



(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 98ATEX1786 U**
- (4) Components: **Series Terminal Blocks Type UK 10 N, UK 16 N, UK 35, UKH 50 and UKH 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. 81786.

- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN 50014 : 1992 + prA1    EN 50019 : 1994 + prA1    prEN 50281-1-1 : 1997**
- (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:

 II 2 GD    EEx e II

Arnhem, 21 December 1998  
by order of the Board of Directors of N.V. KEMA

C.M. Boschloo  
Certification Manager

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## SCHEDULE

(13)

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to EC-Type Examination Certificate KEMA 98ATEX1786 U

(15) **Description**

Series Terminal Blocks Type UK 10 N, UK 16 N, UK 35, UKH 50 and UKH 95 with accessories (covers, partition plates, cross connectors, end brackets) and insulating parts made of PA 6.6, for the connection of copper conductors in enclosures in type of protection increased safety "e". They will be fixed on mounting rails type NS 32 according to EN 50035 or NS 35 according to EN 50022.

Operating temperature range -40 °C ... +80 °C.

### Electrical data

<u>Type</u>	<u>UK 10 N</u>	<u>UK 16 N</u>
Max. rated voltage .....	750 V	750 V
Max. rated voltage with		
cross-connectors .....	750 V	750 V
Rated conductor cross section .....	10 mm <sup>2</sup>	16 mm <sup>2</sup>
Max. conductor cross section (rigid) .....	16 mm <sup>2</sup>	25 mm <sup>2</sup>
Max. conductor cross section with		
two similar conductors connected (rigid) ....	0,5 - 4 mm <sup>2</sup>	0,5 - 4 mm <sup>2</sup>
Max. conductor cross section with		
two similar conductors connected (flex.) ....	0,5 - 4 mm <sup>2</sup>	0,5 - 4 mm <sup>2</sup>
Rated current .....	57 A	72 A
Max. current .....	73 A	88 A
Max. current with cross-connectors .....	55/53 A (FB/EB)	70/71 A (FB/EB)
Max. current with two similar conductors		
connected .....	54 A	50 A
<u>Type</u>	<u>UK 35</u>	<u>UKH 50</u>
Max. rated voltage .....	750 V	750 V
Max. rated voltage with		
cross-connectors .....	750 V	175 V
Rated conductor cross section .....	35 mm <sup>2</sup>	50 mm <sup>2</sup>
Max. conductor cross section (rigid) .....	50 mm <sup>2</sup>	50 mm <sup>2</sup>
Max. conductor cross section with		
two similar conductors connected (rigid) ....	0,75 - 16 mm <sup>2</sup>	10 - 16 mm <sup>2</sup>
Max. conductor cross section with		
two similar conductors connected (flexible)..	0,75 - 10 mm <sup>2</sup>	10 - 16 mm <sup>2</sup>
Rated current .....	112 A	135 A
Max. current .....	145 A	135 A
Max. current with cross-connectors .....	123/121 A (FB/EB)	131 A (FB)
Max. current with two similar conductors		
connected .....	131 A	133 A

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### Electrical data (continued)

<u>Type</u>	<u>UKH 95</u>
Max. rated voltage .....	750 V
Max. rated voltage with cross-connectors .....	750 V
Rated conductor cross section .....	95 mm <sup>2</sup>
Max. conductor cross section (rigid) .....	95 mm <sup>2</sup>
Max. conductor cross section with two similar conductors connected (rigid) ....	25 - 35 mm <sup>2</sup>
Max. conductor cross section with two similar conductors connected (flex.) ....	25 - 35 mm <sup>2</sup>
Rated current .....	210 A
Max. current .....	210 A
Max. current with cross-connectors .....	194 A (EB)
Max. current with two similar conductors connected .....	215 A

### Mounting instructions

The series terminal blocks 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 prEN 50281-1-1.

In combination with other terminal blocks 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.

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.

The maximum permissible temperature at the insulation parts is 80 °C.

### 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.

(16) **Report**

No. 81786

**SCHEDULE**

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to EC-Type Examination Certificate KEMA 98ATEX1786 U

(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
1.0.6b	Instructions for use

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

(19) **Test documentation**

1. Component Certificate KEMA Nr. Ex-94.C.8675 U  
 KEMA Nr. Ex-95.D.3678 U  
 KEMA Nr. Ex-95.D.4411 U

signed

2. Description (20 pages)

20.11.1998

3. Drawing No. 00210749 )  
 00210750 )  
 00210751 )  
 00210752 )  
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 00210754 )  
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 00210756 )  
 00210757 )  
 00210758 )

20.05.1998

00208352

04.12.1998

4. Samples

translation

**AMENDMENT 1**

original language: German

to EC-Type Examination Certificate KEMA 98ATEX1786 U

Manufacturer: **Phoenix Contact GmbH & Co. KG**Address: **Flachmarktstraße 8-28, D-32825 Blomberg, Germany****Scope**

The operating temperature range of the Terminal blocks type UKH 50 and UKH 95 is extended to -40 °C ... + 100 °C.

All other data remain unchanged.

**Test documentation**dated

1. Description (8 Pages)

28.09.2001

Arnhem, 14 February 2002  
KEMA Quality B.V.



T. Pijpker  
Certification Manager