KEMA
REGISTERED QUALITY

translation

original language: German

(1) EC-TYPE EXAMINATION CERTIFICATE

(2) Components intended for use in potentially explosive atmospheres - Directive 94/9/EC

(3) EC-Type Examination Certificate number: **KEMA 99ATEX4487 U**

(4) Components: **Protective Conductor Series Terminal Blocks Types USLKG 1,5N, USLKG 5(-1), USLKG 10N(-1), USLKG 16N(-1), USLKG 50 and USLKG 95**

(5) Manufacturer: **Phoenix Contact GmbH & Co.**

(6) Address: **Flachsmarktstraße 8 - 28, 32825 Blomberg, Germany**

(7) These components and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) KEMA, notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that these components have been found to comply with the Essential Health and Safety Requirements relating to the design and construction of components intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential report no. 94487.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014 : 1992 + prA1 **EN 50019 : 1994 + prA1** **EN 50281-1-1 : 1998**

(10) The sign "U" placed after the certificate number indicates that this certificate describes components and must not be mistaken for a certificate intended for an equipment or protective system. This EC-Type Examination Certificate may be used as a basis for certification of an equipment or protective system.

(11) This EC-Type Examination Certificate relates only to the design and construction of the specified components. If applicable, further requirements of this Directive apply to the manufacture and supply of these components.

(12) The marking of the components shall include the following:

Ex II 2 GD **EEx e II**

Arnhem, 13 October 1999
by order of the Board of Directors of N.V. KEMA

C.M. Boschloo
Certification Manager

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ACCREDITED BY
THE DUTCH COUNCIL
FOR ACCREDITATION

(13) # SCHEDULE

(14) **to EC-Type Examination Certificate KEMA 99ATEX4487 U**

(15) **Description**

Protective Conductor Series Terminal Blocks Types USLKG 1,5N, USLKG 5(-1), USLKG 10 N(-1), USLKG 16N(-1), USLKG 50 and USLKG 95 for the connection of conductors in enclosures in type of protection increased safety "e", insulating parts made of PA 6.6 (covers, cross-connectors and end brackets), for fixing on mounting rails type NS 32 according to EN 50 035 or NS 35 according to EN 50022.

Operating temperature range -40 °C ... +90 °C.
(For types USLKG 1,5N, USLKG 5(-1), USLKG 10N(-1) and USLKG 16N(-1))

Operating temperature range -40 °C ... +80 °C.
(For types USLKG 50 and USLKG 95)

Electrical data

Type	USLKG 1,5N	USLKG 5(-1)	USLKG 10N(-1)
Rated cond. cross section mm²	-	4	10
Max. cond. cross section mm² (AWG) (rigid).	1,5 (16)	4 (12)	16 (6)
Min. cond. cross section mm² (AWG) (rigid) .	0,14 (26)	0,2 (24)	0,5 (20)
Max. cond. cross section mm² (AWG) (flex.).	-	4 (12)	10 (6)
Min. cond. cross section mm² (AWG) (flex.) .	-	0,2 (24)	0,5 (20)

Type	USLKG 16N(-1)	USLKG 50	USLKG 95
Rated cond. cross section mm²	16	50	95
Max. cond. cross section mm² (AWG) (rigid).	25 (4)	50 (0)	95 (000)
Min. cond. cross section mm² (AWG) (rigid) .	2,5 (14)	16 (6)	25 (4)
Max. cond. cross section mm² (AWG) (flex.).	16 (4)	50 (0)	95 (000)
Min. cond. cross section mm² (AWG) (flex.) .	4 (12)	25 (4)	35 (2)

Mounting instructions
The Protective Conductor Series Terminals are suitable for use in enclosures in atmospheres with combustible gases and combustible dust. For combustible gases these enclosures must satisfy the requirements according to EN 50014 and EN 50019. For combustible dust these enclosures must satisfy the requirements according to EN 50281-1-1.

In combination with the series terminals the required creepage distance and clearance for a rated voltage according to EN 50019 are met as follows:

Series terminals	Protective series terminals	max. rated voltage
UK 1,5 N	for USLKG 1,5N,	275 V
UK 5 N	for USLKG 5(-1),	550 V (mounting rail type NS 32)
UK 5 N	for USLKG 5(-1),	750 V (mounting rail type NS 35)
UK 10 N	for USLKG 10N(-1),	750 V
UK 16 N	for USLKG 16N(-1),	750 V
UKH 50 N	for USLKG 50,	750 V
UKH 95 N	for USLKG 95,	750 V

Mounting instructions
The Protective Conductor Series Terminals are suitable for use in enclosures in atmospheres with combustible gases and combustible dust. For combustible gases these enclosures must satisfy the requirements according to EN 50014 and EN 50019. For combustible dust these enclosures must satisfy the requirements according to EN 50281-1-1.

In combination with the series terminals the required creepage distance and clearance for a rated voltage according to EN 50019 are met as follows:

Series terminals	Protective series terminals	Voltage

(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 99ATEX4487 U**

The Terminal Blocks may be used, based on the operating temperature range, in electrical apparatus, e.g. junction and connection boxes, for temperature class T6. When the 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.

Routine test

According to EN 50019, Clause 7.1.b in combination with Clause 6.1, a dielectric strength test has to be carried out.

(15) **Report**

No. 94487

(16) **Special conditions for safe use**

None

(17) **Essential Health and Safety Requirements**

Essential health and safety requirements not covered by standards listed at (9)	
Clause	Subject
1.0.6.b	Instructions for use

These essential health and safety requirements are examined and the results are laid down in the report listed at (16).

(18) **Test documentation**

			signed
1. Description	00214505 (4 pages)	)	
	00214506 (4 pages)	)	
	00214507 (4 pages)	)	29.06.1999
	00214508 (4 pages)	)	
	00214509 (4 pages)	)	30.06.1999
	00214510 (4 pages)	)	
	00207254 rev.01		05.08.1999
	00208352 rev.04		02.09.1999

(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 99ATEX4487 U**

(18) **Test documentation (continued)**

			signed
2. Drawing No.	00207254 rev.01		05.08.1999
	00207255	)	
	00206057 rev.02	)	
	00206104 rev.01	)	
	00207467	)	
	00107469	)	
	00207763	)	29.06.1999
	00207764	)	
	00208046	)	
	00208047	)	
	00208048	)	
	00208049	)	

3. Samples

translation **AMENDMENT 1** original language: German

to EC-Type Examination Certificate KEMA 99ATEX4487 U

Manufacturer: **Phoenix Contact GmbH & Co.**

Address: **Flachsmarktstraße 8, 32825 Blomberg, Germany**

Description

In future the Protective Conductor Series Terminal Block Type USLKG 1,5 N may also be constructed in accordance with the documentation stated below.

The modification concerns the mechanical construction.

Electrical data

Rated cond. cross section mm^2 1,5
Min. cond. cross section mm^2 (AWG) (rigid/flex.) 0,14 (26)
Max. cond. cross section mm^2 (AWG) (rigid/flex.) 1,5 (16)

All other data remains unchanged.

Test documentation

	signed
1. Description (4 pages)	06.09.2000
2. Drawing No. 00207254 rev. 02	02.06.2000

Arnhem, 3 November 2000
by order of the Board of Directors of N.V. KEMA

L.M.J. Vries
Certification Manager

Code:  **II 2 G D EEx e II** [2004080]