



Note on instructions

When working in hazardous areas, the safety of personnel and equipment depends on compliance with the relevant safety regulations. The people in charge of installation and maintenance bear a special responsibility. It is essential that they have an exact knowledge of the applicable rules and regulations.

The instructions provide a summary of the most important safety measures and must be read by everyone working with the product so that they will be familiar with the correct handling of the product.

The instructions have to be kept for future reference and must be available throughout the expected life of the product.

Description

The type 07-9702-0.2./.... mini terminal allows electrical conductors to be connected and disconnected in hazardous (potentially explosive) areas.

The mini terminals are supplied as 2-pole or 3-pole versions and can be fitted in a row at will to form terminal strips.

Adequate clearance and creepage distance must be provided to allow the terminal to be mounted directly onto a metal base. Each individual terminal pole can be marked with clip-on labels.

2-pole and 3-pole insertion bridges are available for forming cross connections.

The mini terminals can be used in hazardous areas groups I and II if fitted into the appropriate enclosures with the "e" increased safety type of protection.

The mini terminal is available in blue also for connecting intrinsically safe circuits.

Explosion protection

Ex protection type

- Ex II 2G Ex eb IIC
- Ex I M2 Ex eb I

Ex eb IIC or Ex eb I

0044

Certification

PTB 99 ATEX 3117 U
IECEXPTB 07.0007U
CSA 2314224 (LR 85562)
UL E198625 (ordinary)

Min. ambient temperature

-55 °C (-67 °F)

Max. operating temperature

+120 °C (+248 °F)

Approved for zones

1 and 2

Technical data

Rated voltage range

Max. 440 V
Max. 300 V CSA/UL

Rated current

23 A
16 A CSA/UL

Rated cross-section

2.5 mm² (single, fine and multi-stranded)
14 AWG CSA/UL

Strip length

6 to 8 mm
(0.2 to 0.3 in)

Multi-conductor connection

Of the same cross section and type:
Max. 2 x 1 mm²

Operating temperature range

-55°C to +120°C
(-67 °F to +248 °F)

Tightening torque

(IEC/EN 60999-1: 2000, Table 4, III)

For clamp screw = 0.4 Nm
(UL: 3.5 lb in.)

For fixing screw with
locking element = 0.6 Nm
(UL: 5.3 lb in.)

Material

Insulation: Thermoplastic
Terminal: Copper alloy

Color

Grey for Ex e circuits
Blue for Ex i circuits

Weight

2-pole: 13 g (0.03 lb)
3-pole: 19 g (0.04 lb)

Dimensions

See page 3

Safety Instructions

The mini terminal may be used in hazardous areas, groups I and II in appropriate enclosures with "e" increased safety type of protection.

The mini-terminal may only be used inside the specified temperature range. If it is installed incorrectly without protection, it may malfunction and the Ex protection can be lost.

Utilization in areas other than those specified or the modification of the product by anyone other than the manufacturer is not permitted and will exempt BARTEC from liability for defects and any further liability.

The generally applicable statutory rules and other binding directives relating to workplace safety, accident prevention and environmental protection must be observed.

Before commissioning or restarting operation, check compliance with the applicable laws and directives.

The mini-terminals may be operated only if they are clean and not damaged in any way. It is not allowed to use the mini terminals as a mechanical stop.

It is not permissible to convert or modify the mini-terminals.

Marking

Particularly important points in these instructions are marked with a symbol:

DANGER

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.

WARNING

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

CAUTION indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.

NOTICE

NOTICE is used to address practices not related to personal injury.

Note

Important instructions and information on effective, economical and environmentally compatible handling.

Standards conformed to

EN 60079-0:2009

EN 60079-7:2007

IEC 60079-0:2004 (Ed.4)

IEC 60079-7:2001 (Ed. 3)

Transport, Storage

NOTICE

Damage to the mini-terminals through incorrect transport or incorrect storage.

- Transport and storage is permissible in original packaging only.

Assembly, Installation, and Commissioning

WARNING

Risk of injury due to incorrect proceedings.

- Only authorized and qualified personnel may do any of the assembly, disassembly, installation and commissioning work.
- Select the quality of the connection cable so that it corresponds to the thermal and mechanical requirements of the respective range of application.

Assembly/Disassembly/Installation

Check when assembling:

- Use appropriate tools.
- Make sure the mini-terminal is in perfect condition.
- Always disconnect the mini-terminals from voltage before doing any assembly/disassembly/installation work.

Note

2-pole mini-terminals must be secured against rotation if fitted singly. If mounting the terminals onto a rail, use an anti-rotation device, order number 05-0010-0005. If mounting the terminals onto the base, use an anti-rotation device, order number 05-0010-0002.

Commissioning

Before commissioning, check that:

- The mini-terminals are assembled and installed in compliance with regulations.
- The mini-terminals are not damaged.
- The connection has been established properly.
- All screws are tightened securely.

Operation

DANGER

Death or serious injury due to improper use.

- The mini-terminal may only be operated within the technical limits that apply to it (see page 1).

Maintenance and Fault Clearance

WARNING

Risk of injury due to incorrect proceedings.

- Only authorized qualified personnel may do any of the work relating to maintenance and fault clearance.
- IEC/EN 60079-17 must be observed.

Maintenance

The operator of the mini-terminals must keep them in good condition, operate and monitor them properly and do maintenance and repairs.

Mini-terminals have to be checked for cracks and damage. Make sure that they are properly established.

Note

Dirty mini-terminals can be cleaned with compressed air.

Fault Clearance

Defective mini-terminals cannot be repaired; they must be replaced considering this operational instruction.

Accessories, Spare Parts

See BARTEC catalogue.

Disposal

The components in the mini-terminals contain metal and plastic parts.

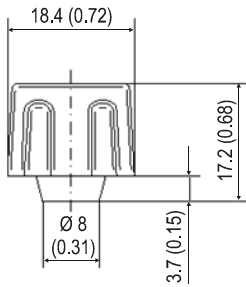
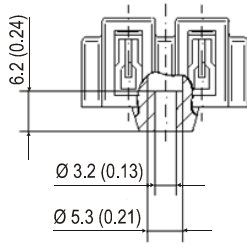
Therefore the statutory requirements for disposing of electronic scrap must be observed (e.g. disposal by an approved disposal company).

Service-Address

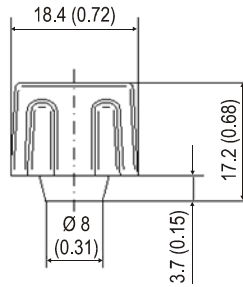
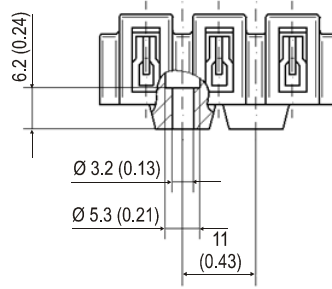
BARTEC GmbH
Max-Eyth-Straße 16
97980 Bad Mergentheim
Germany
Tel.: +49 7931 597-0
Fax: +49 7931 597-119

Dimensions in mm (in)

2-pole mini-terminal

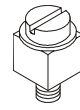


3-pole mini-terminal



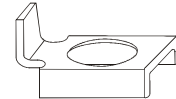
Rotation stop for base mounting

Order number 05-0010-0002

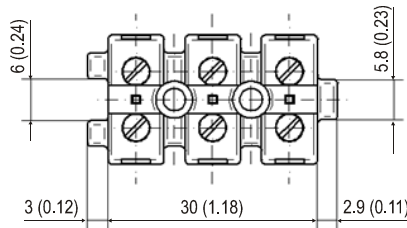
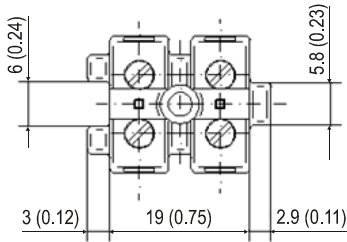


Rotation stop for rail mounting

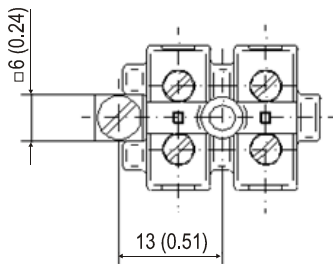
Order number 05-0106-0015



Without rotation stop for base mounting:



With rotation stop for base mounting:



01-9702-7M0001B-04/12-STVT-286298

Erklärung der Konformität
Declaration of Conformity
Attestation de conformité

N° 01-9702-7C0001_A

BARTEC

BARTEC GmbH
Max-Eyth-Straße 16
97980 Bad Mergentheim
Germany

Wir

We

Nous

BARTEC GmbH,

erklären in alleiniger Verantwortung, dass das Produkt

declare under our sole responsibility that the product

attestons sous notre seule responsabilité que le produit

Miniklemme**Mini-terminal****Minibornes****Typ 07-9702-0*2*/******

auf das sich diese Erklärung bezieht den Anforderungen der folgenden **Richtlinien (RL)** entspricht

to which this declaration relates is in accordance with the provision of the following **directives (D)**

se référant à cette attestation correspond aux dispositions des **directives (D)** suivantes

ATEX-Richtlinie 94/9/EG

und mit folgenden Normen oder normativen Dokumenten übereinstimmt

ATEX-Directive 94/9/EC

and is in conformity with the following standards or other normative documents

ATEX-Directive 94/9/CE

et est conforme aux normes ou documents normatifs ci-dessous

EN 60079-0:2009

EN 60079-7:2007

Kennzeichnung**Marking****Marquage**

**II 2 G Ex eb IIC
I M2 Ex eb I**

Verfahren der EG-Baumusterprüfung / Benannte Stelle

Procedure of EC-Type Examination / Notified Body

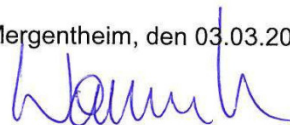
Procédure d'examen CE de type / Organisme Notifié

PTB 99 ATEX 3117 U

0102 PTB, Bundesallee 100, 38116 Braunschweig, D

0044

Bad Mergentheim, den 03.03.2011



ppa. Ewald Warmuth
Geschäftsleitung / General Manager

03-0383-0289

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