17057<br>USA |
| Manufacturer / Hersteller: | TE Connectivity Corporation<br>2901 Fulling Mill Rd<br>Middletown PA 17057<br>USA |
| Authorized person / Bevollmächtigter | Jean He |
| Factory / Fertigungsstätte: | [redacted] |
| Type of equipment / Geräteart: | Connector |
| Type/model / Typenbezeichnung: | HD+ Card Edge Series, 8 Beam<br>HD+ Card Edge Series, 5 Beam<br>Single Beam Card Edge Series<br>1XXXXXX-X, 2XXXXXX-X, 3XXXXXX-X, 4XXXXXX-X, 5XXXXXX-X, 6XXXXXX-X, 7XXXXXX-X, 8XXXXXX-X, 9XXXXXX-X,<br>X= any number (from 0, 1~ 9) and corresponds to non-safety related functions.<br>A specific part number can only be use in one product series. Once a part number is defined in one series, it would be never used in any other series any more.<br>For example: 2343428-1, is only used for HD+ Card Edge Series, 8 Beam. |
| Serial no. / Seriennr.: | N/A |
| Rated voltage/frequency / Nennspannung/Frequenz: | See below |

| Parameter concerns | Specification for components |
|---|---|
| Rated current (At 25°C): | See table 1 for detail |
| Rated voltage: | See table 1 for detail |
| Number of poles: | See table 1 for detail |
| Rated impulse voltage: | See table 1 for detail |
| Overvoltage category: | II |
| Pollution degree: | For HD+ Card Edge Series, 8 Beam: 1;<br>For others: 2 |
| IP code: | IP00 |
| Temperature range (LLT-ULT): | -55°C to +130°C |



Test Report No. / Prüfbericht Nr.: 70.520.19.078.02-01

Name of Project handler: /
Name Projektleiter: Guihua Yuan

TÜV SÜD CERTIFICATION AND TESTING (CHINA) CO., LTD. GUANGZHOU BRANCH

Place / Ort:: Guangzhou Date / Datum: 2020-08-19

Name, seal and signature of Certificate Holder /
Name, Stempel und Unterschrift des Zertifikatinhabers:

Sean Zhang
9/11/2020

**Form**

**Data form for electrical and electronic component**
Aufbauübersicht für elektrische und elektronische Komponenten

Product Service



| | |
|---|---|
| Type of terminals: | PCB solder pins |
| Connectable conductors: | N/A |
| Number of bendings /flexings: | N/A |
| Wire cross-section area: | N/A |
| Number of operating cycles/mechanical endurance: | 200 |
| Number of operating cycles/electrical endurance: | N/A |
| Glow-wire test: | 850°C |
| Ball-pressure test: | 130°C |
| PTI: | 175V |
| **Classification:** | |
| According to protection against electric shock: | ☒ unenclosed connector ☐ enclosed connector |
| According to the style: | ☒ fixed connector ☐ free connector |
| According to additional characteristics: | ☐ with protective earthing contact<br>☒ without protective earthing contact |
| | ☐ with breaking capacity (CBC)<br>☒ without breaking capacity (COC) |
| | ☐ with interlock ☒ without interlock |
| | ☒ non-rewirable connector<br>☐ rewirable connector |
| | ☐ with cable clamp<br>☒ without cable clamp |
| | |

**Table 1 detail information for models**

| Model | Type of Contact | Maximum No. of Contacts | No. of Contacts with Current | Rated Current A (at 25°C) | Rated Voltage Vac | Rated impulse voltage (kV) |
|---|---|---|---|---|---|---|
| HD+ Card Edge Series, 8 Beam | P | 12 | 12 | 55.6 | 150 | 1.5 |
| | S | 14 | 14 | 3 | 60 | 0.8 |
| Single Beam Card Edge Series | P | 2×25 | 2×25 | 9.3 | 100 | 0.8 |
| HD+ Card Edge Series, 5 Beam | P | 2x7 | 2x7 | 31 | 100 | 0.8 |
| | S | 2×10 | 2×10 | 1 | 32 | 0.5 |

Note:
Note 1. P: Power pin or contact, S: signal pin or contact.



Test Report No. / Prüfbericht Nr.: 70.520.19.078.02-01

Place / Ort: Guangzhou Date / Datum: 2020-08-19

Name of Project handler: /
Name Projektleiter: Gulhua Yuan

Name, seal and signature of Certificate Holder /
Name, Stempel und Unterschrift des Zertifikatinhabers:

Sean Zhang
8/21/2020

Form

## Data form for electrical and electronic component

Aufbauübersicht für elektrische und elektronische Komponenten

Product Service



**Additional Information for Laser equipment, classification according to IEC/EN 60825**
Zusätzliche Angaben für Laser, Klassifizierung nach IEC/EN 60825

| | |
|---|---|
| **Class / Klasse:** | N/A |
| **Wavelength / Wellenlänge:** | N/A |
| **Pulse duration / Pulsdauer:** | N/A |

**Safety relevant components: (switches, temperature regulators, heating elements, plugs, sockets, wiring, capacitors, motors and other components with windings e.g. transformers, coils, emergency off devices, 2-hand-control-devices, interlock switches, safety light barriers, safety valves, programmable electronic controllers -PLC, hydraulic controllers, pneumatic controllers, Software (Revision), housing parts, materials with contact to food etc.**
**Components for Functional Safety shall be listed in appropriate table.**
**The entry of safety relevant components into this table documents and confirms review of suitability and acceptance by the product specialist.**

Sicherheitsrelevante Bauteile: (Schalter, Temperaturregler, Heizkörper, Stecker, Fassungen, Leitungen, Kondensatoren, Motoren und sonstige Wicklungen z.B. Transformatoren, Magnetspulen, Not-Aus Geräte, 2-Handsteuerungen, Verriegelungsschalter, Sicherheits-Lichtschranken, Sicherheitsventile, Programmierbare Steuerungen-SPS, hydraulische Steuerungen, pneumatische Steuerungen , Software (Revisionsstand), Gehäuseteile, Materialien mit Kontakt zu Lebensmitteln usw.
Komponenten für Funktionale Sicherheit müssen in die entsprechende Tabelle eingetragen werden.
Der Eintrag sicherheitsrelevanter Komponenten in die Übersicht dokumentiert und bestätigt die Überprüfung der Eignung und Freigabe durch den „Product Specialist".

| Bauteil/ Kind of component | Hersteller / Manufacturer | Angaben über Typ, Stromstärke, Leistung, Transformatorspezifikationsnummer, Isolationsklasse /Information about type, current, power, transformer specification number, insulating class | Prüfzeichen von Test mark from (VDE, BSI, UL etc.) |
|---|---|---|---|
| **HD+ Card Edge Series, 8 Beam** | | | |
| Power contact and termination | [redacted] | Copper alloy, Cu min. 95%, Thickness=0.50mm. [redacted] | Test with appliance |
| Signal contact and termination | [redacted] | Copper alloy, Cu min. 95%, Thickness=0.40mm. [redacted] | Test with appliance |
| Base | [redacted] | LCP, [redacted] V-0, RTI: 130°C, grow wire: 850°C, ball pressure: 130°C, PTI: 175V | [redacted] Test with appliance |
| **Single Beam Card Edge Series** | | | |
| Contact and termination | [redacted] | Copper alloy, Cu min. 95%, Thickness=0.50mm. [redacted] | Test with appliance |
| Base | [redacted] | LCP, [redacted], V-0, RTI: 130°C, grow wire: 850°C, ball pressure: 130°C, PTI: 175V | [redacted] Test with appliance |
| **HD+ Card Edge Series, 5 Beam** | | | |
| Power contact and termination | [redacted] | Copper alloy, Cu min. 95%, Thickness=0.50mm. [redacted] | Test with appliance |
| Signal contact and termination | [redacted] | Copper alloy, Cu min. 95%, Thickness=0.40mm. [redacted] | Test with appliance |
| Base | [redacted] | LCP, [redacted], V-0, RTI: 130°C, grow wire: 850°C, ball pressure: 130°C, PTI: 175V | [redacted] Test with appliance |



Test Report No. / Prüfbericht Nr.: 70.520.19.078.02-01

Place / Ort: Guangzhou Date / Datum: 2020-08-19

Name of Project handler: /
Name Projektleiter: Guihua Yuan

Name, seal and signature of Certificate Holder /
Name, Stempel und Unterschrift des Zertifikatinhabers:

Sean Zhang
8/20/2020

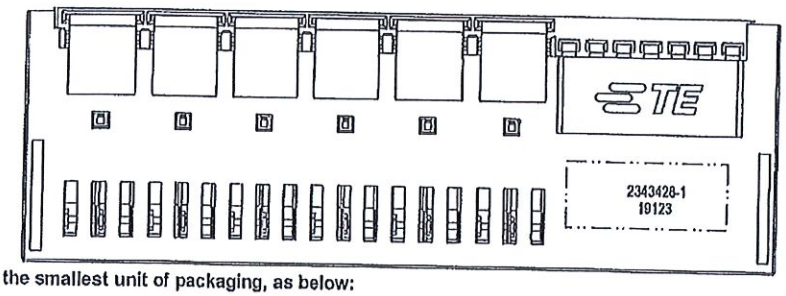
## Form

**Data form for electrical and electronic component**
Aufbauübersicht für elektrische und elektronische Komponenten

Product Service



**Label / Typenschild:**




**The marking on the smallest unit of packaging, as below:**


**Routine Safety Test**

Final Inspection requirements for production are described in Dielectric strength of EN 61984:2009.

☒ Required ☐ Not Required

Reason:
☐ Class III product
☐ Other:

| Test Details: | Test Points: | Test Values: |
|---|---|---|
| ☒ Dielectric strength test | BI: L/L | 1500V/800V/500V Safety Extra-Low Voltage (SELV) |
| ☐ Continuity of PE path test | Protective earthing contacts | |
| ☐ Leakage Current | | |
| ☒ Visual examination | The manufacturer's name or trade marking check | - |

*==End of CDF==*



Test Report No. / Prüfbericht Nr.: 70.520.19.078.02-01

Name of Project handler: /
Name Projektleiter: Gulhua Yuan

Gulhua Yuan

Place / Ort:: Guangzhou Date / Datum: 2020-08-19

Name, seal and signature of Certificate Holder /
Name, Stempel und Unterschrift des Zertifikatinhabers: Sean Zhang

8/20/2020