IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.: **IECEx KEM 06.0048U** Issue No.: **0**

Status: **Current**

Date of Issue: **2007-03-08** Page **1** of **3**

Applicant: **Weidmüller Interface GmbH & Co. KG**
Klingenbergstrasse 16
32758 Detmold
Germany

Electrical Apparatus: **Feed through terminal blocks series ZDU 2.5N... and ZDK 2.5/3AN... and Protective conductor terminal blocks series ZPE 2.5N... and ZDK 2.5/3AN...and Feed through/Protective conductor terminal block Type ZDK 2.5/3AN DU-PE**

Optional accessory:

Type of Protection: **Increased safety**

Marking: **Ex e II**

Approved for issue on behalf of the IECEx Certification Body: T. Pijpker

Position: Certification Manager

Signature:
(for printed version)

Date: 8.3.2007

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting the Official IECEx Website.

Certificate issued by:

KEMA Quality B.V.
Utrechtseweg 310
6812 AR Arnhem
The Netherlands

KEMA

IECEx Certificate of Conformity

Certificate No.: **IECEx KEM 06.0048U**

Date of Issue: **2007-03-08** Issue No.: **0**

Manufacturer: **Weidmüller Interface GmbH & Co. KG**
Klingenbergstrasse 16
32758 Detmold
Germany

Manufacturing location(s):

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacture'rs quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended.

STANDARDS:
The electrical apparatus and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards:

IEC 60079-0 : 2004 Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
IEC 60079-7 : 2001 Edition: 3	Electrical apparatus for explosive gas atmospheres - Part 7: Increased safety 'e'

*This Certificate **does not** indicate compliance with electrical safety and performance requirements other than those expressly included in the Standards listed above.*

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in

Test Report:

NL/KEM/ExTR06.0049/00

Quality Assessment Report:

NL/KEM/QAR06.0006/01

IECEx Certificate of Conformity

Certificate No.: **IECEx KEM 06.0048U**

Date of Issue: **2007-03-09** Issue No.: **0**

Schedule

EQUIPMENT:
Equipment and systems covered by this certificate are as follows:

The Feed through terminal blocks Types ZDU 2.5N, ZDU 2.5N/3AN, ZDU 2.5N/4AN, ZDK 2.5/3AN, and ZDK 2.5/3AN V as well as the Protective conductor terminal blocks Types ZPE 2.5N, ZPE 2.5N/3AN, ZPE 2.5N/4AN, ZDK 2.5/3AN PE and Feed through/protective conductor terminal block Type ZDK 2.5/3AN DU-PE with accessories, are intended for the connection of copper conductors in enclosures in type of protection increased safety. For combustible dust these enclosures must satisfy the requirements according to IEC 61241 series. Fixing is made on mounting rails type TS 35 according to IEC 60715.

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

CONDITIONS OF CERTIFICATION: NO

Annexe: IECEx KEM 06.0048U.pdf

Annex to:	IECEx KEM 06.0048U
Applicant:	Weidmüller Interface GmbH & Co.
Electrical Apparatus:	Feed through terminal blocks Types ZDU 2.5N, ZDU 2.5N/3AN, ZDU 2.5N/4AN, ZDK 2.5/3AN, ZDK 2.5/3AN V and Protective conductor terminal blocks Types ZPE 2.5N, ZPE 2.5N/3AN, ZPE 2.5N/4AN, ZDK 2.5/3AN PE and Feed through/ Protective conductor terminal block Type ZDK 2.5/3AN DU-PE

Electrical data

Feed through terminal blocks

Type:	**ZDU 2.5N**	**ZDU 2.5N/3AN**
Rated insulation voltage [V]	500	500
Rated voltage [V]	550	550
- with jumper [V]	440	440
- with skipping jumper [V]	275	275
- with jumper adjacent PE Type [V]	440	440
- with 2 jumpers with separation wall [V]	440	440
Nominal current [A]	20,5	21,5
- with jumper [A]	19	21
Rated cross section [mm²] (AWG)	2,5 (14)	2,5 (14)
Connectable conductor cross section		
- rigid [mm²] (AWG)	0,5-4 (20-12)	0,5-4 (20-12)
- flexible [mm²] (AWG)	0,5-2,5 (20-14)	0,5-2,5 (20-14)

Type:	**ZDU 2.5N/4AN**
Rated insulation voltage [V]	500
Rated voltage [V]	550
- with jumper [V]	440
- with skipping jumper [V]	275
- with jumper adjacent PE Type [V]	440
- with 2 jumpers with separation wall [V]	440
Nominal current [A]	21
- with jumper [A]	20
Rated cross section [mm²] (AWG)	2,5 (14)
Connectable conductor cross section	
- rigid [mm²] (AWG)	0,5-4 (20-12)
- flexible [mm²] (AWG)	0,5-2,5 (20-14)

KEMA

Annex to: IECEx KEM 06.0048U
Applicant: Weidmüller Interface GmbH & Co.
Electrical Apparatus: Feed through terminal blocks Types ZDU 2.5N, ZDU 2.5N/3AN, ZDU 2.5N/4AN, ZDK 2.5/3AN, ZDK 2.5/3AN V and Protective conductor terminal blocks Types ZPE 2.5N, ZPE 2.5N/3AN, ZPE 2.5N/4AN, ZDK 2.5/3AN PE and Feed through/ Protective conductor terminal block Type ZDK 2.5/3AN DU-PE

Type:	**ZDK 2.5/3AN**	**ZDK 2.5/3AN V**
Rated insulation voltage [V]	500	500
Rated voltage [V]	550	550
- with jumper [V]	275	275
- with skipping jumper [V]	275	275
- with jumper adjacent PE Type [V]	275	275
- with 2 jumpers with separation wall [V]	275	275
Nominal current [A]	21,5	21
- with jumper [A]	21	18,5
Rated cross section [mm²] (AWG)	2,5 (14)	2,5 (14)
Connectable conductor cross section		
- rigid [mm²] (AWG)	0,5-4 (20-12)	0,5-4 (20-12)
- flexible [mm²] (AWG)	0,5-2,5 (20-14)	0,5-2,5 (20-14)

Feed through/ Protective conductor terminal block

Type:	**ZDK 2.5/3AN DU-PE**
Rated insulation voltage [V]	500
Rated voltage [V]	550
- with jumper [V]	275
- with skipping jumper [V]	275
- with jumper adjacent PE Type [V]	275
- with 2 jumpers with separation wall [V]	275
Nominal current [A]	21
- with jumper – feed through level [A]	21
Rated cross section [mm²] (AWG)	2,5 (14)
Connectable conductor cross section	
- rigid [mm²] (AWG)	0,5-4 (20-12)
- flexible [mm²] (AWG)	0,5-2,5 (20-14)

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Protective conductor terminal blocks

Type:	**ZPE 2.5N**	**ZPE 2.5N/3AN**
Rated cross section [mm²] (AWG)	2,5 (14)	2,5 (14)
Connectable conductor cross section		
- rigid [mm²] (AWG)	0,5-4 (20-12)	0,5-4 (20-12)
- flexible [mm²] (AWG)	0,5-2,5 (20-14)	0,5-2,5 (20-14)

Type:	**ZPE 2.5N/4AN**	**ZDK 2.5/3AN PE**
Rated cross section [mm²] (AWG)	2,5 (14)	2,5 (14)
Connectable conductor cross section		
- rigid [mm²] (AWG)	0,5-4 (20-12)	0,5-4 (20-12)
- flexible [mm²] (AWG)	0,5-2,5 (20-14)	0,5-2,5 (20-14)

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 IEC 60079-0 and IEC 60079-7. For combustible dust these enclosures must satisfy the requirements according to IEC 61241 series.

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

Regarding the use of covers, 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 associated lower current has to be laid down in the IECEx Certificate of Conformity of the complete equipment.

The Terminal Blocks may be used, based on the self-heating when used at the nominal current and at ambient temperatures of -50 °C to +40 °C at the mounting position in apparatus, e.g. connection and junction boxes, for temperature class T6. If 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.