



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

(2) Equipment and Protective Systems Intended for Use in
Potentially Explosive Atmospheres - **Directive 94/9/EC**

(3) EC-type-examination Certificate Number:

PTB 09 ATEX 1111 U



(4) Component: Feed-through terminal blocks, type PIT 2,5... and PITTB 2,5...
Protective conductor terminal blocks, type PIT 2,5...-PE and
PITTB 2,5-PE

(5) Manufacturer: PHOENIX CONTACT GmbH & Co. KG

(6) Address: Flachsmarktstr. 8, 32825 Blomberg, Germany

(7) This component and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.

The examination and test results are recorded in the confidential assessment and test report PTB Ex 10-19164.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2006 EN 60079-7:2007 EN 61241-0:2006 EN 61241-1:2004

(10) The sign "U" placed behind the certificate number indicates that this certificate should not be confounded with certificates issued for equipment or protective systems. This Component Certificate only serves as a basis for the issuing of certificates for equipment or protective systems.

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified component in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this component. These are not covered by this certificate.

(12) The marking of the component shall include the following:

 **II 2 G Ex e II**

 **II 2 D**

Zertifizierungssektor Explosionsschutz

By order:

Dr.-Ing. M. Thedens
Oberregierungsrat



Braunschweig, May 3, 2010

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EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

(13) SCHEDULE

(14) EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1111 U

(15) Description of component

Feed-through terminal blocks, type PIT 2,5... and PITTB 2,5... as well as protective conductor terminal blocks, type PIT 2,5...-PE and PITTB 2,5-PE consist of an insulating housing (polyamide PA 6.6) in different colours, current bar, springs (screwless-type clamping units) and an orange coloured pusher and serve to connect copper conductors in terminal compartments designed to Increased Safety "e" or "tD".

Accessories are end supports, end cover plates type D-ST 2,5... and D-PITTB 2,5, separating plates type ATP-ST... and ATP-STTB 4 and plug-in bridges type FBS...-5. The fixing is done by fastening on mounting rails.

Technical Data

Feed-through terminal blocks	PIT 2,5	PIT 2,5 -TWIN	PIT 2,5 -QUATTRO	PITTB 2,5	PITTB 2,5 -PV
Rated insulation voltage without plug-in bridges type FBS...-5	500 V	500 V	500 V	400 V	400 V
Rated voltage without plug-in bridges type FBS...-5	550 V	550 V	550 V	440 V	440 V
Resistance	1.1 mΩ	1.1 mΩ	1.1 mΩ	1.2 mΩ	1.16 mΩ
Rated insulation voltage with plug-in bridges type FBS...-5 single, skipped, chain bridging	500 V	500 V	500 V	320 V	320 V
Rated voltage, max with plug-in bridges type FBS...-5 single, skipped, chain bridging	550 V	550 V	550 V	352 V	352 V
Rated insulation voltage with plug-in bridges type FBS...-5, cut to length and separating plates type ATP-ST... resp. ATP-STTB 4	500 V	500 V	500 V	500 V	500 V
Rated voltage with plug-in bridges type FBS...-5, cut to length and separating plates type ATP-ST... resp. ATP-STTB 4	550 V	550 V	550 V	550 V	550 V

Rated insulation voltage with plug-in bridges type FBS...-5 cut to length and end cover plates type D-ST 2,5... resp. D-PITTB 2,5	250 V	250 V	250 V	320 V	320 V
Rated voltage with plug-in bridges type FBS...-5 cut to length and end cover plates type D-ST 2,5... resp. D-PITTB 2,5	275 V	275 V	275 V	352 V	352 V

Feed-through terminal blocks	PIT 2,5	PIT 2,5 -TWIN	PIT 2,5 -QUATTRO	PITTB 2,5	PITTB 2,5 -PV
Rated current (Temperature rise 40 K, cross section 2,5 mm ²)	20.5 A	20.5 A	21 A	19.0 A	19.5 A
Rated current (Temperature rise 45 K, cross section 2,5 mm ²)	22 A	22 A	22.5 A	20.5 A	21 A
Max. rated current (Temperature rise 40 K, cross section 4 mm ²)	26.5 A	25.5 A	25.5 A	22.5 A	23.5 A
Max. rated current (Temperature rise 45 K, cross section 4 mm ²)	28 A	27 A	27 A	24 A	25 A
Connecting Capacity	0.14 mm ² – 4 mm ² rigid 0.14 mm ² – 2.5 mm ² flexible				
Number of conductors per terminal connection	1 conductor per terminal connection				
Operating temperature range	-50 °C bis +110 °C				

Protective conductor terminal blocks	PIT 2,5-PE PIT 2,5-TWIN-PE PIT 2,5-QUATTRO-PE PITTB 2,5-PE
Connecting Capacity	0.14 mm ² – 4 mm ² rigid 0.14 mm ² – 2.5 mm ² flexible
Number of conductors per terminal connection	1 conductor per terminal connection
Operating temperature range	-50 °C bis +110 °C

(16) Assessment and test report PTB Ex 10-19164

(17) Notes for manufacture, installation and operation

The feed-through terminal blocks and protective conductor terminal blocks are suitable for use in areas with combustible gas or combustible dust. For areas with combustible gas the enclosures have to meet the requirements of EN 60079-0 and EN 60079-7. For areas with combustible dust the enclosures have to meet the requirements of EN 61241-1

In case of mixture with other certified series and sizes and use of accessories the clearances and creepage distances shown in table 1 shall be duly considered.

Concerning the use end cover plates, separating plates and plug-in bridges, the instructions for installation provided by the manufacturer shall be observed.

(18) Essential health and safety requirements

Met by compliance with the standards mentioned above.

Zertifizierungssektor Explosionsschutz

By order:



Dr.-Ing. M. Thedens
Oberregierungsrat

Braunschweig, May 3, 2010

1. SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1111U

(Translation)

Component: Feed-through terminal blocks, type PIT 2,5... and PITTB 2,5...
Protective conductor terminal blocks, type PIT 2,5...-PE and PITTB 2,5-PE

Marking:  **II 2 G Ex e II**
II 2 D

Manufacturer: PHOENIX CONTACT GmbH & Co. KG

Address: Flachsmarktstr. 8, 32825 Blomberg, Germany

Description of supplements and modifications

The feed-through terminal blocks, type PIT 2,5... and PITTB 2,5... and protective conductor terminal blocks, type PIT 2,5...-PE and PITTB 2,5-PE are supplemented by the type PITO 2,5...and PITO 2,5...-PE.

The terminal blocks type PITO 2,5...and PITO 2,5...-PE consist of an insulating housing (polyamide PA 6.6) in different colours, current bar, springs (screwless-type clamping units) and serve to connect copper conductors in terminal compartments designed to Increased Safety "e" or "tD".

Accessories are end supports, end cover plates type D-ST 2,5..., separating plates type ATP-ST... and plug-in bridges type FBS...-5. The fixing is done by fastening on mounting rails.

Technical Data

Feed-through terminal blocks	PITO 2,5	PITO 2,5 -TWIN	PITO 2,5 -QUATTRO
Rated insulation voltage without plug-in bridges type FBS...-5	500 V	500 V	500 V
Rated voltage without plug-in bridges type FBS...-5	550 V	550 V	550 V
Resistance	1.1 mΩ	1.1 mΩ	1.1 mΩ
Rated insulation voltage with plug-in bridges type FBS...-5 single, skipped, chain bridging	500 V	500 V	500 V
Rated voltage, max with plug-in bridges type FBS...-5 single, skipped, chain bridging	550 V	550 V	550 V

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Rated insulation voltage with plug-in bridges type FBS...-5, cut to length and separating plates type ATP-ST...	500 V	500 V	500 V
Rated voltage with plug-in bridges type FBS...-5, cut to length and separating plates type ATP-ST...	550 V	550 V	550 V
Rated insulation voltage with plug-in bridges type FBS...-5 cut to length and end cover plates type D- ST 2,5...	250 V	250 V	250 V
Rated voltage with plug-in bridges type FBS...-5 cut to length and end cover plates type D- ST 2,5... resp. D-PITTB 2,5	275 V	275 V	275 V

Feed-through terminal blocks	PITO 2,5	PITO 2,5 -TWIN	PITO 2,5 -QUATTRO *
Rated current (Temperature rise 40 K, cross section 2,5 mm ²)	20.5 A	20.5 A	21 A
Rated current (Temperature rise 45 K, cross section 2,5 mm ²)	22 A	22 A	22.5 A
Max. rated current (Temperature rise 40 K, cross section 4 mm ²)	26.5 A	25.5 A	25.5 A
Max. rated current (Temperature rise 45 K, cross section 4 mm ²)	28 A	27 A	27 A
Connecting Capacity	0.14 mm ² – 4 mm ² rigid 0.14 mm ² – 2.5 mm ² flexible		
Number of conductors per terminal connection	1 conductor per terminal connection		
Operating temperature range	-50 °C bis +110 °C		

Protective conductor terminal blocks	PITO 2.5-PE PITO 2.5-TWIN-PE PITO 2.5-QUATTRO-PE
Connecting Capacity	0.14 mm ² – 4 mm ² rigid 0.14 mm ² – 2.5 mm ² flexible
Number of conductors per terminal connection	1 conductor per terminal connection
Operating temperature range	-50 °C bis +110 °C

1. SUPPLEMENT TO EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1111U

Notes for manufacture, installation and operation

The feed-through terminal blocks and protective conductor terminal blocks are suitable for use in areas with combustible gas or combustible dust. For areas with combustible gas the enclosures have to meet the requirements of EN 60079-0 and EN 60079-7. For areas with combustible dust the enclosures have to meet the requirements of EN 61241-1

In case of mixture with other certified series and sizes and use of accessories the clearances and creepage distances shown in table 1 shall be duly considered.

Concerning the use end cover plates, separating plates and plug-in bridges, the instructions for installation provided by the manufacturer shall be observed.

Applied standards

EN 60079-0:2006 EN 60079-7:2007 EN 61241-0:2006 EN 61241-1:2004

Assessment and test report: PTB Ex 10-10085

Zertifizierungssektor Explosionsschutz

Braunschweig, May 3, 2010

By order:

Dr.-Ing. M. Thedens
Oberregierungsrat



2nd SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1111 U

(Translation)

Equipment: Feed-through terminal blocks, type PIT 2,5***, PITTB 2,5*** and PITO 2,5***
Protective conductor terminal blocks, type PIT 2,5***-PE, PITTB 2,5-PE and PITO 2,5-PE

Marking:  II 2 G Ex e II
 II 2 D

Manufacturer: PHOENIX CONTACT GmbH & Co. KG

Address: Flachsmarktstr. 8, 32825 Blomberg, Germany

Description of supplements and modifications

The names of the feed-through terminal blocks type PIT 2,5*** and type PITTB 2,5*** are changed to type PT 2,5*** and PTTB 2,5***.

The names of the protective conductor terminal blocks, type PIT 2,5***-PE and PITTB 2,5-PE are changed to type PT 2,5***-PE and type PTTB 2,5-PE.

The feed-through terminal blocks and protective conductor terminal blocks have been re-examined on the basis of standards EN 60079-0:2009 and EN 60079-7:2007. The marking therefore changes to:

 II 2 G Ex eb IIC
 II 2 D

Normal.dotm

Technical data

Feed-through terminal blocks	PT 2,5	PT 2,5 -TWIN	PT 2,5 -QUATTRO	PTTB 2,5	PTTB 2,5 -PV
Rated insulation voltage without plug-in bridges type FBS...-5	500 V	500 V	500 V	400 V	400 V
Rated voltage without plug-in bridges type FBS...-5	550 V	550 V	550 V	440 V	440 V
Resistance	1.1 mΩ	1.1 mΩ	1.1 mΩ	1.2 mΩ	1.16 mΩ
Rated insulation voltage with plug-in bridges type FBS...-5 single, skipped, chain bridging	500 V	500 V	500 V	320 V	320 V
Rated voltage with plug-in bridges type FBS...-5 single, skipped, chain bridging	550 V	550 V	550 V	352 V	352 V
Rated insulation voltage with plug-in bridges type FBS...-5, cut to length and separating plates type ATP-ST... resp. ATP-STTB 4	500 V	500 V	500 V	500 V	500 V
Rated voltage with plug-in bridges type FBS...-5, cut to length and separating plates type ATP-ST... resp. ATP-STTB 4	550 V	550 V	550 V	550 V	550 V
Rated insulation voltage with plug-in bridges type FBS...-5 cut to length and end cover plates type D-ST 2,5... resp. D-PITTB 2,5	250 V	250 V	250 V	320 V	320 V
Rated voltage with plug-in bridges type FBS...-5 cut to length and end cover plates type D-ST 2,5... resp. D-PITTB 2,5	275 V	275 V	275 V	352 V	352 V

Feed-through terminal blocks	PT 2,5	PT 2,5 -TWIN	PT 2,5 -QUATTRO	PTTB 2,5	PTTB 2,5 -PV
Rated current (Temperature rise 40 K, cross section 2.5 mm ²)	20.5 A	20.5 A	21 A	19.0 A	19.5 A
Rated current (Temperature rise 45 K, cross section 2.5 mm ²)	22 A	22 A	22.5 A	20.5 A	21 A
Max. load current (Temperature rise 40 K, cross section 4 mm ²)	26.5 A	25.5 A	25.5 A	22.5 A	23.5 A
Max. load current (Temperature rise 45 K, cross section 4 mm ²)	28 A	27 A	27 A	24 A	25 A
Connecting Capacity	0.14 mm ² – 4 mm ² rigid 0.14 mm ² – 2.5 mm ² flexible				
Number of conductors per terminal connection	1 conductor per terminal connection				
Operating temperature range	-50 °C up to +110 °C				

Protective conductor terminal blocks	PT 2,5-PE PT 2,5-TWIN-PE PT 2,5-QUATTRO-PE PTTB 2,5-PE
Connecting Capacity	0.14 mm ² – 4 mm ² rigid 0.14 mm ² – 2.5 mm ² flexible
Number of conductors per terminal connection	1 conductor per terminal connection
Operating temperature range	-50 °C up to +110 °C

Applied standards

EN 60079-0:2009, EN 60079-7:2007

Test report: PTB Ex 12-12002

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, October 8, 2012


Dr.-Ing. M. Thedens
Oberregierungsrat



Sheet 3/3

EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

3rd SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1111 U (Translation)

Equipment: Feed-through terminal blocks, type PT 2,5***, PTTB 2,5*** and PITO 2,5***
Protective conductor terminal blocks, type PT 2,5***-PE, PTTB 2,5-PE and PITO 2,5-PE

Marking:  II 2 G Ex eb IIC
 II 2 D

Manufacturer: PHOENIX CONTACT GmbH & Co. KG

Address: Flachsmarktstr. 8, 32825 Blomberg, Germany

Description of supplements and modifications

The feed-through terminal blocks type PITO 2,5*** are renamed to type PTO 2,5***.

The protective conductor terminal blocks, type PITO 2,5***-PE are renamed to type PTO 2,5***-PE.

The feed-through terminal blocks and protective conductor terminal blocks have been re-examined on the basis of standards EN 60079-0:2009 and EN 60079-7:2007. The marking therefore changes to:

 II 2 G Ex eb IIC

 II 2 D

Feed-through terminal blocks	PTO 2,5	PTO 2,5 -TWIN	PTO 2,5 -QUATTRO
Rated voltage without plug-in bridges type FBS...-5	500 V	500 V	500 V
Rated voltage without plug-in bridges type FBS...-5	550 V	550 V	550 V
Resistance	1.1 mΩ	1.1 mΩ	1.1 mΩ

Normal.dotm

Rated insulation voltage with plug-in bridges type FBS...-5 single, skipped, chain bridging	500 V	500 V	500 V
Rated voltage with plug-in bridges type FBS...-5 single, skipped, chain bridging	550 V	550 V	550 V
Rated insulation voltage with plug-in bridges type FBS...-5, cut to length and separating plates type ATP- ST...	500 V	500 V	500 V
Rated voltage with plug-in bridges type FBS...-5, cut to length and separating plates type ATP- ST...	550 V	550 V	550 V
Rated insulation voltage with plug-in bridges type FBS...-5 cut to length and end cover plates type D-ST 2,5...	250 V	250 V	250 V
Rated voltage with plug-in bridges type FBS...-5 cut to length and end cover plates type D-ST 2,5...	275 V	275 V	275 V

Feed-through terminal blocks	PTO 2,5	PTO 2,5 -TWIN	PTO 2,5 -QUATTRO *
Rated current (Temperature rise 40 K, cross section 2.5 mm ²)	20.5 A	20.5 A	21 A
Rated current (Temperature rise 45 K, cross section 2.5 mm ²)	22 A	22 A	22.5 A
Max. load current (Temperature rise 40 K, cross section 4 mm ²)	26.5 A	25.5 A	25.5 A
Max. load current (Temperature rise 45 K, cross section 4 mm ²)	28 A	27 A	27 A
Connecting Capacity	0.14 mm ² – 4 mm ² rigid 0.14 mm ² – 2.5 mm ² flexible		
Number of conductors per terminal connection	1 conductor per terminal connection		
Operating temperature range	-50 °C up to +110 °C		

Protective conductor terminal blocks	PTO 2,5-PE PTO 2,5-TWIN-PE PTO 2,5-QUATTRO-PE
Connecting Capacity	0.14 mm ² – 4 mm ² rigid 0.14 mm ² – 2.5 mm ² flexible
Number of conductors per terminal connection	1 conductor per terminal connection
Operating temperature range	-50 °C up to +110 °C

Applied standards

EN 60079-0:2009, EN 60079-7:2007

Test report: PTB Ex 12-12060

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, October 8, 2012


Dr.-Ing. M. Thedens
Oberregierungsrat



4th SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1111 U

(Translation)

Equipment: Feed-through terminal blocks, type PIT 2,5***, PITTB 2,5*** and PITO 2,5***
Protective conductor terminal blocks, type PIT 2,5***-PE, PITTB 2,5-PE and PITO 2,5-PE

Marking:  II 2 G Ex eb IIC
 II 2 D

Manufacturer: PHOENIX CONTACT GmbH & Co. KG

Address: Flachsmarktstr. 8, 32825 Blomberg, Germany

Description of supplements and modifications

The feed-through terminal block type PT 2,5* shall be equipped with a new current bar.
The technical data remain without changes.

Technical data

Feed-through terminal blocks	PT 2,5	PT 2,5 -TWIN	PT 2,5 -QUATTRO	PTTB 2,5	PTTB 2,5 -PV
Rated insulation voltage without plug-in bridges type FBS***-5	500 V	500 V	500 V	400 V	400 V
Rated voltage without plug-in bridges type FBS***-5	550 V	550 V	550 V	440 V	440 V
Resistance	1.1 mΩ	1.1 mΩ	1.1 mΩ	1.2 mΩ	1.16 mΩ
Rated insulation voltage with plug-in bridges type FBS***-5 single, skipped, chain bridging	500 V	500 V	500 V	320 V	320 V
Rated voltage with plug-in bridges type FBS***-5 single, skipped, chain bridging	550 V	550 V	550 V	352 V	352 V

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Rated insulation voltage with plug-in bridges type FBS***-5, cut to length and separating plates type ATP-ST... resp. ATP-STTB 4	500 V	500 V	500 V	500 V	500 V
Rated voltage with plug-in bridges type FBS***-5, cut to length and separating plates type ATP-ST... resp. ATP-STTB 4	550 V	550 V	550 V	550 V	550 V
Rated insulation voltage with plug-in bridges type FBS***-5 cut to length and end cover plates type D-ST 2,5... resp. D-PITTB 2,5	250 V	250 V	250 V	320 V	320 V
Rated voltage with plug-in bridges type FBS***-5 cut to length and end cover plates type D-ST 2,5... resp. D-PITTB 2,5	275 V	275 V	275 V	352 V	352 V

Feed-through terminal blocks	PT 2,5	PT 2,5 -TWIN	PT 2,5 -QUATTRO	PTTB 2,5	PTTB 2,5 -PV
Rated current (Temperature rise 40 K, cross section 2.5 mm ²)	20.5 A	20.5 A	21 A	19.0 A	19.5 A
Rated current (Temperature rise 45 K, cross section 2.5 mm ²)	22 A	22 A	22.5 A	20.5 A	21 A
Max. load current (Temperature rise 40 K, cross section 4 mm ²)	26.5 A	25.5 A	25.5 A	22.5 A	23.5 A
Max. load current (Temperature rise 45 K, cross section 4 mm ²)	28 A	27 A	27 A	24 A	25 A
Connecting Capacity	0.14 mm ² – 4 mm ² rigid 0.14 mm ² – 2.5 mm ² flexible				
Number of conductors per terminal connection	1 conductor per terminal connection				
Operating temperature range	-50 °C up to +110 °C				

Protective conductor terminal blocks	PT 2,5-PE PT 2,5-TWIN-PE PT 2,5-QUATTRO-PE PTTB 2,5-PE
Connecting Capacity	0.14 mm ² – 4 mm ² rigid 0.14 mm ² – 2.5 mm ² flexible
Number of conductors per terminal connection	1 conductor per terminal connection
conductor per terminal connection	-50 °C up to +110 °C

Notes for manufacture, installation and operation

The feed-through terminal blocks and protective conductor terminal blocks are suitable for use in enclosures used in areas with combustible gas or combustible dust. For areas with combustible gas the enclosures have to meet the requirements of EN 60079-0 and EN 60079-7. For areas with combustible dust the enclosures have to meet the requirements of EN 60079-31

In case of mixture with other certified series and sizes and use of accessories the clearances and creepage distances required for the equipment shall be duly considered.

Concerning the use end cover plates, separating plates and plug-in bridges, the instructions for installation provided by the manufacturer shall be observed.

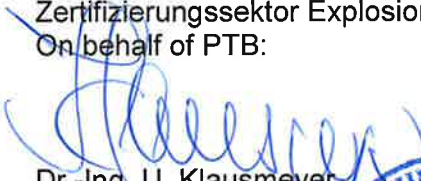
Applied standards

EN 60079-0:2009, EN 60079-7:2007

Test report: PTB Ex 13-13082

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, July 10, 2013


Dr.-Ing. U. Klausmeyer
Direktor und Professor



5th SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1111 U

(Translation)

Equipment: Feed-through terminal blocks, type PIT 2,5***, PITTB 2,5*** and PITO 2,5***
Protective conductor terminal blocks, type PIT 2,5***-PE, PITTB 2,5-PE and PITO 2,5***-PE

Marking:  II 2 G Ex eb IIC
 II 2 D

Manufacturer: PHOENIX CONTACT GmbH & Co. KG

Address: Flachsmarktstr. 8, 32825 Blomberg, Germany

Description of supplements and modifications

The feed-through terminal block type PTO 2,5* shall be equipped with a new current bar.
The technical data remain without changes.

Feed-through terminal blocks	PTO 2,5	PTO 2,5 -TWIN	PTO 2,5 -QUATTRO
Rated voltage without plug-in bridges type FBS***-5	500 V	500 V	500 V
Rated voltage without plug-in bridges type FBS***-5	550 V	550 V	550 V
Resistance	1.1 mΩ	1.1 mΩ	1.1 mΩ
Rated insulation voltage with plug-in bridges type FBS***-5 single, skipped, chain bridging	500 V	500 V	500 V
Rated voltage with plug-in bridges type FBS***-5 single, skipped, chain bridging	550 V	550 V	550 V

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EC-type-examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

Rated insulation voltage with plug-in bridges type FBS***-5; cut to length and separating plates type ATP-ST...	500 V	500 V	500 V
Rated voltage with plug-in bridges type FBS***-5; cut to length and separating plates type ATP-ST...	550 V	550 V	550 V
Rated insulation voltage with plug-in bridges type FBS***-5; cut to length and end cover plates type D-ST 2,5...	250 V	250 V	250 V
Rated voltage with plug-in bridges type FBS***-5; cut to length and end cover plates type D-ST 2,5...	275 V	275 V	275 V

Feed-through terminal blocks	PTO 2,5	PTO 2,5 -TWIN	PTO 2,5 -QUATTRO *
Rated current (Temperature rise 40 K, cross section 2.5 mm ²)	20.5 A	20.5 A	21 A
Rated current (Temperature rise 45 K, cross section 2.5 mm ²)	22 A	22 A	22.5 A
Max. load current (Temperature rise 40 K, cross section 4 mm ²)	26.5 A	25.5 A	25.5 A
Max. load current (Temperature rise 45 K, cross section 4 mm ²)	28 A	27 A	27 A
Connecting Capacity	0.14 mm ² – 4 mm ² rigid 0.14 mm ² – 2.5 mm ² flexible		
Number of conductors per terminal connection	1 conductor per terminal connection		
Operating temperature range	-50 °C up to +110 °C		

Protective conductor terminal blocks	PTO 2,5-PE PTO 2,5-TWIN-PE PTO 2,5-QUATTRO-PE
Connecting Capacity	0.14 mm ² – 4 mm ² rigid 0.14 mm ² – 2.5 mm ² flexible
Number of conductors per terminal connection	1 conductor per terminal connection
Operating temperature range	-50 °C up to +110 °C

Notes for manufacture, installation and operation

The feed-through terminal blocks and protective conductor terminal blocks are suitable for use in enclosures used in areas with combustible gas or combustible dust. For areas with combustible gas the enclosures have to meet the requirements of EN 60079-0 and EN 60079-7. For areas with combustible dust the enclosures have to meet the requirements of EN 60079-31.

In case of mixture with other certified series and sizes and use of accessories the required clearances and creepage distances of the equipment shall be duly considered.

Concerning the use end cover plates, separating plates and plug-in bridges, the instructions for installation provided by the manufacturer shall be observed.

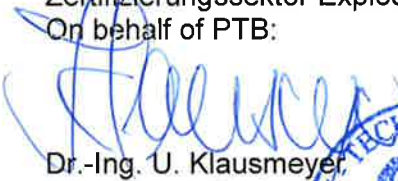
Applied standards

EN 60079-0:2009, EN 60079-7:2007

Test report: PTB Ex 13-13083

Zertifizierungssektor Explosionsschutz
On behalf of PTB:

Braunschweig, July 10, 2013


Dr.-Ing. U. Klausmeyer
Direktor und Professor



6th SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1111 U (Translation)

Equipment: Feed-through terminal block, types PIT 2,5***, PITTB 2,5*** and PITO 2,5***
Protective-conductor terminal block, types PIT 2,5***-PE, PITTB 2,5-PE and PITO 2,5***-PE

Marking:  **I 2 G Ex eb IIC**
 **II 2 D**

Manufacturer: PHOENIX CONTACT GmbH & Co. KG

Address: Flachsmarktstr. 8, 32825 Blomberg, Germany

Description of supplements and modifications

The feed-through terminal block, types PT 2,5***, PTTB 2,5*** and PTO 2,5***, and the protective-conductor terminal block, types PT 2,5***-PE, PTTB 2,5-PE and PTO 2,5***-PE, are modified in the following respects:

- Deletion of feed-through terminal block, type PTO 2,5***, and protective-conductor terminal block, type PTO 2,5***-PE
- Contour of the current bars in the terminal connection region (Rev. (R1))
- Adaptation of the current rating for type PT 2,5*** (see table)
- Extension of the operating temperatures to values between -60 °C and +110 °C

Technical data

Feed-through terminal block		PT 2,5**	PT 2,5 -QUATTRO**	PT 2,5 -TWIN**	PTTB 2,5**	PTTB 2,5 -PV**
Rated voltage	[V]	550	550	550	440	440
- with plug-in jumper FBS...	[V]	550	550	550	440	440
- skipping jumper	[V]	352	352	352	352	352
- with cut-to-length jumper	[V]	220	220	220	166	166
- with cut-to-length jumper and cover, type D	[V]	275	275	275	352	352
- with cut-to-length jumper and partition, type ATP	[V]	550	550	550	440	440

Feed-through terminal block		PT 2,5**	PT 2,5 -QUATTRO**	PT 2,5 -TWIN**	PTTB 2,5**	PTTB 2,5 -PV**
Rated current (temperature rise 40 K, rated cross section 2.5 mm ²)	[A]	19	19	19	18	18
Rated current (temperature rise 40 K, max. conductor cross section 4 mm ²)	[A]	23	23	23	22	22
Rated current (temperature rise 45 K, rated cross section 2.5 mm ²)	[A]	21	21	21	19	19
Rated current (temperature rise 45 K, max.. conductor cross section 4 mm ²)	[A]	25	25	25	23	23
Rated current						
- with plug-in jumper FBS... (temperature rise 40 K, rated cross section 2.5 mm ²)	[A]	19	19	19	16	16
- with plug-in jumper FBS... (temperature rise 40 K, rated cross section 4 mm ²)	[A]	22	22	22	19	19
- with plug-in jumper FBS... (temperature rise 45 K, rated cross section 2.5 mm ²)	[A]	20	20	20	17	17
- with plug-in jumper FBS... (temperature rise 45 K, rated cross section 4 mm ²)	[A]	24	24	24	21	21
Contact resistance cross section 2.5 mm ²	[mΩ]	0.93	1.14	1.03	bottom 1.20 top 0.92	bottom 1.20 top 0.92
Contact resistance cross section 4 mm ²	[mΩ]	0.86	0.89	0.87	bottom 0.86 top 0.63	bottom 0.86 top 0.63
Rated cross section	[mm ²]	2.5	2.5	2.5	2.5	2.5
Connected conductor cross sections						
- rigid	[mm ²]	0.14 - 4	0.14 - 4	0.14 - 4	0.14 - 4	0.14 - 4
- flexible	[mm ²]	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5
Operating temperatures	[°C]	-60 to +110				
** applies to colour versions						

Protective-conductor terminal block		PT 2,5-PE	PT 2,5 -QUATTRO-PE	PT 2,5 -TWIN-PE	PTTB 2,5-PE
Rated cross section	[mm ²]	4	4	4	4
Connected conductor cross sections					
- rigid	[mm ²]	0.14 - 4	0.14 - 4	0.14 - 4	0.14 - 4
- flexible	[mm ²]	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5	0.14 - 2.5
Operating temperatures	[°C]	-60 to +110			

Notes for manufacturing and operation

The feed-through and protective-conductor terminal blocks can be used in enclosures that are installed in atmospheres with flammable gases or flammable dust. For flammable gases, the enclosures must meet EN 60079-0 and EN 60079-7 requirements. For flammable dust, the enclosures must meet EN 60079-31 requirements.

When combined with other certified type series and sizes, and when using their accessories, care must be taken to ensure that the specified clearances and creepage distances are complied with.

Regarding end supports, end cover plates and plug-in bridges, the manufacturer's instructions must be complied with.

The installation of electrical components is subject to re-assessment by a notified body.

Applied standards

EN 60079-0:2012, EN 60079-7:2007, EN 60079-31:2009

Test report: PTB Ex 14-14074

Konformitätsbewertungsstelle, Sektor Explosionsschutz

Braunschweig, November 24, 2014

On behalf of PTB:



Dr.-Ing. D. Markus
Oberregierungsrat

