


## Mini Spring-Cage Terminal Block MSB

<b>Article description</b>	<b>MSB 2,5-M *</b>
Article no.	3244067 *
<b>EC-TYPE EXAMINATION CERTIFICATE IECEX-CERTIFICATE</b>	<b>PTB 08ATEX1075 U *</b> <b>IECEX PTB 08.0048 U *</b>
Marking	 Ex eb IIC PTB 08ATEX1075 U IECEX PTB 08.0048 U
Direct assembly Assembly on mounting rails	On mounting plate NS 15 acc. to EN 60715-TH 15 NS 35 acc. to EN 60715-TH 35
Stripping length	8 mm
Assembly instructions	See page 2
Operating temperature range	-50 °C ... +110 °C



### Technical data according to IEC/EN 60079-7 (increased safety „e“)

Rated insulation voltage	630 V	Assembly on mounting rails	500 V	Assembly on mounting plate
Rated voltage	690 V		550 V	
Nominal current	21 A	( $\Delta T$ 40 K)		
Max. current	26 A	( $\Delta T$ 40 K)		
Temperature rise	32 K	(21,3 A / 2,5 mm <sup>2</sup> )		
Contact resistance	0,87 m $\Omega$			
<b>Connection capacity</b>				
Rated cross-section	2,5 mm <sup>2</sup>		AWG 14	
Max. conductor cross-section	4 mm <sup>2</sup>		AWG 12	
Connectable conductor cross-section	0,08 - 4 mm <sup>2</sup> rigid 0,08 - 2,5 mm <sup>2</sup> flexible		AWG 28 – 12 rigid AWG 28 – 14 flexible	

### Data of insulation material

Description	PA 6.6
Creep resistance acc. to IEC 60112 / material group	CTI 600 / I

### Accessories

	Description	Article no.
Cover	D-MZB 1,5	3024177
Cover	D-MZB 1,5-F	3024180

\* valid for colour variants

## Important assembly instructions – increased safety „e“

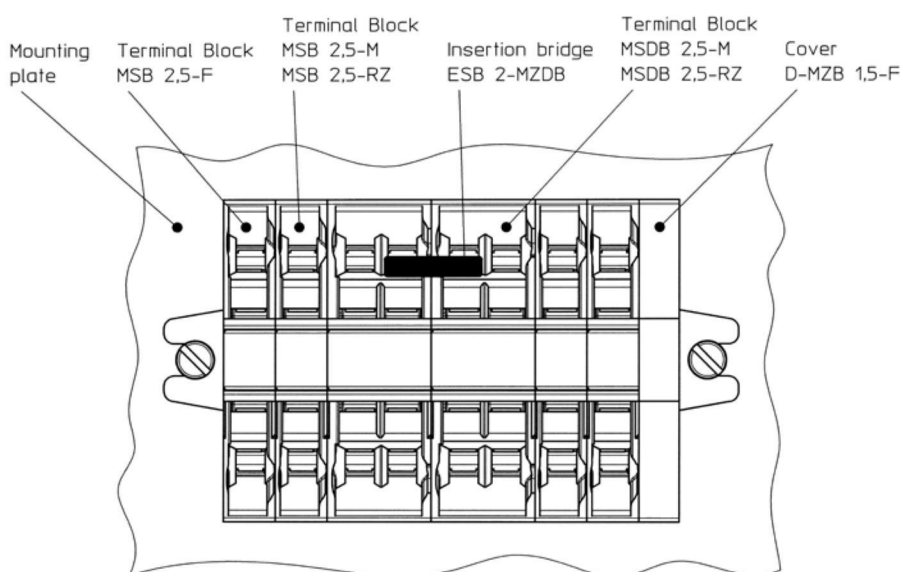
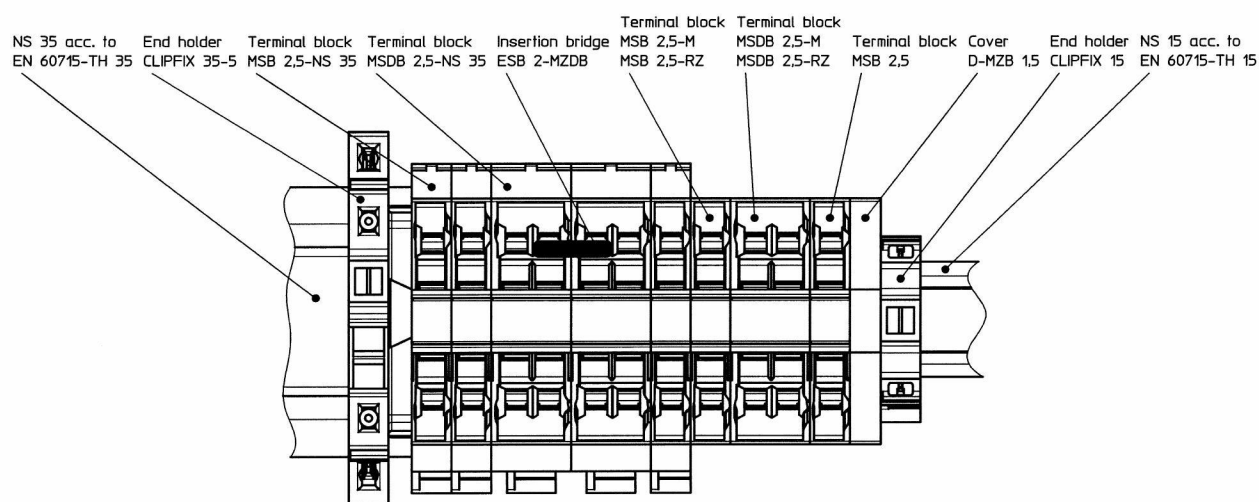
The Terminal Blocks are suitable for use in enclosures in Atmospheres with flammable gases or combustible dust. For flammable gases these enclosures must satisfy the requirements according to IEC/EN 60079-0 and IEC/EN 60079-7. For combustible dust these enclosures must satisfy the relevant requirements of IEC/EN 60079-31.

When assembling with other certified series and sizes of terminal blocks and using accessories designed for the purpose, the required creepage distances and clearances have to be observed.

If conductors with smaller cross section than the rated cross section are used, the assigned lower current has to be specified in the EC-Type Examination Certificate of the complete apparatus.

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 electrical apparatus, e.g. junction and connection boxes, for temperature class T6. When the Terminal Blocks are used in electrical apparatus of temperature classes T5 up to T1, the highest temperature of the insulating material shall not exceed the maximum value of the operating temperature range.

The Terminal Blocks and their appropriate accessories have to be assembled as specified below.



## Operational instructions – Intrinsic safety “i”

EN 60079-14:2014 Clause 3.5.5 terminal blocks as simple apparatus when used in intrinsically-safe circuits. Testing by a notified body and marking is not required. If terminal blocks be identifiable as part of an intrinsically circuit are marked by a colour, the colour used shall be light blue.

Testing for compliance to intrinsically safe requirements including clearance, creepage, and solid insulation distances specified in EN 60079-0:2012 + A11 2013 and EN 60079-11:2012 have been performed for circuits up to 60 V.

Compliance with distance requirements of EN 60079-14:2014 Clause 16.4 for the connection of separated intrinsically-safe circuit accessories is met. A minimum distance of 50 mm to separate clamping units of intrinsically-safe and non-intrinsically-safe circuits is required through the use of a separating plate or similar device.

## Attestation of Conformity

The above-mentioned product conforms with the most important requirements of directive 2014/34/EU (ATEX directive) and its amending directives. The following pertinent standards were consulted for evaluating the conformity:

- IEC 60079-0/EN 60079-0
- IEC 60079-7/EN 60079-7

For the complete list of relevant standards, including the issue status, see certificate of conformity. This is available for download at [www.phoenixcontact.com](http://www.phoenixcontact.com) in the e-shop under the category manufacturer's declaration.

Conformance with the provisions of the ATEX directive was certified by the following notified body:

Notified Body:	PHYSIKALISCH-TECHNISCHE BUNDESANSTALT	[Kenn-Nr.: 0102]
Address:	Bundesallee 100, 38116 Braunschweig, Deutschland	
Certificate: (No., Date)	PTB 08ATEX1075 U, 1 <sup>st</sup> Suppl. 2013-05-15	

This attestation certifies the conformity with the indicated directive, it does not, however, covenant any characteristics. The instructions for safety and installation have to be observed.

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

 +49 – (0) 52 35 – 3-00

 +49 – (0) 52 35 – 3-4 12 00

 [www.phoenixcontact.com](http://www.phoenixcontact.com)