

Translation, original language: German

(1) **EC-TYPE EXAMINATION CERTIFICATE**

(2) **Equipment and protective systems intended for use in potentially explosive atmospheres - Directive 94/9/EC**

(3) EC-Type Examination Certificate Number: **KEMA 04ATEX2048 U** Issue Number: 2

(4) Component: **Terminal blocks UT 2,5; UT 4; UT 4-MTD; UT 6; UT 10; UT 16; UT 35; UT 35 IB
Protective conductor terminal blocks UT 2,5-PE; UT 4-PE; UT 4-MTD-PE; UT 4-MTD-PE/S;
UT 6-PE; UT 10-PE; UT 16-PE; UT 35-PE; UT 35-PE IB;
Pick-off terminal blocks AGK 4-UT 10; AGK 4-UT 16; AGK 4-UT 35**

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

(6) Address: **Flachmarktstraße 8, D-32825 Blomberg, Germany**

(7) This component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) KEMA Quality B.V., notified body number 0344 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems 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. 2104946.

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

EN 60079-0 : 2006

EN 60079-7 : 2003

EN 50281-1-1 : 1998 + A1

(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, examination and tests of the specified component according to the Directive 94/9/EC. Further requirements of the directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

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



II 2 G D Ex e II

This certificate is issued on 7 May 2007 and, as far as applicable, shall be revised before the date of cessation of presumption of conformity of (one of) the standards mentioned above as communicated in the Official Journal of the European Union.

KEMA Quality B.V.


T. Pijpker
Certification Manager

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(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 04ATEX2048 U**

Issue No. 2

(15) **Description**

Terminal Blocks (all colors) UT 2,5; UT 4; UT 4-MTD; UT 6; UT 10; UT 16; UT 35; UT 35 IB as well as Protective Conductor Terminal Blocks UT 2,5-PE; UT 4-PE; UT 4-MTD-PE; UT 4-MTD-PE/S; UT 6-PE; UT 10-PE; UT 16-PE; UT 35-PE; UT 35-PE IB with accessories for the connection of copper conductors in enclosures in type of protection increased safety "e" or "D" (dust), for fixing on mounting rails type NS 35 according to EN 60715-TH 35.

The Pick-off terminal blocks AGK 4-UT 10; AGK 4-UT 16 and AGK 4-UT 35 are to be used in combination with the associated terminal blocks (UT 10; UT 16; UT 35 (-IB)).

Operating temperature range: -50 °C ... +110 °C.

Electrical data

Terminal blocks

Type:	UT 2,5	UT 4
Rated insulation voltage [V]	630	630
Rated voltage [V]	690	690
- with skipping jumper [V]	352	352
- with skipping jumper over PE type [V]	275	275
Nominal current [A]	22	30
Max. load current [A]	28	38
- with jumper [A]	21	27
Rated cross section [mm ²] (AWG)	2,5 (14)	4 (12)
Connectable conductor cross section		
- rigid [mm ²] (AWG)	0,14 - 4 (26-12)	0,14 - 6 (26-10)
- flexible [mm ²] (AWG)	0,14 - 2,5 (26-14)	0,14 - 4 (26-12)
Multiple conductor connection (2 conductor with the same cross section)		
- rigid/flexible [mm ²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)
Type:	UT 4-MTD	UT 6
Rated insulation voltage [V]	630	630
Rated voltage [V]	690	690
- with skipping jumper [V]	352	275
- with skipping jumper over PE type [V]	275	176
- with skipping jumper over PE/S type [V]	176	-
Nominal current [A]	29	40
Max. load current [A]	36	50
- with jumper [A]	29	39
Rated cross section [mm ²] (AWG)	4 (12)	6 (10)
Connectable conductor cross section		
- rigid [mm ²] (AWG)	0,14 - 6 (26-10)	0,2 - 10 (24-8)
- flexible [mm ²] (AWG)	0,14 - 4 (26-12)	0,2 - 6 (24-10)
Multiple conductor connection (2 conductor with the same cross section)		
- rigid/flexible [mm ²] (AWG)	0,14 - 1,5 (26-16)	0,2 - 2,5 (24-14)

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Issue No. 2

Type:	UT 10	UT 16
Rated insulation voltage [V]	630	630
Rated voltage [V]	690	690
- with jumper [V]	690	690
Nominal current [A]	54	73,5
Max. load current [A]	69	89,5
- with jumper [A]	54	73,5
Rated cross section [mm ²] (AWG)	10 (8)	16 (6)
Connectable conductor cross section		
- rigid [mm ²] (AWG)	0,5 - 16 (20-6)	1,5 - 25 (16-4)
- flexible [mm ²] (AWG)	0,5 - 10 (20-8)	1,5 - 16 (16-6)
Multiple conductor connection (2 conductor with the same cross section)		
- rigid [mm ²] (AWG)	0,5 - 4 (20-12)	1,0 - 6 (18-10)
- flexible [mm ²] (AWG)	0,5 - 4 (20-12)	1,0 - 4 (18-12)

Type:	UT 35 (-IB)
Rated insulation voltage [V]	630
Rated voltage [V]	690
- with jumper [V]	690
Nominal current [A]	126
Max. load current [A]	129
- with jumper [A]	98,5
Rated cross section [mm ²] (AWG)	35 (2)
Connectable conductor cross section	
- rigid [mm ²] (AWG)	1,5 - 50 (16-1/0)
- flexible [mm ²] (AWG)	1,5 - 35 (16-2)
Multiple conductor connection (2 conductor with the same cross section)	
- rigid [mm ²] (AWG)	1,5 - 16 (16-6)
- flexible [mm ²] (AWG)	1,5 - 10 (16-8)

Protective conductor terminal blocks

Type:	UT 2,5-PE	UT 4-PE
Rated cross section [mm ²] (AWG)	2,5 (14)	4 (12)
Connectable conductor cross section		
- rigid [mm ²] (AWG)	0,14 - 4 (26-12)	0,14 - 6 (26-10)
- flexible [mm ²] (AWG)	0,14 - 2,5 (26-14)	0,14 - 4 (26-12)

Type:	UT 4-MTD-PE	UT 4-MTD-PE/S
Rated cross section [mm ²] (AWG)	4 (12)	4 (12)
Connectable conductor cross section		
- rigid [mm ²] (AWG)	0,14 - 6 (26-10)	0,14 - 6 (26-10)
- flexible [mm ²] (AWG)	0,14 - 4 (26-12)	0,14 - 4 (26-12)

Type:	UT 6-PE	UT 10-PE
Rated cross section [mm ²] (AWG)	6 (10)	10 (8)
Connectable conductor cross section		
- rigid [mm ²] (AWG)	0,2 - 10 (24-8)	0,5 - 16 (20-6)
- flexible [mm ²] (AWG)	0,2 - 6 (24-10)	0,5 - 10 (20-8)

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(14) **to EC-Type Examination Certificate KEMA 04ATEX2048 U** Issue No. 2

Type:	UT 16-PE	UT 35-PE (-IB)
Rated cross section [mm ²] (AWG)	16 (6)	35 (2)
Connectable conductor cross section		
- rigid [mm ²] (AWG)	1,5 - 25 (16-4)	1,5 - 35 (16-2)
- flexible [mm ²] (AWG)	1,5 - 16 (16-6)	1,5 - 35 (16-2)

Pick-off terminal blocks

Type:	AGK 4-UT 10	AGK 4-UT 16
Rated insulation voltage [V]	400	630
Rated voltage [V]	440	690
Nominal current [A]	32	32
Max. load current [A]	41	41
Rated cross section [mm ²] (AWG)	4(12)	4 (12)
Connectable conductor cross section		
- rigid [mm ²] (AWG)	0,14 - 6 (26-10)	0,14 - 6 (26-10)
- flexible [mm ²] (AWG)	0,14 - 4 (26-12)	0,14 - 4 (26-12)
Multiple conductor connection (2 conductor with the same cross section)		
- rigid/flexible [mm ²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)

Type:	AGK 4-UT 35
Rated insulation voltage [V]	630
Rated voltage [V]	690
Nominal current [A]	32
Max. load current [A]	41
Rated cross section [mm ²] (AWG)	4 (12)
Connectable conductor cross section	
- rigid [mm ²] (AWG)	0,14 - 6 (26-10)
- flexible [mm ²] (AWG)	0,14 - 4 (26-12)
Multiple conductor connection (2 conductor with the same cross section)	
- rigid/flexible [mm ²] (AWG)	0,14 - 1,5 (26-16)

Installation instructions

The Terminal Blocks and Protective Conductor Terminal Blocks are suitable for use in enclosures in atmospheres with flammable gases and combustible dust. For flammable gases these enclosures must satisfy the requirements of EN 60079-0 and EN 60079-7. For combustible dust these enclosures must satisfy the requirements of EN 50281-1-1.

When assembling with other certified series and sizes and using the associated accessories, the required creepage distances and clearances have to be observed.

Regarding the use of covers, cross connectors and end brackets the instructions of the manufacturer must be followed.

If smaller cross sections as the rated cross section are used, the associated lower current has to be laid down in the EC-Type Examination Certificate of the complete equipment.

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The Terminal Blocks may be used, based on the self-heating when used at the above mentioned rated current and at ambient temperatures of -50 °C to +40 °C at the mounting position in electrical apparatus, e.g. junction and connection boxes, for temperature class T6. If 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

Routine dielectric strength tests according to EN 60079-7, Clause 7.2 in combination with Clause 6.1, have to be carried out.

(16) **Report**

KEMA No. 2104946.

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

None.

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

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 2104946.