



IECEX Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

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

Ex COMPONENT CERTIFICATE

Certificate No.: **IECEX SEV 13.0012U**

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Certificate history:

Status: **Current**

Issue No: 4

Issue 3 (2023-06-28)

Issue 2 (2021-06-03)

Issue 1 (2014-04-28)

Issue 0 (2013-10-23)

Date of Issue: 2023-11-14

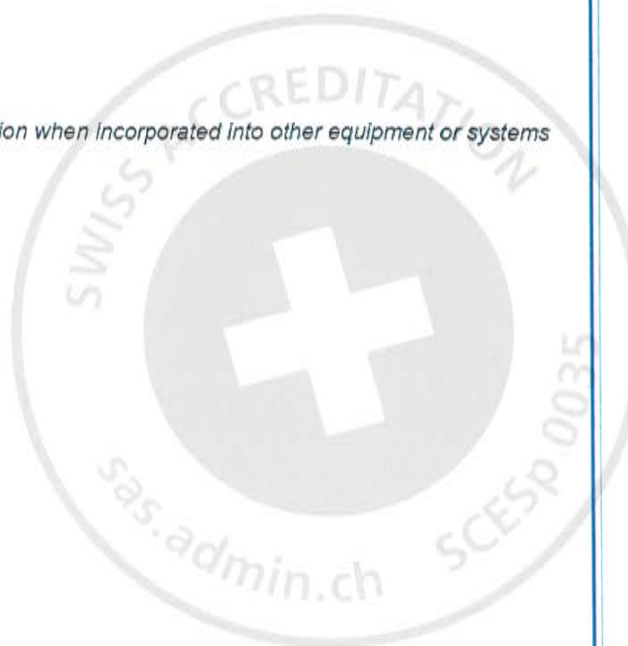
Applicant: **PHOENIX CONTACT GmbH & Co. KG**
Flachsmarktstraße 8
32825 Blomberg
Germany

Ex Component: Terminal blocks

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **e**

Marking: Ex eb IIC Gb



Approved for issue on behalf of the IECEx
Certification Body:

Munira Gamma

Position:

Manager Product Certification

Signature:
(for printed version)

M. Gamma

Date:
(for printed version)

2023-11-14

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.
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Certificate issued by:

Eurofins Electric & Electronic Product Testing AG
Luppenstrasse 3
8320 FEHRALTORF,
Switzerland



E&E



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Manufacturer: **PHOENIX CONTACT GmbH & Co. KG**
Flachmarktstraße 8
32825 Blomberg
Germany

Manufacturing
locations:

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 manufacturer's 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 component 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 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-7:2017 Explosive atmospheres - Part 7: Equipment protection by Increased safety "e"
Edition:5.1

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

TEST & ASSESSMENT REPORTS:

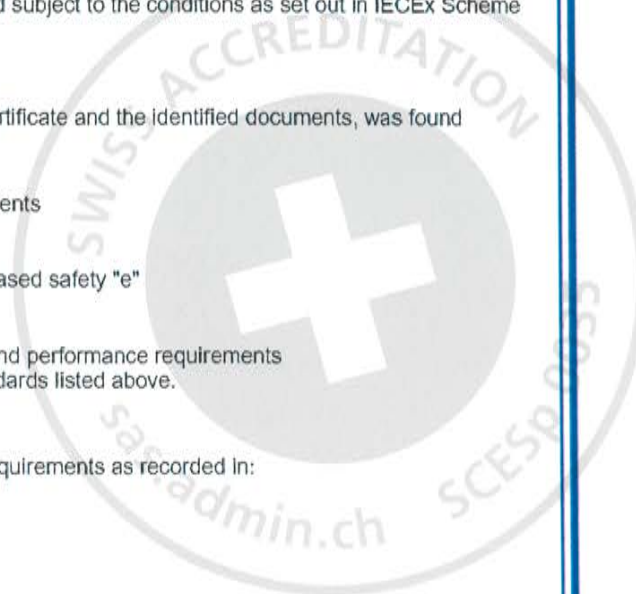
A sample(s) of the component listed has successfully met the examination and test requirements as recorded in:

Test Report:

CH/SEV/ExTR13.0009/04

Quality Assessment Report:

NL/DEK/QAR17.0005/04





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Ex Component(s) covered by this certificate is described below:

The terminal blocks and protective conductor terminal blocks of the MUT series consists of an insulating housing (PA 6.6) which are equipped with current bar(s), screw-type clamping units to be used in terminal compartments of the Ex "e" type of protection (in gas atmospheres) or Ex "t" type of protection (in dust atmospheres).

If needed, two or more pole of adjacent terminal blocks can be connected with cross connectors FBS (jumper bridges) to build groups of terminals with the same potential.

Accessories are covers, partition plates, jumper and end brackets.

These terminal blocks can be mounted on standard support rails according to IEC/EN 60715-TH 15 (NS 15).

Classification of installation and use:	stationary
Ingress protection:	N/A
Rated ambient temperature range (°C):	N/A
Rated ambient temperature range (°C) for Ex Components	-60 °C to +110 °C

SCHEDULE OF LIMITATIONS:

- The terminal blocks of the MUT series are to be installed in enclosures that meet the requirements of the standards IEC 60079-0 and IEC 60079-7 (for gas atmospheres) and IEC 60079-31 (for dust atmospheres).
- When installing the terminal blocks, clearances and creepage distances according to the standard IEC 60079-7 must be observed, in particular when using qualified terminal accessories (reduced voltage ratings apply): see manufacturer's documentation and installation instructions of MUT series. When installing the terminal blocks, the data included in the manufacturer's installation instructions of the MUT series shall be considered, in particular the temperature rise (when carrying rated current with specified conductor size) and the resistance across the terminal (with rated conductor cross-section). Reduced current ratings must be observed when multiple terminals are installed, according to the rating of the enclosure explained in sub-clauses 5.8, 6.7 and Annex E.
- Service temperature range: from -60 °C ... +110 °C.
- The maximum surface temperature must be determined in accordance with IEC 60079-0 after installation in a housing.
- Increased safety of these terminal blocks is only guaranteed when their walls remain intact and undamaged.



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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

- Extension of another type MUTTB 2,5 and MUTTB 2,5-PV
- The maximum temperature (current) measurement was done with witness testing.
- There are new document relation to MUTTB 2,5 and MUTTB 2,5-PV
- Type reference table was supplemented with the two new types.
- Update the national difference report.
- Re-creation of test reports 60079-0 and 60079-7





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Additional information:
See Annexe to this certificate

Annex:

[IECEX SEV 13.0012U Annexe Issue 4 20231114_14-59.pdf](#)



Annexe to: **IECEX SEV 13.0012U**
Issue No.: 4

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Applicant Name: **Phoenix Contact GmbH & Co. KG**
Equipment: **Terminal block**
Description of product
Ratings technical data

Type:	Terminal block MUT 2,5	Terminal block MUT 2,5-PE	Terminal block MUT 4	Terminal block MUT 4-PE
Rated voltage [V]	352	---	352	---
Rated current [A]	20.5	---	27.5	---
Max. load current [A]	20.5	---	32.5	---
Rated current with FBS jumper bridges	18.5	--	24.5	---
Temperature rise [K]	40	---	40	---
Contact resistance [mΩ]	---	---	---	---
Rated cross-section [mm ²] (AWG)	2.5 (AWG 14)	2.5 (AWG 14)	4.0 (AWG 12)	4.0 (AWG 12)
Connectable conductor cross- section	---	---	---	---
- rigid [mm ²] (AWG)	0.2 - 4.0 (AWG 24 - 12)	0.2 - 4.0 (AWG 24 - 12)	0.2 - 6.0 (AWG 24 - 10)	0.2 - 6.0 (AWG 24 - 10)
- flexible [mm ²] (AWG)	0.2 - 2.5 (AWG 24 - 14)	0.2 - 2.5 (AWG 24 - 14)	0.2 - 4.0 (AWG 24 - 12)	0.2 - 4.0 (AWG 24 - 12)
Assembly as stated	NS 15 acc. to IEC/EN 60715-TH 15	NS 15 acc. to IEC/EN 60715-TH 15	NS 15 acc. to IEC/EN 60715-TH 15	NS 15 acc. to IEC/EN 60715-TH 15
Stripping length [mm]	9	9	9	9
Service temperature [°C]	-60 °C ... +110 °C	-60 °C ... +110 °C	-60 °C ... +110 °C	-60 °C ... +110 °C
Torque of the clamping screws [Nm]	0.5 - 0.6	0.5 - 0.6	0.6 - 0.8	0.6 - 0.8

= different colour versions, e.g. BU, BK, RD, etc.

Type:	Terminal block MUT 6	Terminal block MUT 6-PE
Rated voltage [V]	275	---
Rated current [A]	39	---
Max. load current [A]	50	---
Rated current with FBS jumper bridges [A] at 6 mm ²	38	--
Temperature rise [K]	40	---
Contact resistance [mΩ]	0.08	---
Rated cross-section [mm ²] (AWG)	6 (AWG 10)	6 (AWG 10)
Connectable conductor cross-section	---	---
- rigid [mm ²] (AWG)	0.2 - 10 (AWG 24 - 8)	0.2 - 10 (AWG 24 - 8)
- flexible [mm ²] (AWG)	0.25 - 6 (AWG 24 - 10)	0.2 - 6 (AWG 24 - 10)
Assembly as stated	NS 15 acc. to IEC/EN 60715-TH 15	NS 15 acc. to IEC/EN 60715- TH 15
Stripping length [mm]	8 ... 9	8 ... 9
Service temperature [°C]	-60 °C ... +110 °C	-60 °C ... +110 °C
Torque of the clamping screws [Nm]	0.6 - 0.8	0.6 - 0.8

* = different colour versions, e.g. BU, BK, RD, etc.

Type:	Terminal block MUTTB 2,5	Terminal block MUTTB 2,5 -PV
Rated voltage [V]	275	275
Rated current [A] at 2.5 mm ²	19	19
Max. load current [A] at 4 mm ²	24	24
Rated current with FBS jumper bridges [A] at 2.5 mm ²	19	19
Temperature rise [K]	40	40
Contact resistance [mΩ]	0.42 Level 1 0.27 Level 2	0.7
Rated cross-section [mm ²] (AWG)	2.5 (AWG 14)	2.5 (AWG 14)
Connectable conductor cross-section	---	---
- rigid [mm ²] (AWG)	0.2 - 4 (AWG 24 - 12)	0.2 - 4 (AWG 24 - 12)
- flexible [mm ²] (AWG)	0.2 - 2.5 (AWG 24 - 14)	0.2 - 2.5 (AWG 24 - 14)
Assembly as stated	NS 15 acc. to IEC/EN 60715-TH 15	NS 15 acc. to IEC/EN 60715- TH 15
Stripping length [mm]	7 ... 9	7 ... 9
Service temperature [°C]	-60 °C ... +110 °C	-60 °C ... +110 °C
Torque of the clamping screws [Nm]	0.5 - 0.6	0.5 - 0.6

* = different colour versions, e.g. BU, BK, RD, etc.