



(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 1112 U



(4) Component: Feed-through terminal blocks, types PIT 4... and PITTB 4...
Protective conductor terminal blocks, types PIT 4...-PE and
PITTB 4-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 10-19166.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0:2009, EN 60079-7:2007

(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:



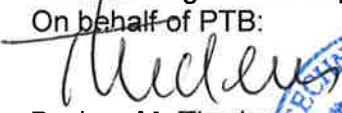
II 2 G Ex eb IIC



II 2 D

Zertifizierungssektor Explosionsschutz

On behalf of PTB:


Dr.-Ing. M. Thedens
Oberregierungsrat



Braunschweig, December 9, 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 1112 U

(15) Description of component

Feed-through terminal blocks, types PIT 4... and PITTb 4... as well as protective conductor terminal blocks, types PIT 4...-PE and PITTb 4-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 Protection by Enclosure "tb".

Accessories are end supports, end cover plates type D-ST 4..., D-STTB 4 und D-PIT 4-..., separating plates type ATP-ST... and ATP-STTB 4 as well as plug-in bridges type FBS...-6. The terminal blocks are mounted on 35 mm DIN rails.

Technical Data

Feed-through terminal blocks	PIT 4*	PIT 4-QUATTRO*	PIT 4-TWIN*
Rated insulation voltage without plug-in bridges type FBS...-6	500 V	500 V	500 V
Rated voltage without plug-in bridges type FBS...-6	550 V	550 V	550 V
Resistance	1.2 mΩ	1.1 mΩ	1.1 mΩ
Rated insulation voltage with plug-in bridges type FBS...-6 single, skipped, chain bridging	320 V	320 V	320 V
Rated voltage, max with plug-in bridges type FBS...-6 single, skipped, chain bridging	352 V	352 V	352 V
Rated insulation voltage with plug-in bridges type FBS...-6, cut to length and separating plates type ATP-ST...	500 V	500 V	500 V
Rated voltage with plug-in bridges type FBS...-6, cut to length and separating plates type ATP-ST...	550 V	550 V	550 V
Rated insulation voltage with plug-in bridges type FBS...-6 cut to length and end cover plates type D-ST 4 resp. D-PIT 4-...	250 V	250 V	250 V
Rated voltage with plug-in bridges type FBS...-6 cut to length and end cover plates type D-ST 4 resp. D-PIT 4-...	275 V	275 V	275 V

Feed-through terminal blocks	PIT 4*	PIT 4-QUATTRO*	PIT 4-TWIN*
Rated current (Temperature rise 40 K, cross section 4 mm ²)	27 A	28 A	28.5 A
Rated current (Temperature rise 45 K, cross section 4 mm ²)	29 A	29.5 A	30.5 A
Max. rated current (Temperature rise 40 K, cross section 4 mm ²)	27 A	28 A	28.5 A
Max. rated current (Temperature rise 45 K, cross section 4 mm ²)	29 A	29.5 A	30.5 A
Connecting Capacity	0.2 mm ² – 4 mm ² , rigid and flexible		
Number of conductors per terminal connection	1 conductor per terminal connection		
Operating temperature range	-50 °C to +110 °C		

Feed-through terminal blocks	PITTB 4*	PITTB 4-PV*
Rated insulation voltage without plug-in bridges type FBS...-6	400 V	400 V
Rated voltage without plug-in bridges type FBS...-6	440 V	440 V
Resistance	1.1 mΩ upper level 1.7 mΩ lower level	1.1 mΩ upper level 1.7 mΩ lower level
Rated insulation voltage with plug-in bridges type FBS...-6 single, skipped, chain bridging	320 V	320 V
Rated voltage with plug-in bridges type FBS...-6 single, skipped, chain bridging	352 V	352 V
Rated insulation voltage with plug-in bridges type FBS...-6, cut to length and separating plates type ATP-STTB 4	400 V	400 V
Rated voltage with plug-in bridges type FBS...-6, cut to length and separating plates type ATP-STTB 4	440 V	440 V
Rated insulation voltage with plug-in bridges type FBS...-6 cut to length and end cover plates type D-STTB 4	250 V	250 V
Rated voltage with plug-in bridges type FBS...-6 cut to length and end cover plates type D-STTB 4	275 V	275 V

Feed-through terminal blocks	PITTB 4*	PITTB 4-PV*
Rated current (Temperature rise 40 K, cross section 4 mm ²)	23.5 A	23.5 A
Rated current (Temperature rise 45 K, cross section 4 mm ²)	25 A	25A
Max. rated current (Temperature rise 40 K, cross section 4 mm ²)	23.5 A	23.5 A
Max. rated current (Temperature rise 45 K, cross section 4 mm ²)	25 A	25 A
Connecting Capacity	0.2 mm ² – 4 mm ² rigid and flexible	
Number of conductors per terminal connection	1 conductor per terminal connection	
Operating temperature range	-50 °C to +110 °C	

Protective conductor terminal blocks	PIT 4-PE PIT 4-TWIN-PE PIT 4-QUATTRO-PE PITTB 4-PE
Connecting Capacity	0.2 mm ² – 4 mm ² , rigid and flexible
Number of conductors per terminal connection	1 conductor per terminal connection
Operating temperature range	-50 °C to +110 °C

(16) Assessment and test report PTB Ex 10-19166

(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 60079-0 and EN 60079-31.

In case of mixture with other certified series and sizes and use of accessories the clearances and creepage distances shown in EN 60079-7, table 1 shall be duly considered.

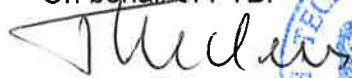
Concerning the use of end cover plates, separating plates and plug-in bridges, the instructions for installation provided by the manufacturer shall be observed.

(18) Essential health and safety requirements

Met by compliance with the standards mentioned above.

Zertifizierungssektor Explosionsschutz

On behalf of PTB:



Dr.-Ing. M. Thedens
Oberregierungsrat



Braunschweig, December 9, 2010

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1st SUPPLEMENT

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1112 U (Translation)

Equipment: Feed-through terminal blocks, types PIT 4*** and PITTB 4***
Protective conductor terminal blocks, types PIT 4***-PE and PITTB 4-PE

Marking:  II 2 G Ex eb IIC

Manufacturer: PHOENIX CONTACT GmbH & Co. KG

Address: Flachsmarktstr. 8, 32825 Blomberg, Germany

Description of supplements and modifications

The feed-through terminal blocks type PIT 4*** and PITTB 4*** are renamed to type PT 4*** and PTTB4***.

The protective conductor terminal blocks, type PIT 4***-PE and PITTB 4-PE are renamed to type PT 4***-PE and PTTB 4-PE.

Technical data

Feed-through terminal blocks	PT 4*	PT 4-QUATTRO*	PT 4-TWIN*
Rated insulation voltage without plug-in bridges type FBS***-6	500 V	500 V	500 V
Rated voltage without plug-in bridges type FBS***-6	550 V	550 V	550 V
Resistance	1.2 mΩ	1.1 mΩ	1.1 mΩ
Rated insulation voltage with plug-in bridges type FBS***-6 single, skipped, chain bridging	320 V	320 V	320 V
Rated voltage, max with plug-in bridges type FBS***6 single, skipped, chain bridging	352 V	352 V	352 V
Rated insulation voltage with plug-in bridges type FBS***-6, cut to length and separating plates type ATP-ST...	500 V	500 V	500 V

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Rated voltage with plug-in bridges type FBS***-6, cut to length and separating plates type ATP-ST...	550 V	550 V	550 V
Rated insulation voltage with plug-in bridges type FBS***-6 cut to length and end cover plates type D-ST 4 resp. D-PIT 4***	250 V	250 V	250 V
Rated voltage with plug-in bridges type FBS***-6 cut to length and end cover plates type D-ST 4 resp. D-PIT 4-***	275 V	275 V	275 V

Feed-through terminal blocks	PT 4*	PT 4-QUATTRO*	PT 4-TWIN*
Rated current (Temperature rise 40 K, cross section 4 mm ²)	27 A	28 A	28.5 A
Rated current (Temperature rise 45 K, cross section 4 mm ²)	29 A	29.5 A	30.5 A
Max. rated current (Temperature rise 40 K, cross section 4 mm ²)	27 A	28 A	28.5 A
Max. rated current (Temperature rise 45 K, cross section 4 mm ²)	29 A	29.5 A	30.5 A
Connecting Capacity	0.2 mm ² – 4 mm ² , rigid and flexible		
Number of conductors per terminal connection	1 conductor per terminal connection		
Operating temperature range	-50 °C to +110 °C		

Feed-through terminal blocks	PTTB 4*	PTTB 4-PV*
Rated insulation voltage without plug-in bridges type FBS***-5	400 V	400 V
Rated voltage without plug-in bridges type FBS...-5	440 V	440 V
Resistance	1.1 mΩ upper level 1.7 mΩ lower level	1.1 mΩ upper level 1.7 mΩ lower level
Rated insulation voltage with plug-in bridges type FBS***-6 single, skipped, chain bridging	320 V	320 V
Rated voltage with plug-in bridges type FBS***-6 single, skipped, chain bridging	352 V	352 V
Rated insulation voltage with plug-in bridges type FBS***-6, cut to length and separating plates type ATP-STTB 4	400 V	400 V

Rated voltage with plug-in bridges type FBS***-6, cut to length and separating plates type ATP-STTB 4	440 V	440 V
Rated insulation voltage with plug-in bridges type FB***-6 cut to length and end cover plates type D-STTB 4	250 V	250 V
Rated voltage with plug-in bridges type FBS...-6 cut to length and end cover plates type D-STTB 4	275 V	275 V

Feed-through terminal blocks	PTTB 4*	PTTB 4-PV*
Rated current (Temperature rise 40 K, cross section 4 mm ²)	23.5 A	23.5 A
Rated current (Temperature rise 45 K, cross section 4 mm ²)	25 A	25A
Max. rated current (Temperature rise 40 K, cross section 4 mm ²)	23.5 A	23.5 A
Max. rated current (Temperature rise 45 K, cross section 4 mm ²)	25 A	25 A
Connecting Capacity	0.2 mm ² – 4 mm ² rigid and flexible	
Number of conductors per terminal connection	1 conductor per terminal connection	
Operating temperature range	-50 °C to +110 °C	

Protective conductor terminal blocks	PIT 4-PE PIT 4-TWIN-PE PIT 4-QUATTRO-PE PITTB 4-PE
Connecting Capacity	0.2 mm ² – 4 mm ² , rigid and flexible
Number of conductors per terminal connection	1 conductor per terminal connection
Operating temperature range	-50 °C to +110 °C

Applied standards

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

Test report: PTB Ex 12-12004

Zertifizierungssektor Explosionsschutz

Braunschweig, October 8, 2012

On behalf of PTB:

Dr.-Ing. M. Thedens
Oberregierungsrat



2nd S U P P L E M E N T

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

to EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 1112 U

(Translation)

Equipment: Feed-through terminal blocks, types PT 4*** and PTTB 4***
Protective-conductor terminal blocks, types PT 4***-PE, PTTB 4-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, types PT 4*** and PTTB 4***, and the protective conductor terminal blocks, types PT 4***-PE and PTTB 4-PE, are modified in the following respects:

- Contour of the current bars
- Extension of the rated cross section for rigid conductors to 6 mm²
- Adaptation of the current rating (see table)
- Extension of the operating temperatures to values between -60 °C and +110 °C

Technical data

Type name		PT 4**	PT 4 -QUATTRO**	PT 4 -TWIN**	PTTB 4**	PTTB 4 -PV**
Rated voltage	[V]	550	550	550	440	440
- with jumper FBS...	[V]	550	550	550	440	440
- with skipping jumper	[V]	352	352	352	352	352
- with skipping jumper type PE	[V]	352	352	352	352	352
- with cut-to-length jumpers	[V]	220	220	220	220	220
- with cut-to-length jumper and cover, type D	[V]	275	275	275	352	352
- with cut-to-length jumper and cover, type ATP	[V]	550	550	550	440	440

Type name		PT 4**	PT 4 -QUATTRO**	PT 4 -TWIN**	PTTB 4**	PTTB 4 -PV**
Rated current (temperature rise 40 K, cross section 4 mm ²)	[A]	26	26	26	23	23
Rated current (temperature rise 40 K, cross section 6 mm ²)	[A]	30	30	30	27	27
Rated current (temperature rise 45 K, cross section 4 mm ²)	[A]	28	28	28	25	25
Rated current (temperature rise 45 K, cross section 6 mm ²)	[A]	32	32	32	28	28
Rated current						
- with jumper FBS... (temperature rise 40 K, cross section 4 mm ²)	[A]	25	25	25	23	23
- with jumper FBS... (temperature rise 40 K, cross section 6 mm ²)	[A]	27	27	27	23	23
- with jumper FBS... (temperature rise 45 K, cross section 4 mm ²)	[A]	27	27	27	24	24
- with jumper FBS... (temperature rise 45 K, cross section 6 mm ²)	[A]	29	29	29	25	25
Contact resistance (cross section 4 mm ²)	[mΩ]	0.59	0.69	0.64	lower level 0.67 upper level 0.49	lower level 0.67 upper level 0.49
Contact resistance (cross section 6 mm ²)	[mΩ]	0.54	0.66	0.60	lower level 0.76 upper level 0.60	lower level 0.76 upper level 0.60
Rated cross section	[mm ²] (AWG)	4 (12)	4 (12)	4 (12)	4 (12)	4 (12)
Rated connecting capacity						
- rigid	[mm ²] (AWG)	0.2 - 6 (24 - 10)	0.2 - 6 (24 - 10)	0.2 - 6 (24 - 10)	0.2 - 6 (24 - 10)	0.2 - 6 (24 - 10)
- flexible	[mm ²] (AWG)	0.2 - 4 (24 - 12)	0.2 - 4 (24 - 12)	0.2 - 4 (24 - 12)	0.2 - 4 (24 - 12)	0.2 - 4 (24 - 12)
Stripping length	[mm]	10	10	10	10	10
Assembly		on rails, NS35, in accordance with EN 60715-TH 35				
Operating temperatures	[°C]	-60 to +110				
** applies to colour versions						

Type name		PT 4-PE	PT 4-QUATTRO-PE	PT 4-TWIN-PE	PTTB 4-PE
Rated cross section	[mm ²] (AWG)	4 (12)	4 (12)	4 (12)	4 (12)
Rated connecting capacity					
- rigid	[mm ²] (AWG)	0.2 - 6 (24 - 10)	0.2 - 6 (24 - 10)	0.2 - 6 (24 - 10)	0.2 - 6 (24 - 10)
- flexible	[mm ²] (AWG)	0.2 - 4 (24 - 12)	0.2 - 4 (24 - 12)	0.2 - 4 (24 - 12)	0.2 - 4 (24 - 12)
Stripping length	[mm]	10	10	10	10
Assembly		on rails, NS35, in accordance with EN 60715-TH 35			
Operating temperatures	[°C]	-60 to +110			

Notes for manufacturing, installation and commissioning

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

Test report: PTB Ex 14-14076

Konformitätsbewertungsstelle, Sektor Explosionsschutz

Braunschweig, November 17, 2014

On behalf of PTB:


Dr.-Ing. D. Markus
Oberregierungsrat

