



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

Ex COMPONENT CERTIFICATE

Certificate No.:	IECEX KEM 06.0035U	Issue No: 5	<u>Certificate history:</u>
Status:	Current	Page 1 of 4	Issue No. 5 (2018-10-25)
Date of Issue:	2018-10-25		Issue No. 4 (2013-02-15)
Applicant:	PHOENIX CONTACT GmbH & Co. KG Flachsmarktstrasse 8 32825 Blomberg Germany		Issue No. 3 (2012-07-23)
Ex Component:	Protective Conductor Terminal Blocks USLKG 1,5 N; USLKG 5 (-1); USLKG 10 N (-1); USLKG 16 N (1); USLKG 50 (-IB) and USLKG 95		Issue No. 2 (2009-07-27)
			Issue No. 1 (2007-06-01)
			Issue No. 0 (2006-08-22)

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:

R.H.D. Pommé

Position:

Certification Manager

Signature:
(for printed version)

Date:

2018-10-25

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:

KEMA Quality B.V.
Utrechtseweg 310
6812 AR Arnhem
The Netherlands





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

Additional Manufacturing location(s):

PHOENIX CONTACT GmbH & Co. KG
Flachmarktstrasse 8
32825 Blomberg
Germany

PHOENIX CONTACT India Pvt. Ltd.
Unit I : A-58/2, Okhla Industrial Area, Phase –
II
New Delhi – 110020
Unit III : Prithla-Dhatir Road Village Dudhola
Palwal – 121102 (Haryana)
India

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

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 Component 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 Ex 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 electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:

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

Test Report:

[NL/KEM/ExTR06.0036/03](#)

Quality Assessment Report:

[NL/DEK/QAR11.0009/05](#)

[NL/DEK/QAR11.0010/03](#)

[NL/DEK/QAR11.0011/03](#)



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Schedule

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

General product information:

The Protective Conductor Terminal Blocks USLKG 1,5 N; USLKG 5 (-1); USLKG 10 N (-1); USLKG 16 N (1); USLKG 50 (-IB) and USLKG 95 are intended for the connection of copper conductors in enclosures fulfilling the degree of protection which is required by the applied type of protection for the end-application. The Protective Conductor Terminal Blocks are intended for installation on mounting rails type NS 32 according to EN 60715-G 32 or type NS 35 according to EN 60715-TH 35.

Operating temperature range -60 °C to +110 °C.

For electrical data and nomenclature see Annex 1 to IECEx Certificate of Conformity KEM 06.0035U.

SCHEDULE OF LIMITATIONS:

Schedule of Limitations

1. The Protective Conductor Terminal Blocks shall be mounted in a certified enclosure that meets the requirements of an approved type of protection as specified in IEC 60079-0 clause 1, with a degree of protection at least as required for Ex e.
2. When assembling with other certified series and sizes and using the associated accessories, the required creepage distances and clearances have to be observed.
3. The installation instruction of the manufacturer shall be followed e.g. for the use of cover, jumpers, end brackets. The data regarding current and associated temperature rise shall be used as guideline for the given conductor cross sections. The cross section has an influence on the temperature rise which shall be assessed in the end application.
4. If the Protective Conductor Terminal Blocks are used in electrical apparatus of temperature classes T1 up to T5, the highest temperature of the insulating material shall not exceed the maximum value of the operating temperature range.
5. If the Protective Conductor Terminal Blocks are used in electrical apparatus of temperature classes T6 the permissible ambient temperature range is $-60\text{ °C} < T_{amb} < +40\text{ °C}$.



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

Details of Change

1. Assessment to recent edition of standards.
2. Deletion several types of Protective Conductor Terminal Blocks.
3. Small mechanical changes.
4. PHOENIX CONTACT Ind. Com. Ltda deleted as manufacturing location.

Annex:

[219710400-03_Annex1.pdf](#)

Annex 1 to Test Report IECEx NL/KEM/ExTR06.0036/03
Annex 1 to Certificate of Conformity IECEx KEM 06.0035U, issue no. 5
Annex 1 to EU-Type Examination KEMA 99ATEX4487 U, issue no. 3

Electrical data

Note 1: in this document [,] is used as decimal separator.

Type	USLKG 1,5 N	USLKG 5 (-1)
Rated cross-section [mm ²] (AWG)	1,5 (16)	4 (12)
Connectable conductor cross-section		
- rigid [mm ²] (AWG)	0,14 - 1,5 (26 - 16)	0,2 - 4 (24 - 12)
- flexible [mm ²] (AWG)	0,14 - 1,5 (26 - 16)	0,2 - 4 (24 - 12)
Type	USLKG 10 N (-1)	USLKG 16 N (-1)
Rated cross-section [mm ²] (AWG)	10 (8)	16 (6)
Connectable conductor cross-section		
- rigid [mm ²] (AWG)	0,5 - 16 (20 - 6)	2,5 - 25 (14 - 4)
- flexible [mm ²] (AWG)	0,5 - 10 (20 - 8)	4 - 16 (12 - 6)
Type	USLKG 50 (-IB)	USLKG 95
Rated cross-section [mm ²] (AWG)	50 (1/0)	95 (3/0)
Connectable conductor cross-section		
- rigid [mm ²] (AWG)	16 - 50 (6 - 1/0)	25 - 95 (4 - 3/0)
- flexible [mm ²] (AWG)	25 - 50 (4 - 1/0)	35 - 95 (2 - 3/0)

In combination with the Terminal Blocks the required clearances and creepage distances are kept for the rated voltages according to IEC 60079-7 as listed below:

Protective Conductor Terminal Block	Type	Terminal Block Certificates	Rated Voltage
USLKG 1,5 N	UK 1,5 N	IECEX KEM 06.0034U, KEMA 98ATEX1651 U	275 V
USLKG 5 (-1)	UK 5 N		550 V (on NS 32)
USLKG 5 (-1)	UK 5 N		690 V (on NS 35)
USLKG 10 N (-1)	UK 10 N	IECEX KEM 06.0013U, KEMA 98ATEX1786 U	690 V
USLKG 16 N (-1)	UK 16 N		690 V
USLKG 50 (-IB)	UKH 50		880 V
USLKG 95	UKH 95		880 V

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Nomenclature

USLKG * N (-1) (-IB)
 I II III IV V

Designation	Explanation	Value	Explanation
I	Type indicator	USLKG	Protective Conductor Terminal Block with screw connection
II	Rated cross section	1,5	1,5 mm ² , 16 AWG
		5	5 mm ² , 12 AWG
		10	10 mm ² , 8 AWG
		16	16 mm ² , 6 AWG
		50	50 mm ² , 1/0 AWG
		95	95 mm ² , 3/0 AWG
III	New	N	Only for; USLKG 1,5 N; USLKG 10 N (-1) USLKG 16 N (-1)
IV	Mounting rails	(-1)	Suitable for rail NS 35 and rail NS 32 Only for; USLKG 5 (-1) USLKG 10 N (-1) USLKG 16 N (-1)
V	Options	(-IB)	InBus screw connection (only USLKG 50 (-IB))