

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 00ATEX2052 U** Issue Number: **2**

(4) Component: **Terminal Blocks**
Types ST 2,5, ST 2,5-TWIN, ST 2,5-QUATTRO and STTB 2,5(-PV)
Protective Conductor Terminal Blocks
Types ST 2,5-PE, ST 2,5 TWIN-PE, ST 2,5-QUATTRO-PE and STTB 2,5-PE

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

(6) Address: **Flachsmarktstraße 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. 2100735.

(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 6 February 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.


C.G. van Es
Certification Manager

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(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 00ATEX2052 U** Issue No. **2**

(15) **Description**

Terminal Blocks (all colours) Types ST 2,5, ST 2,5-TWIN, ST 2,5-QUATTRO and STTB 2,5(-PV) as well as Protective Conductor Terminal Blocks Types ST 2,5-PE, ST 2,5-TWIN-PE, ST 2,5-QUATTRO-PE and STTB 2,5-PE 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.

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

Electrical data

Terminal Blocks

Type:	ST 2,5	ST 2,5-TWIN
Rated insulation voltage [V]	500	500
Rated voltage [V]	550	550
- with skipping jumper [V]	352	352
- with skipping jumper over PE type [V]	352	352
Rated current [A]	21	21,5
Max. load current [A]	27	25
- with jumper and 2,5 mm ² conductor cross section [A]	23	22,5
- with jumper and 4,0 mm ² conductor cross section [A]	25,5	25
Rated cross section [mm ²] (AWG)	2,5 (14)	2,5 (14)
Connectable conductor cross section		
- rigid [mm ²] (AWG)	0,08 - 4,0 (28-12)	0,08 - 4,0 (28-12)
- flexible [mm ²] (AWG)	0,08 - 2,5 (28-14)	0,08 - 2,5 (28-14)

Type:	ST 2,5-QUATTRO	STTB 2,5(-PV)
Rated insulation voltage [V]	500	400
Rated voltage [V]	550	440
- with skipping jumper [V]	352	352
- with skipping jumper over PE type [V]	352	352
Rated current [A]	22	19,5
Max. load current [A]	26	23,5
- with jumper and 2,5 mm ² conductor cross section [A]	21,5	17
- with jumper and 4,0 mm ² conductor cross section [A]	25,5	20,5
Rated cross section [mm ²] (AWG)	2,5 (14)	2,5 (14)
Connectable conductor cross section		
- rigid [mm ²] (AWG)	0,08 - 4,0 (28-12)	0,08 - 4,0 (28-12)
- flexible [mm ²] (AWG)	0,08 - 2,5 (28-14)	0,08 - 2,5 (28-14)

(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 00ATEX2052 U** Issue No. 2

Protective Conductor Terminal Blocks

Type:	ST 2,5-PE	ST 2,5-TWIN-PE
Rated cross section [mm ²] (AWG)	2,5 (14)	2,5 (14)
Connectable conductor cross section		
- rigid [mm ²] (AWG)	0,08 - 4,0 (28-12)	0,08 - 4,0 (28-12)
- flexible [mm ²] (AWG)	0,08 - 2,5 (28-14)	0,08 - 2,5 (28-14)

Type:	ST 2,5-QUATTRO-PE	STTB 2,5-PE
Rated cross section [mm ²] (AWG)	2,5 (14)	2,5 (14)
Connectable conductor cross section		
- rigid [mm ²] (AWG)	0,08 - 4,0 (28-12)	0,08 - 4,0 (28-12)
- flexible [mm ²] (AWG)	0,08 - 2,5 (28-14)	0,08 - 2,5 (28-14)

Installation instructions

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

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

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

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

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

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. 2100735.

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

None.



(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 00ATEX2052 U** Issue No. 2

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

Covered by the standards listed at (9).

(19) **Test documentation**

As listed in Test Report No. 2100735.