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 13.0005U**

Page 1 of 4

Certificate history:

Status: **Current**

Issue No: 8

Issue 7 (2021-01-28)
Issue 6 (2019-12-04)
Issue 5 (2019-03-15)
Issue 4 (2017-01-19)
Issue 3 (2016-11-28)
Issue 2 (2016-05-23)
Issue 1 (2015-01-23)
Issue 0 (2013-09-04)

Date of Issue: 2024-07-22

Applicant: **Phoenix Contact GmbH & Co. KG**
Flachsmarktstrasse 8
32823 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: **Increased safety "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)

Date:
(for printed version)

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 www.iecex.com or use of this QR Code.

Certificate issued by:

Eurofins Electric & Electronic Product Testing AG
Luppmenstrasse 3
8320 FEHRALTORF .
Switzerland

eurofins | E&E

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Certificate No.: **IECEx SEV 13.0005U** Page 2 of 4

Date of issue: 2024-07-22 Issue No: 8

Manufacturer: **Phoenix Contact GmbH & Co. KG,**
Flachsmarktstrasse 8
32823 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/ExTR13.0005/07

Quality Assessment Report:

NL/DEK/QAR11.0009/09

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

Types:
PT 1,5/S ...
PTS 1,5/S …
PTTB 1,5 ...
PTTBS 1,5 …
PT 2,5-3 ...
PTS 2,5 …
PTTBS 2,5 ...
PT 6 ...
PT 10 ...
PT 16 ...
Ratings: See Annexe to this certificate

This CoC replaces IECEx SEV 13.0005U Issue 7

SCHEDULE OF LIMITATIONS:

- The terminal blocks of the PT 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 the PT series.
- When installing the terminal blocks, the data included in the manufacturer's installation instructions of the PT 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 1: -60 °C to +85 °C
  Service temperature range 2: -40 °C to +110 °C
  The terminal blocks are intended for use in two separate temperature ranges.
  Service temperature range 1 defines the use of the terminal blocks in extreme cold.
  Service temperature range 2 defines the use of the terminal blocks in extreme heat.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Temperature range changed. Now there are two ranges.

Annex:

IECEx SEV 13.0005 Annexe Issue 8.pdf

Annexe to:	**IECEx SEV 13.0005U**	**Issue No.: 8**
		page 1 of 7
Applicant Name:	**PHOENIX CONTACT GmbH & Co. KG**	
Electrical Apparatus:	**Terminal block**	

General product information:
The terminal blocks and protective conductor terminal blocks of the PT series consist of an insulating housing (PA 6.6) which is equipped with current bar(s), screwless-type clamping units (Push-in technology) 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).
When need be, two or more poles 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, insertion bridges and end brackets. These terminal blocks can be mounted on standard support rails according to IEC/EN 60715-TH 35 (NS 35).

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	Service temperature range 1: -60 °C to +85 °C Service temperature range 2: -40 °C to +110 °C The terminal blocks are intended for use in two separate temperature ranges. Service temperature range 1 defines the use of the terminal blocks in extreme cold. Service temperature range 2 defines the use of the terminal blocks in extreme heat.

See ratings below.

Eurofins Electric & Electronic Product Testing AG
Swiss Certification Body

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www.eurofins.ch

Type:	**PT 1,5/S**	**PT 1,5/S -QUATTRO**	**PT 1,5/S-TWIN**
Rated voltage [V]	352	352	352
- with jumper FBS…	352	352	352
- with skipping jumper [V]	220	220	220
- with skipping jumper type PE [V]	220	220	220
- with cut to length bridge [V]	166	166	166
- with cut to length bridge and cover type D [V]	275	275	275
- with cut to length bridge and cover type ATP [V]	352	352	352
Rated current [A]	15	15	15
with jumper type FBS … [A]	14,5	14,5	14,5
Max. load current [A]	15	15	15
Temperature rise [K]	40	40	40
Contact resistance [mΩ]	1,3	1,5	1,4
- first level	---	---	---
- second level	---	---	---
- third level	---	---	---
- lower / upper level	---	---	---
Rated cross-section [mm²] (AWG)	1,5 (16)	1,5 (16)	1,5 (16)
Connectable conductor cross-section			
- rigid [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)
- flexible [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)
Assembly as stated	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35
Stripping length [mm]	8	8	8
Service temperature range 1 [°C]	-60 … +85	-60 … +85	-60 … +85
Service temperature range 2 [°C]	-40 … +110	-40 … +110	-40 … +110

Type:	**PT 1,5/S-PE**	**PT 1,5/S-QUATTRO-PE**	**PT 1,5/S-TWIN-PE**
Rated cross-section [mm²] (AWG)	1,5 (16)	1,5 (16)	1,5 (16)
Connectable conductor cross-section			
- rigid [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)
- flexible [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)
Assembly as stated	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35
Stripping length [mm]	8	8	8
Service temperature range 1 [°C]	-60 … +85	-60 … +85	-60 … +85
Service temperature range 2 [°C]	-40 … +110	-40 … +110	-40 … +110

Type:	**PTTB 1,5/S**	**PTTB 1,5/S-PV**	**PT 2,5-3L and PT 2,5-L/L/N**	**PT 2,5-3PV**
Rated voltage [V]	352	352	440	440
- with jumper FBS…	352	352	440	440
- with skipping jumper [V]	220	220	352	352
- with skipping jumper type PE [V]	220	220	352	352
- with cut to length bridge [V]	166	166	166	166
- with cut to length bridge and cover type D [V]	275	275	352	352
- with cut to length bridge and cover type ATP [V]	352	352	---	---
Rated current [A]	14,5	14,5	17	17
with jumper type FBS … [A]	13,5	13,5	14,5	14,5
Max. load current [A]	14,5	14,5	21	21
Temperature rise [K]	40	40	40	40
Contact resistance [mΩ]				
- first level	1,4	1,4	1,2	1,2
- second level	1,3	1,3	1,1	1,1
- third level	-	-	0,8	0,8
- lower / upper level	-	1,7		1,3
Rated cross-section [mm²] (AWG)	1,5 (16)	1,5 (16)	2,5 (14)	2,5 (14)
Connectable conductor cross-section				
- rigid [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 4 (26-12)	0,14 - 4 (26-12)
- flexible [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 2,5 (26-14)	0,14 - 2,5 (26-14)
Assembly as stated	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35
Stripping length [mm]	8	8	10	10
Service temperature range 1 [°C]	-60 … +85	-60 … +85	-60 … +85	-60 … +85
Service temperature range 2 [°C]	-40 … +110	-40 … +110	-40 … +110	-40 … +110

Type:	**PTTB 1,5/S-PE**	**PT 2,5-3PE**
Rated cross-section [mm²] (AWG)	1,5 (16)	2,5(14)
Connectable conductor cross-section		
- rigid [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 4 (26-12)
- flexible [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 2,5 (26-14)
Assembly as stated	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35
Stripping length [mm]	8	10
Service temperature range 1 [°C]	-60 … +85	-60 … +85
Service temperature range 2 [°C]	-40 … +110	-40 … +110

Type:	**PTS 1,5/S**	**PTS 1,5/S - QUATTRO**	**PTS 1,5/S -TWIN**	**PTTBS 1,5/S**	**PTTBS 1,5/S -PV**
Rated voltage [V]	352	352	352	352	352
- with jumper FBS…	352	---	352	352	352
- with skipping jumper [V]	220	---	220	220	220
- with skipping jumper type PE [V]	220	---	220	220	220
- with cut to length bridge [V]	166	---	166	---	---
- with cut to length bridge and cover type D [V]	275	---	275	---	---
- with cut to length bridge and cover type ATP [V]	352	---	352	---	---
Rated current [A]	15	15	15	13,5	13,5
with jumper type FBS … [A]	14,5	-	14,5	13	13
Max. load current [A]	15	15	15	13,5	13,5
Temperature rise [K]	40	40	40	40	40
Contact resistance [mΩ]	1,4	1,4	1,4		
- first level	---	---	---	1,7	1,7
- second level	---	---	---	1,4	1,4
- third level	---	---	---	---	---
- lower / upper level	---	---	---	---	1,7
Rated cross-section [mm²] (AWG)	1,5 (16)	1,5 (16)	1,5 (16)	1,5 (16)	1,5 (16)
Connectable conductor cross-section					
- rigid [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)
- flexible [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)
Assembly as stated	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35
Stripping length [mm]	8	8	8	8	8
Service temperature range 1 [°C]	-60 … +85	-60 … +85	-60 … +85	-60 … +85	-60 … +85
Service temperature range 2 [°C]	-40 … +110	-40 … +110	-40 … +110	-40 … +110	-40 … +110

Type:	**PTS 1,5/S-PE**	**PTS 1,5/S -QUATTRO-PE**	**PTS 1,5/S -TWIN-PE**	**PTTBS 1,5/S-PE**
Rated cross-section [mm²] (AWG)	1,5 (16)	1,5 (16)	1,5 (16)	1,5 (16)
Connectable conductor cross-section				
- rigid [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)
- flexible [mm²] (AWG)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)	0,14 - 1,5 (26-16)
Assembly as stated	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35
Stripping length [mm]	8	8	8	8
Service temperature range 1 [°C]	-60 … +85	-60 … +85	-60 … +85	-60 … +85
Service temperature range 2 [°C]	-40 … +110	-40 … +110	-40 … +110	-40 … +110

Type:	**PTS 2,5**	**PTS 2,5 - QUATTRO**	**PTS 2,5 -TWIN**	**PTTBS 2,5**	**PTTBS 2,5 -PV**
Rated voltage [V]	550	550	550	440	440
- with jumper FBS…	550	---	550	440	440
- with skipping jumper [V]	352	---	352	352	352
- with skipping jumper type PE [V]	352	---	352	352	352
- with cut to length bridge [V]	166	---	166	137,5	137,5
- with cut to length bridge and cover type D [V]	352	---	352	352	352
- with cut to length bridge and cover type ATP [V]	440	---	440	---	---
Rated current [A]	21	21	21	19	20
with jumper type FBS … [A]	20	-	20,5	16,5	16,5
Max. load current [A]	25	25	25	21,5	23
Temperature rise [K]	40	40	40	40	40
Contact resistance [mΩ]	1,08	1,08	1,08	---	---
- first level	---	---	---	1,3	1,3
- second level	---	---	---	1,3	1,3
- third level	---	---	---	---	1,3
- lower / upper level	---	---	---	---	1,3
Rated cross-section [mm²] (AWG)	2,5 (14)	2,5 (14)	2,5 (14)	2,5 (14)	2,5 (14)
Connectable conductor cross-section					
- rigid [mm²] (AWG)	0,14 - 4 (26-12)	0,14 - 4 (26-12)	0,14 - 4 (26-12)	0,14 - 4 (26-12)	0,14 - 4 (26-12)
- flexible [mm²] (AWG)	0,14 - 2,5 (26-14)	0,14 - 2,5 (26-14)	0,14 - 2,5 (26-14)	0,14 - 2,5 (26-14)	0,14 - 2,5 (26-14)
Assembly as stated	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35
Stripping length [mm]	10	10	10	10	10
Service temperature 1 [°C]	-60 … +85	-60 … +85	-60 … +85	-60 … +85	-60 … +85
Service temperature 2 [°C]	-40 … +110	-40 … +110	-40 … +110	-40 … +110	-40 … +110

**valid for color variants

Type:	**PTS 2,5-PE**	**PTS 2,5 -QUATTRO-PE**	**PTS 2,5 -TWIN-PE**	**PTTBS 2,5-PE**
Rated cross-section [mm²] (AWG)	2,5 (14)	2,5 (14)	2,5 (14)	2,5 (14)
Connectable conductor cross-section				
- rigid [mm²] (AWG)	0,14 - 4 (26-12)	0,14 - 4 (26-12)	0,14 - 4 (26-12)	0,14 - 4 (26-12)
- flexible [mm²] (AWG)	0,14 - 2,5 (26-14)	0,14 - 2,5 (26-14)	0,14 - 2,5 (26-14)	0,14 - 2,5 (26-14)
Assembly as stated	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35
Stripping length [mm]	10	10	10	10
Service temperature range 1 [°C]	-60 … +85	-60 … +85	-60 … +85	-60 … +85
Service temperature range 2 [°C]	-40 … +110	-40 … +110	-40 … +110	-40 … +110

Type:	**PT 6**	**PT 6-QUATTRO**	**PT 6-TWIN**
Rated voltage [V]	550	550	550
- with jumper FBS…	550	550	550
- with skipping jumper [V]	275	275	275
- with skipping jumper type PE [V]	275	275	275
- with cut to length bridge [V]	220	220	220
- with cut to length bridge and cover type D [V]	275	275	275
Rated current [A]	36,5	36	35,5
with jumper type FBS … [A]	35	35	35
Max. load current [A]	46	45	44,5
Temperature rise [K]	40	40	40
Contact resistance [mΩ]	0,48	0,65	0,65
Rated cross-section [mm²] (AWG)	6 (10)	6 (10)	6 (10)
Connectable conductor cross-section			
- rigid [mm²] (AWG)	0,5 - 10 (20-8)	0,5 - 10 (20-8)	0,5 - 10 (20-8)
- flexible [mm²] (AWG)	0,5 - 6 (20-10)	0,5 - 6 (20-10)	0,5 - 6 (20-10)
Assembly as stated	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35
Stripping length [mm]	12	12	12
Service temperature range 1 [°C]	-60 … +85	-60 … +85	-60 … +85
Service temperature range 2 [°C]	-40 … +110	-40 … +110	-40 … +110

**valid for color variants

Type:	**PT 6-PE**	**PT 6-QUATTRO-PE**	**PT 6-TWIN-PE**
Rated cross-section [mm²] (AWG)	6 (10)	6 (10)	6 (10)
Connectable conductor cross-section			
- rigid [mm²] (AWG)	0,5 - 10 (20-8)	0,5 - 10 (20-8)	0,5 - 10 (20-8)
- flexible [mm²] (AWG)	0,5 - 6 (20-10)	0,5 - 6 (20-10)	0,5 - 6 (20-10)
Assembly as stated	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35
Stripping length [mm]	12	12	12
Service temperature range 1 [°C]	-60 … +85	-60 … +85	-60 … +85
Service temperature range 2 [°C]	-40 … +110	-40 … +110	-40 … +110

Type:	**PT 10**	**PT 10-TWIN**	**PT 16 N**	**PT 16-TWIN N**
Rated voltage [V]	550	550	550	550
- with jumper FBS…	550	550	550	550
Rated current [A]	52,5	48,5	65,5	65,5
with jumper type FBS … [A]	48	48	60,5	60,5
Max. load current [A]	61,5	61	78	78
Temperature rise [K]	40	40	40	40
Contact resistance [mΩ]	0,43	0,52	0,31	0,31
Rated cross-section [mm²] (AWG)	10 (8)	10 (8)	16 (6)	16 (6)
Connectable conductor cross-section				
- rigid [mm²] (AWG)	0,5 - 16 (20-6)	0,5 - 16 (20-6)	0,5 - 25 (20-4)	0,5 - 25 (20-4)
- flexible [mm²] (AWG)	0,5 - 10 (20-8)	0,5 - 10 (20-8)	0,5 - 16 (20-6)	0,5 - 16 (20-6)
Assembly as stated	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35
Stripping length [mm]	18	18	18	18
Service temperature range 1 [°C]	-60 … +85	-60 … +85	-60 … +85	-60 … +85
Service temperature range 2 [°C]	-40 … +110	-40 … +110	-40 … +110	-40 … +110

**valid for color variants

Type:	**PT 10-PE**	**PT 10-TWIN-PE**	**PT 16 N-PE**	**PT 16-TWIN N-PE**
Rated cross-section [mm²] (AWG)	10 (8)	10 (8)	16 (6)	16 (6)
Connectable conductor cross-section				
- rigid [mm²] (AWG)	0,5 - 16 (20-6)	0,5 - 16 (20-6)	0,5 - 25 (20-4)	0,5 - 25 (20-4)
- flexible [mm²] (AWG)	0,5 - 10 (20-8)	0,5 - 10 (20-8)	0,5 - 16 (20-6)	0,5 - 16 (20-6)
Assembly as stated	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35	NS 35 acc. to EN 60715-TH 35
Stripping length [mm]	18	18	18	18
Service temperature range 1 [°C]	-60 … +85	-60 … +85	-60 … +85	-60 … +85
Service temperature range 2 [°C]	-40 … +110	-40 … +110	-40 … +110	-40 … +110