



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 00ATEX2005 U**
- (4) Components: **Series Terminal Blocks Type QTS 1,5/4 (BU) and QTS 2,5/4 (BU), and Protective Conductor Series Terminal Blocks Type QTS 1,5/4-PE and QTS 2,5/4-PE.**
- (5) **Manufacturer: Phoenix Contact GmbH & Co.**
- (6) **Address: Flachmarktstraße 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. 02005.

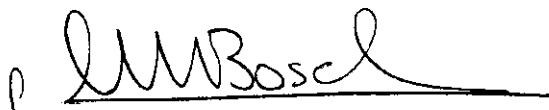
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 50014 : 1992 + prA1
EN 50019 : 1994 + prA1 + prA2
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:

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Arnhem, 17 March 2000
by order of the Board of Directors of N.V. KEMA


for L.M.J. Vries C.M. Boschloo
Certification Manager

◦ This Certificate may only be reproduced in its entirety and without any change



(13)

SCHEDULE

(14)

to EC-Type Examination Certificate KEMA 00ATEX2005 U

(15) **Description**

Series Terminal Blocks with insulation piercing clamping units on one side and spring cage clamping units on the other side, Types QTS 1,5/4 (BU) and QTS 2,5/4 (BU), and Protective Conductor Series Terminal Blocks Types QTS 1,5/4-PE and QTS 2,5/4-PE, with accessories (insulating parts made of PA 6.6) for the connection of copper conductors in enclosures in type of protection increased safety "e", for fixing on mounting rails type NS 35 according to EN 50022.

Operating temperature range -40 °C ... +90 °C.
(connecting temperature range of the IP-clamping units -10 °C ... +90 °C).

Electrical data

Series Terminal Blocks

Type	<u>QTS 1,5/4 (BU)</u>	<u>QTS 2,5/4 (BU)</u>
Max. rated voltage	550 V	550 V
Max. rated voltage (with selectable cross-connectors)	275 V	275
Max. rated voltage (with double selectable cross-connectors)	175 V	175 V
Rated current (at rated conductor cross section)	17,5 A	22 A
Rated current (with cross-connectors)	17,5 A	21 A
Rated conductor cross section mm ² (AWG)	1,5 (16)	2,5 (14)
Max. conductor cross section of the insulation piercing clamping unit mm ² (AWG)	1,5 (16)	2,5 (14)
Min. conductor cross section of the insulation piercing clamping unit mm ² (AWG)	0,34 (22)	1,0 (18)
Max. conductor cross section of the spring cage clamping unit mm ² (AWG)	4 (12)	4 (12)
Min. conductor cross section of the spring cage clamping unit mm ² (AWG)	0,2 (24)	0,2 (24)

Protective Conductor Terminal Blocks

Type	<u>QTS 1,5/4-PE</u>	<u>QTS 2,5/4-PE</u>
Rated conductor cross section mm ² (AWG)	1,5 (16)	2,5 (14)
Max. conductor cross section of the insulation piercing clamping unit mm ² (AWG)	1,5 (16)	2,5 (14)
Min. conductor cross section of the insulation piercing clamping unit mm ² (AWG)	0,34 (22)	1,0 (18)
Max. conductor cross section of the spring cage clamping unit mm ² (AWG)	4 (12)	4 (12)
Min. conductor cross section of the spring cage clamping unit mm ² (AWG)	0,2 (24)	0,2 (24)

Mounting instructions

The 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.

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to EC-Type Examination Certificate KEMA 00ATEX2005 U**Mounting instructions (continued)**

In combination with other terminal block series and sizes and if other accessories are used the applicable creepage distances and clearances shall be met.

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

An insulation piercing clamping unit shall only be used for the connection of copper conductors for a maximum of ten times.

The Series Terminal Blocks may be used, based on the self-heating when used at the above mentioned rated current and at ambient temperatures of -40 °C to +40 °C at the mounting position 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.

If 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.

Routine test

Routine dielectric strength tests according to EN 50019, Clause 7.1.b in combination with Clause 6.1, are to be carried out.

(16) **Report**

No. 02005

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

None

(18) **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 positively judged. The results are laid down in the report listed at (16).

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to EC-Type Examination Certificate KEMA 00ATEX2005 U(19) **Test documentation**signed

1. Description (16 pages))	
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2. Drawing No. 00260281)	
00260282)	
00260283)	28.01.2000
00260284)	
00260285)	
00260286)	
00260287)	
00260288)	
00208352 rev. 04		16.09.1999
3. Samples		