CERTIFICATE

(1) EU-Type Examination

(2) **Component intended for use on/in equipment or protective systems intended for use in potentially explosive atmospheres - Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number: **KEMA 04ATEX2048 U** Issue Number: **5**

(4) Product: **Terminal Blocks UT 2,5; UT 4; UT 4-MTD; UT 6; UT 10; UT10-SL; 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: **Flachsmarktstrasse 8, 32825 Blomberg, Germany.**

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

(8) DEKRA Certification B.V., Notified Body number 0344 in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential test report number NL/KEM/ExTR07.0033/04.

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

EN 60079-0 : 2012 +A11 : 2013 **EN 60079-7 : 2015**

(10) The sign "U" is placed after the certificate number. It indicates that this certificate must not be mistaken for a certificate intended for an equipment or protective system. This partial certification may be used as a basis for certification of an equipment or protective system.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

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

II 2 GD Ex eb IIC Gb

Date of certification: 8 March 2018

DEKRA Certification B.V.

R. Schuller
Certification Manager

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(13) # SCHEDULE

(14) **to EU-Type Examination Certificate KEMA 04ATEX2048 U** Issue No. **5**

(15) **Description**

Terminal Blocks (all colors) UT 2,5; UT 4; UT 4-MTD; UT 6; UT 10; UT 10 SL; 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 and accessories 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 terminal blocks and protective conductor terminal blocks are intended for installation 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 (SL); UT 16; UT 35 (IB).

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

Electrical data

For thermal data, nomenclature and electrical data see Annex 1 to this certificate.

Installation instructions

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

(16) **Report Number**

No. NL/KEM/ExTR07.0033/04.

(17) **Schedule of Limitations**

1. The Terminal Blocks, the Protective Conductor Terminal Blocks and the Pick-off Terminal Blocks shall be mounted in a certified enclosure that meets the requirements of a type of protection as specified in EN 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 influence on the temperature rise which shall be assessed in the end application.
4. If the Terminal Blocks and Pick-off Terminal Blocks are used in electrical equipment 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 Terminal Blocks and Pick-off Terminal Blocks are used in electrical equipment of temperature classes T6 the permissible ambient temperature range is -60 °C < Tamb < +40 °C.

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

Covered by the standards listed at item (9).

(13) # SCHEDULE

(14) **to EU-Type Examination Certificate KEMA 04ATEX2048 U** Issue No. **5**

(19) **Test documentation**

As listed in Report No. NL/KEM/ExTR07.0033/04.

(20) **Certificate history**

Issue 0 -	207223100	Initial certification.
Issue 1 -	208871800	Update of standards, addition of new types of terminal blocks.
Issue 2 -	210494600	Update of standards, addition of new types of terminal blocks.
Issue 3 -	211801500	Update of standards, addition of new types of bridges.
Issue 4 -	215216600	Update of standards, operating temperature range changed.
Issue 5 -	219562800	Update of standards, addition of a new type of terminal blocks, small mechanical changes.

Annex 1 to Report IECEx NL/KEM/ExTR07.0033/04
Annex 1 to Certificate of Conformity IECEx KEM 06.0027 U, issue 6
Annex 1 to EU-Type Examination Certificate KEMA 04ATEX2048 U, issue 5

Description

Terminal Blocks (all colors) UT 2,5; UT 4; UT 4-MTD; UT 6; UT 10; UT 10 SL; 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.

And accessories are intended for the connection of copper conductors in enclosures in type of protection Ex e or Ex t 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 (SL); UT 16; UT 35 (IB).

Electrical data

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

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 type PE [V]	275	275
- with cut-to-length bridge and cover type D [V]	220	220
- with cut-to-length bridge and partition plate type ATP [V]	275	275
Rated current [A]	21	30
- with plug-in bridge type FBS... [A]	21	27
Maximum load current [A]	28	38
Temperature rise [K]	40 K (23,3 A; 2,5 mm²)	40 K (33,3 A; 4 mm²)
Contact resistance [mΩ]	0,41	0,26
Rated cross section [mm²] (AWG)	2,5 (14)	4 (12)
Connectable conductor cross section		
- rigid [mm²] (AWG)	0,14 - 4 (26-12)	0,14 - 6 (26-10)
- flexible [mm²] (AWG)	0,14 - 2,5 (26-14)	0,14 - 4 (26-12)
Multiple conductor connection		
(2 conductors with the same cross section)		
- rigid [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)
- flexible [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)

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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 type PE [V]	275	176
- with skipping jumper type PE/S [V]	176	-
- with cut to length bridge and cover type D [V]	220	220
- with cut to length bridge and partition plate type ATP [V]	275	275
Rated current [A]	29	40
- with plug-in bridge type FBS... [A]	29	39
Maximum load current [A]	36	50
Temperature rise [K]	40 K (32,0 A; 4 mm²)	40 K (44,9 A; 6 mm²)
Contact resistance [mΩ]	0,32	0,20
Rated cross section [mm²] (AWG)	4 (12)	6 (10)
Connectable conductor cross section		
- rigid [mm²] (AWG)	0,14 - 6 (26-10)	0,2 - 10 (24-8)
- flexible [mm²] (AWG)	0,14 - 4 (26-12)	0,2 - 6 (24-10)
Multiple conductor connection		
(2 conductors with the same cross section)		
- rigid [mm²] (AWG)	0,14 - 1,5 (26-16)	0,2 - 2,5 (24-14)
- flexible [mm²] (AWG)	0,14 - 1,5 (26-16)	0,2 - 2,5 (24-14)

Type:	**UT 10 (SL)**	**UT 16**
Rated insulation voltage [V]	630	630
Rated voltage [V]	690	690
- with plug-in bridge type FBS 2-.. [V]	690	690
Rated current [A]	54	73,5
- with plug-in bridge type FBS 2-.. [A]	54	73,5
Maximum load current [A]	69	89.5
Temperature rise [K]	40 K (60,1 A; 10 mm²)	40 K (80,5 A; 16 mm²)
Contact resistance [mΩ]	0,16	0,16
Rated cross [mm²] (AWG)	10 (8)	16 (6)
Connectable conductor cross section		
- rigid [mm²] (AWG)	0,5 - 16 (20-6)	1,5 - 25 (16-4)
- flexible [mm²] (AWG)	0,5 - 10 (20-8)	1,5 - 16 (16-6)
Multiple conductor connection		
(2 conductors with the same cross section)		
- rigid [mm²] (AWG)	0,5 - 4 (20-12)	1,0 - 6 (18-10)
- flexible [mm²] (AWG)	0,5 - 4 (20-12)	1,0 - 4 (18-12)

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Type:	**UT 35 (IB)**
Rated insulation voltage [V]	630
Rated voltage [V]	690
- with plug-in bridge type FBS 2-.. [V]	690
Rated current [A]	123
- with plug-in bridge type FBS 2-.. [A]	98.5
Maximum load current [A]	129
Temperature rise [K]	40 K (133,6 A; 35 mm²)
Contact resistance [mΩ]	0,08
Rated cross section [mm²] (AWG)	35 (2)
Connectable conductor cross section	
- rigid [mm²] (AWG)	1,5 - 50 (16-1/0)
- flexible [mm²] (AWG)	1,5 - 35 (16-2)
Multiple conductor connection	
(2 conductors with the same cross section)	
- rigid [mm²] (AWG)	1,5 - 16 (16-6)
- flexible[mm²] (AWG)	1,5 - 10 (16-8)

Protective Conductor Terminal Blocks

Type:	**UT 2,5-PE**	**UT 4-PE**
Rated cross section [mm²] (AWG)	2,5 (14)	4 (12)
Connectable conductor cross section		
- rigid [mm²] (AWG)	0,14 - 4 (26-12)	0,14 - 6 (26-10)
- flexible [mm²] (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 [mm²] (AWG)	4 (12)	4 (12)
Connectable conductor cross section		
- rigid [mm²] (AWG)	0,14 - 6 (26-10)	0,14 - 6 (26-10)
- flexible [mm²] (AWG)	0,14 - 4 (26-12)	0,14 - 4 (26-12)

Type:	**UT 6-PE**	**UT 10-PE**
Rated cross section [mm²] (AWG)	6 (10)	10 (8)
Connectable conductor cross section		
- rigid [mm²] (AWG)	0,2 - 10 (24-8)	0,5 - 16 (20-6)
- flexible [mm²] (AWG)	0,2 - 6 (24-10)	0,5 - 10 (20-8)

Type:	**UT 16-PE**	**UT 35-PE (IB)**
Rated cross section [mm²] (AWG)	16 (6)	35 (2)
Connectable conductor cross section		
- rigid [mm²] (AWG)	1,5 - 25 (16-4)	1,5 - 35 (16-2)
- flexible [mm²] (AWG)	1,5 - 16 (16-6)	1,5 - 35 (16-2)

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Pick-off Terminal Blocks

Type:	**AGK 4-UT 10**	**AGK 4-UT 16**
Rated insulation voltage [V]	400	630
Rated voltage [V]	440	690
Rated current [A]	32	32
Maximum load current [A]	41	41
Temperature rise [K]	40 K (34,0 A; 4 mm²)	40 K (36,0 A; 4 mm²)
Contact resistance [mΩ]	0,42	0,43
Rated cross section [mm²] (AWG)	4 (12)	4 (12)
Connectable conductor cross section		
- rigid [mm²] (AWG)	0,14 - 6 (26-10)	0,14 - 6 (26-10)
- flexible [mm²] (AWG)	0,14 - 4 (26-12)	0,14 - 4 (26-12)
Multiple conductor connection		
(2 conductors with the same cross section)		
- rigid [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)
- flexible [mm²] (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
Rated current [A]	32
Maximum load current [A]	41
Temperature rise [K]	40 K (40,0 A; 4 mm²)
Contact resistance [mΩ]	0,43
Rated cross section [mm²] (AWG)	4 (12)
Connectable conductor cross section	
- rigid [mm²] (AWG)	0,14 - 6 (26-10)
- flexible [mm²] (AWG)	0,14 - 4 (26-12)
Multiple conductor connection	
(2 conductors with the same cross section)	
- rigid [mm²] (AWG)	0,14 - 1,5 (26-16)
- flexible [mm²] (AWG)	0,14 - 1,5 (26-16)

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Nomenclature

Terminal Blocks

UT	*	-MTD
I	II	III

Designation	Explanation	Value	Explanation
I	Type indicator	UT	Universal Terminal block with screw connection
II	Rated cross section	2,5 4 6 10 16 35	2,5 mm², 14 AWG 4 mm², 12 AWG 6 mm², 10 AWG 10 mm², 8 AWG 16 mm², 6 AWG 35 mm², 2 AWG
III	Options	None -MTD IB SL	- No disconnection function (only UT 4) InBus screw connection (only UT 35) Six-Lobe screw (only UT 10)

Protective Conductor Terminal Blocks

UT	*	-MTD-	PE	/	S
I	II	III		IV	

Designation	Explanation	Value	Explanation
I	Type indicator	UT	Universal Terminal block with screw connection
II	Rated cross section	2,5 4 6 10 16 35	2,5 mm², 14 AWG 4 mm², 12 AWG 6 mm², 10 AWG 10 mm², 8 AWG 16 mm², 6 AWG 35 mm², 2 AWG
III	Option	- -MTD-	None No disconnection function (only UT 4)
IV	Terminal block	PE PE/S	Protective Earth, green-yellow colour, with a spring for mounting rail contact Protective Earth, green-yellow colour, with a screwed clamp for mounting rail contact (only UT 4-MTD)

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Pick-off Terminal Blocks

AGK * - UT - *
I II III IV

Designation	Explanation	Value	Explanation
I	Type indicator	AGK	Pick-off terminal block with screw connection
II	Rated cross section	4	4 mm^2, 12 AWG
III	Type indicator associated terminal block	UT	Type indicator associated Universal Terminal block
IV	Rated cross section associated terminal block	10 16 35	10 mm², 8 AWG 16 mm², 6 AWG 35 mm², 2 AWG

Plug-in bridge FBS

FBS * - *
I II III

Designation	Explanation	Value	Explanation
I	Type indicator	FBS	Plug-in-bridge
II	Number of positions	 2 3 4 5 10 20	Amount of contacts; 2 contacts (for all series) 3 contacts (for UT 2,5; UT 4; UT 6) 4 contacts (for UT 2,5; UT 4; UT 6) 5 contacts (for UT 2,5; UT 4; UT 6) 10 contacts (for UT 2,5; UT 4; UT 6) 20 contacts (for UT 2,5; UT 4)
III	Pitch between electrical contacts	5 6 8 10 12 16	5,2 mm (for UT 2,5) 6,2 mm (for UT 4) 8,2 mm (for UT 6) 10,2 mm (for UT 10) 12 mm (for UT 16) 16 mm (for UT 35)