

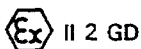


translation

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 98ATEX1683 U
- (4) Components: Feed Through Terminal Types WDU 2.5N, WDU 2.5, WDU 4, WDU 6, WDU 10, WDU 16, WDU 35 and WDU 70N and Protective Conductor Terminals Type WPE 2.5N, WPE 2.5, WPE 4, WPE 6, WPE 10, WPE 16, WPE 35 and WPE 70N
- (5) Applicant: Weidmüller Interface GmbH & Co.
- (6) Address: Klingenbergstraße 16, 32758 Detmold, 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 has 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. 81683.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- EN 50014: 1992 + prA1 EN 50019: 1994 + prA1 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:



II 2 GD

EEx e II

Arnhem, 26 May, 1999  
by order of the Board of Directors of N.V. KEMA

C.M. Boschloo  
Certification Manager

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



## SCHEDULE

- (13)
- (14) to EC-Type Examination Certificate KEMA 98ATEX1683 U

(15) **Description**

The Feed Through Terminal Types WDU 2.5N, WDU 2.5, WDU 4, WDU 6, WDU 10, WDU 16, WDU 35 and WDU 70N and the Protective Conductor Terminal Types WPE 2.5N, WPE 2.5, WPE 4, WPE 6, WPE 10, WPE 16, WPE 35 and WPE 70N of the W-Series, for the connection of copper conductors in enclosures in type of protection increased safety "e", insulating parts made of Wemid, with accessories (cross-connectors, end brackets, partitions and identification material) for fixing on mounting rail TS 35.

Operating temperature range -50 °C ... +100 °C.

**Electrical data**

Feed Through terminals

Type .....	<u>WDU 2,5N</u>	<u>WDU 2,5</u>
Max. rated voltage .....	420 V	550 V
Max. rated voltage (with cross-connectors) ....	420 V	550 V
Max. rated voltage (with cross-connectors adjacent to Protective Conductor Terminals without partitions) .....	420 V	420 V
Max. rated voltage (with cross-connectors jumping over) .....	110 V	110 V
Max. rated voltage (with parallel cross-connectors WQV/ZQV) .....	110 V / -	110 V / 60 V
Rated current (at rated conductor cross section) .....	21 A	21 A
Rated current (with cross-connectors WQV) ...	21 A	21 A
Rated current (with cross-connectors ZQV) ....	21 A	21 A
Rated conductor cross section mm <sup>2</sup> (AWG) ...	2,5 (14)	2,5 (14)
Max. conductor cross section mm <sup>2</sup> (AWG) .....	4 (12)	4 (12)
Min. conductor cross section mm <sup>2</sup> (AWG) .....	0,5 (20)	0,5 (20)

Feed Through terminals

Type .....	<u>WDU 4</u>	<u>WDU 6</u>
Max. rated voltage .....	750 V	550 V
Max. rated voltage (with cross-connectors) ....	750 V	550 V
Max. rated voltage (with cross-connectors adjacent to Protective Conductor Terminals without partitions) .....	420 V	420 V
Max. rated voltage (with cross-connectors in parallel or jumping over) .....	110 V	110 V
Rated current (at rated conductor cross section) .....	28 A	36 A
Rated current (with cross-connectors) .....	28 A	36 A
Rated conductor cross section mm <sup>2</sup> (AWG) ...	4 (12)	6 (10)
Max. conductor cross section mm <sup>2</sup> (AWG) .....	6 (10)	10 (8)
Min. conductor cross section mm <sup>2</sup> (AWG) .....	0,5 (20)	0,5 (20)

Feed Through terminals

Type .....	<u>WDU 10</u>	<u>WDU 16</u>
Max. rated voltage .....	550 V	750 V
Max. rated voltage (with cross-connectors) ....	550 V	750 V
Max. rated voltage (with cross-connectors adjacent to Protective Conductor Terminals without partitions) .....	420 V	750 V

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**Electrical data (continued)**

Feed Through terminals

Type .....	<u>WDU 10</u>	<u>WDU 16</u>
Max. rated voltage (with cross-connectors in parallel or jumping over) .....	110 V	110 V
Rated current (at rated conductor cross section) .....	60 A	66 A
Rated current (with cross-connectors) .....	50 A	66 A
Rated conductor cross section mm <sup>2</sup> (AWG) ...	10 (8)	16 (6)
Max. conductor cross section mm <sup>2</sup> (AWG) .....	16 (6)	25 (4)
Min. conductor cross section mm <sup>2</sup> (AWG) .....	1,5 (16)	1,5 (16)

Feed Through terminals

Type .....	<u>WDU 35</u>	<u>WDU 70N</u>
Max. rated voltage .....	750 V	750 V
Max. rated voltage (with cross-connectors) ....	750 V	750 V
Max. rated voltage (with cross-connectors adjacent to Protective Conductor Terminals without partitions) .....	750 V	750 V
Max. rated voltage (with cross-connectors in parallel or jumping over) .....	110 V	110 V
Rated current (at rated conductor cross section) .....	109 A	167 A
Rated current (with cross-connectors) .....	109 A	167 A
Rated conductor cross section mm <sup>2</sup> (AWG) ...	35 (2)	70 (00)
Max. conductor cross section mm <sup>2</sup> (AWG) .....	35 (2)	70 (00)
Min. conductor cross section mm <sup>2</sup> (AWG) .....	2,5 (14)	10 (8)

Protective Conductor Terminals

Type .....	<u>WPE 2,5N</u>	<u>WPE 2,5</u>
Rated conductor cross section mm <sup>2</sup> (AWG) ...	2,5 (14)	2,5 (14)
Max. conductor cross section mm <sup>2</sup> (AWG) .....	4 (12)	4 (12)
Min. conductor cross section mm <sup>2</sup> (AWG) .....	0,5 (20)	0,5 (20)

Protective Conductor Terminals

Type .....	<u>WPE 4</u>	<u>WPE 6</u>
Rated conductor cross section mm <sup>2</sup> (AWG) ...	4 (12)	6 (10)
Max. conductor cross section mm <sup>2</sup> (AWG) .....	6 (10)	10 (8)
Min. conductor cross section mm <sup>2</sup> (AWG) .....	0,5 (20)	0,5 (20)

Protective Conductor Terminals

Type .....	<u>WPE 10</u>	<u>WPE 16</u>
Rated conductor cross section mm <sup>2</sup> (AWG) ...	10 (8)	16 (6)
Max. conductor cross section mm <sup>2</sup> (AWG) .....	16 (6)	25 (4)
Min. conductor cross section mm <sup>2</sup> (AWG) .....	1,5 (16)	1,5 (16)

Protective Conductor Terminals

Type .....	<u>WPE 35</u>	<u>WPE 70N</u>
Rated conductor cross section mm <sup>2</sup> (AWG) ...	35 (2)	70 (00)
Max. conductor cross section mm <sup>2</sup> (AWG) .....	35 (2)	70 (00)
Min. conductor cross section mm <sup>2</sup> (AWG) .....	2,5 (14)	10 (8)

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### Mounting instructions

The series terminals are suitable for application 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.

In the combination of Feed Through Terminals with Protective Conductor Terminals of the same rated values, the applicable creepage distances and clearances according to EN 50019 are met.

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 end plates, partitions and end brackets the instructions of the manufacturer must be followed.

The Feed Through Terminals 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 classes T6 and T5. When the Feed Through Terminals and Protective Conductor Terminals are used in electrical apparatus of temperature classes T1 up to T4, the highest temperature of the insulating material Wemid shall not exceed the value of 100 °C.

If smaller cross sections than 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.

Unused terminals shall be tightened.

### 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.

### Test documentation

1. Description (5 pages)		<u>signed</u> 29.04.1999
2. Drawing No. 4 14633, rev. 13	)	
4 14653, rev. 24	)	
4 18585, rev. 7	)	
4 18586, rev. 9	)	
4 09252, rev. 17	)	
3 09264, rev. 12	)	
4 09233, rev. 11	)	12.05.1998

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**Test documentation (continued)**

signed

- Drawing No. 4 24798, rev. 4 )
- 3 09270, rev. 15 )
- 4 09253, rev. 19 )
- 4 24767, rev. 1 )
- 4 24799, rev. 1 )
- 2 24804, rev. 6 )
- 4 09254, rev. 16 )
- 4 09266, rev. 27 )
- 4 09235, rev. 8 )
- 3 09272, rev. 13 )
- 4 09255, rev. 13 )
- 4 09267, rev. 24 )
- 4 09236, rev. 7 )
- 3 09273, rev. 11 )
- 4 09256, rev. 14 )
- 4 09268, rev. 28 )
- 4 09237, rev. 7 )
- 3 09274, rev. 10 )
- 4 09257, rev. 17 )
- 4 09269, rev. 30 )
- 4 09238, rev. 6 )
- 4 09275, rev. 10 )
- 4 25642 )
- 860066 )
- 860085 )
- 4 25641 )
- 860071 )
- 3 28025 sheet 1/3 )
- 4 14685, rev. 3 )
- 4 14686, rev. 3 )
- 4 08861, rev. 5 )
- 4 08873, rev. 5 )
- 4 08874, rev. 4 )
- 4 09134, rev. 4 )
- 4 26402 )
- 3 24707, rev. 5 )
  
- 3 28025 sheet 2/3 )
- 3 28025 sheet 3/3, rev. 1 )
- 3 12199, rev. 9 )

12.05.1998

13.10.1998

**3. Samples**

(16) **Report**

No. 81683

(13) **SCHEDULE**

(14) **to EC-Type Examination Certificate KEMA 98ATEX1683 U**

(15) **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 the results are laid down in the report listed at (16).