IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEx KIWA 17.0009U**

Certificate history:
Issue 1 (2018-03-07)
Issue 0 (2017-10-11)

Status: **Current**

Issue No: 2

Date of Issue: 2022-02-24

Applicant: **PHOENIX CONTACT GmbH & Co. KG**
Flachsmarktstr. 8
32825 Blomberg
Germany

Ex Component: Terminal blocks Types SSK 0525, SSK 110, SSK 116 and SSK 135

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Increased Safety**

Marking: Ex eb IIC Gb

Approved for issue on behalf of the IECEx Certification Body: **Dorin Stochitoiu P. Eng**

Position: **Technical Oversight Specialist**

Signature:
(for printed version)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.

Certificate issued by:

CSA Group
178 Rexdale Blvd
Toronto Ontario M9W 1R3
Canada

IECEx Certificate of Conformity

Manufacturer: **PHOENIX CONTACT GmbH & Co. KG**
Flachsmarktstr. 8
32825 Blomberg
Germany

Additional manufacturing locations:

PHOENIX CONTACT India Pvt. Ltd.
Prithla-Datir Road, Dudhola, Dist.
Palwal, Haryana
India

PHOENIX CONTACT Asia-Pacific (Nanjing) Co., Ltd. and Nanjing PHOENIX CONTACT Co., Ltd.
36 Phoenix Road
Jiangning Development Zone
Nanjing, Jiangsu Province 211100
China

SPA PHOENIX CONTACT LLC
Stupino city district
Shmatovo village
Industrialnaya street, building 6
Moscow 142821
Russian Federation

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 component 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"
Edition:5.1

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

TEST & ASSESSMENT REPORTS:
A sample(s) of the component listed has successfully met the examination and test requirements as recorded in:

Test Reports:

NL/KIWA/ExTR17.0015/00 NL/KIWA/ExTR17.0015/01 NL/KIWA/ExTR17.0015/02

Quality Assessment Reports:

NL/DEK/QAR11.0009/08 NL/DEK/QAR11.0010/05 NL/DEK/QAR11.0011/05
NL/DEK/QAR17.0005/03

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Certificate No.: **IECEx KIWA 17.0009U** Page 3 of 4

Date of issue: 2022-02-24 Issue No: 2

Ex Component(s) covered by this certificate is described below:

Terminal blocks Types SSK 0525, SSK 110, SSK 116 and SSK 135 with accessories (end cover type D-SSK * KER and chain bridge type KBI-*), used for the connection of copper conductors in equipment in type of protection increased safety “e”. Insulating materials are made of ceramics.

The terminal blocks are snapped onto mounting rail type NS 32 to EN 60715-G 32.

Operating temperature range -60°C to +180°C.

Refer to the Annexe for Technical Data

SCHEDULE OF LIMITATIONS:

1. The terminals have a service temperature range of -60°C to +180°C.
2. The terminals shall be mounted in an enclosure having one of the specific types of protection mentioned in IEC 60079-0, section 1.
3. When mounted in an enclosure with type of protection Increased Safety “e”, the clearances and creepage distances to other live parts shall fulfil the requirements of IEC 60079-7, Table 2.
4. When accessories are used, the instructions provided by the manufacturer shall be observed.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
This issue, Issue 2, recognises the following changes; refer to the certificate annex to view a comprehensive history:

1. To permit the removal of Protective conductor terminal blocks Types SLK 4-EX, SLK 10-EX, SLK 16-EX and SLK 35-EX from the scope of the certificate. As a result, the Equipment title & Certificate Schedule were revised to remove reference to these components and the associated certification documents listed in NL/KIWA/ExTR17.0015/01 were made obsolete.
2. Permit a minor change to the maximum current cross-connectors specified for Type SSK 116 terminal.
3. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2011 Ed.6 & IEC 60079-7:2015 Ed. 5.0 were replaced by IEC 60079-0:2017 & IEC60079-7:2015+AMD1:2017. In accordance with the requirements of IEC 60079-0:2017, the Schedule of Limitations was revised to include confirmation of the service temperature range of the terminals.
4. Permit the addition of alternative manufacturing locations for the components.
5. Minor drawing changes not affecting the original assessment.

Annex:

IECEx KIWA 17.0009U Annexe Issue 2.pdf

Annexe to: **IECEx KIWA 17.0009U Issue 2**

Applicant: **PHOENIX CONTACT GmbH & Co. KG**

Apparatus: **Terminal blocks Types SSK 0525, SSK 110, SSK 116 and SSK 135**

Technical Data:

	Type SSK 0525	Type SSK 110
Rated insulation voltage	400 V	400 V
Rated voltage	440 V	440 V
Rated current	28 A	36,5 A
Maximum current	28 A	49 A
Maximum current cross-connectors	28 A (4 mm^2)	49 A (10 mm^2)
Rated cross-section	4 mm^2	6 mm^2
Connectable conductor cross-section	0,2 - 4 mm^2 (rigid) 0,25 - 4 mm^2 (flexible)	0,5 - 10 mm^2 (rigid) 0,5 - 6 mm^2 (flexible)
Temperature rise	40 K (31,3 A / 4 mm^2)	40 K (40,3 A / 6 mm^2)
Contact resistance	0,94 mΩ	0,74 mΩ
	Type SSK 116	Type SSK 135
Rated insulation voltage	400 V	500V
Rated voltage	440 V	550V
Rated current	55 A	101 A
Maximum current	64,5 A	113 A
Maximum current cross-connectors	55 A (10 mm^2)	100 A (35 mm^2)
Rated cross-section	10 mm^2	25 mm^2
Connectable conductor cross-section	0,5 - 16 mm^2 (rigid) 0,5 - 10 mm^2 (flexible)	1 - 35 mm^2 (rigid) 1 - 25 mm^2 (flexible)
Temperature rise	40 K (60,9 A / 10 mm^2)	40 K (116,5 A / 25 mm^2)
Contact resistance	0,23 mΩ	0,2 mΩ

Instructions:

The instructions provided with the product shall be followed in detail to assure safe operation.

Date: **24 February 2022**

CSA Group Testing & Certification Inc.
178 Rexdale Boulevard,
Toronto, Ontario M9W 1R3

Annexe to: **IECEx KIWA 17.0009U Issue 2**

Applicant: **PHOENIX CONTACT GmbH & Co. KG**

Apparatus: **Terminal blocks Types SSK 0525, SSK 110, SSK 116 and SSK 135**

Full certificate change history

Issue 1 – this Issue introduced the following change:

1. Due to modification of end plate type D-SSK 135-KER, the rated insulation voltage of terminal type SSK 135 is reduced to 500 V.

Issue 2 – this Issue introduced the following changes:

1. To permit the removal of Protective conductor terminal blocks Types SLK 4-EX, SLK 10-EX, SLK 16-EX and SLK 35-EX from the scope of the certificate. As a result, the Equipment title & Certificate Schedule were revised to remove reference to these components and the associated certification documents listed in NL/KIWA/ExTR17.0015/01 were made obsolete.
2. Permit a minor change to the maximum current cross-connectors specified for Type SSK 116 terminal.
3. Following appropriate assessment to demonstrate compliance with the latest technical knowledge, IEC 60079-0:2011 Ed.6& IEC 60079-7:2015 Ed. 5.0 were replaced by IEC 60079-0:2017 & IEC60079-7:2015+AMD1:2017. In accordance with the requirements of IEC 60079-0:2017 / EN IEC 60079-0:2018, the Schedule of Limitations was revised to include confirmation of the service temperature range of the terminals.
4. Permit the addition of alternative manufacturing locations for the components.
5. Minor drawing changes not affecting the original assessment.

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