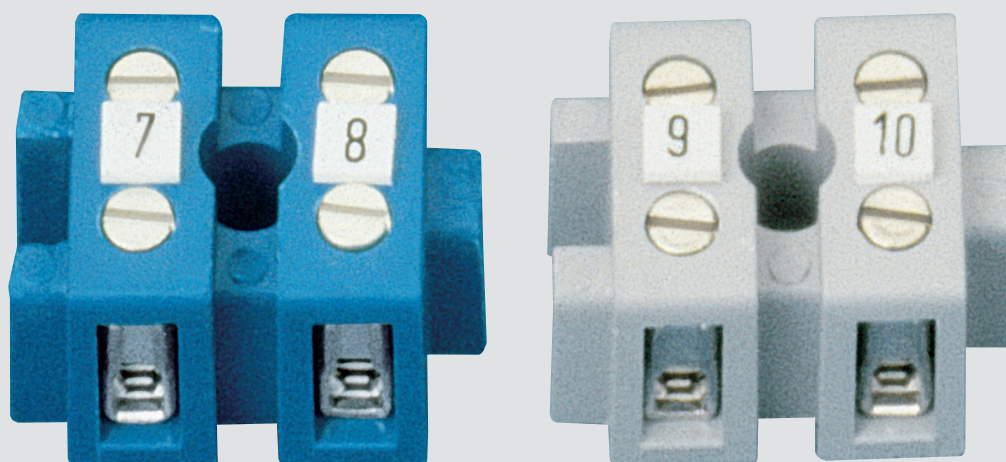


# Mini-terminal

Type 07-9702-0\*2\*/\*\*\*\*



# Mini-terminal

Type 07-9702-0\*2\*/\*\*\*\*



## 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 operating instruction 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

Notified Body No.	0044
Approved Body No.	2503
Marking ATEX / UKEX	Ⓜ II 2G Ex eb IIC Gb Ⓜ I M2 Ex eb I Mb
Certification	EPS 21 ATEX 1101 U EPS 21 UKEX 1 314 U
Marking IECEx	Ex eb IIC Gb Ex eb I Mb
Certification	IECEx EPS 21.0038 U
	Other approvals and certificates, see <a href="http://www.bartec.com">www.bartec.com</a>
Approved for zones	1 and 2

## Technical data

Service temperature range	-55 °C to +120 °C (-67 °F to +248 °F)
Rated voltage	400 V Max. 300 V CSA/UL
Operating voltage	440 V
Rated current	24 A 16 A CSA/UL
Rated cross-section	2.5 mm <sup>2</sup> (single-, fine- and multi-stranded) 14 AWG CSA/UL
Strip length	6 to 8 mm (0.2 to 0.3 in)
Multi-conductor connection	With the same cross-section and same conductor type: max. 2 x 1 mm <sup>2</sup>
Rated connecting capacity per clamping point	0.2 - 2.5 mm <sup>2</sup> When using the insert bridges (2- or 3-pole), the cross section is reduced to max. 1.5 mm <sup>2</sup>
Tightening torque	(IEC/EN 60999-1:2000, TAB 4, III) For terminal screw = 0.4 Nm For fixing screw with locking element = 0.6 Nm
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 5

## 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:

	<p><b>DANGER</b></p> <p>indicates a hazardous situation which, if not avoided, will result in death or serious injury.</p>
	<p><b>WARNING</b></p> <p>indicates a hazardous situation which, if not avoided, could result in death or serious injury.</p>
	<p><b>CAUTION</b></p> <p>indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.</p>
	<p><b>NOTICE</b></p> <p>is used to address practices not related to personal injury.</p>
	<p><b>NOTE</b></p> <p>Important instructions and information on effective, economical and environmentally compatible handling.</p>

## Standards conformed to

See Attestations of Conformity.

## Transport and Storage

**ATTENTION**

**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**

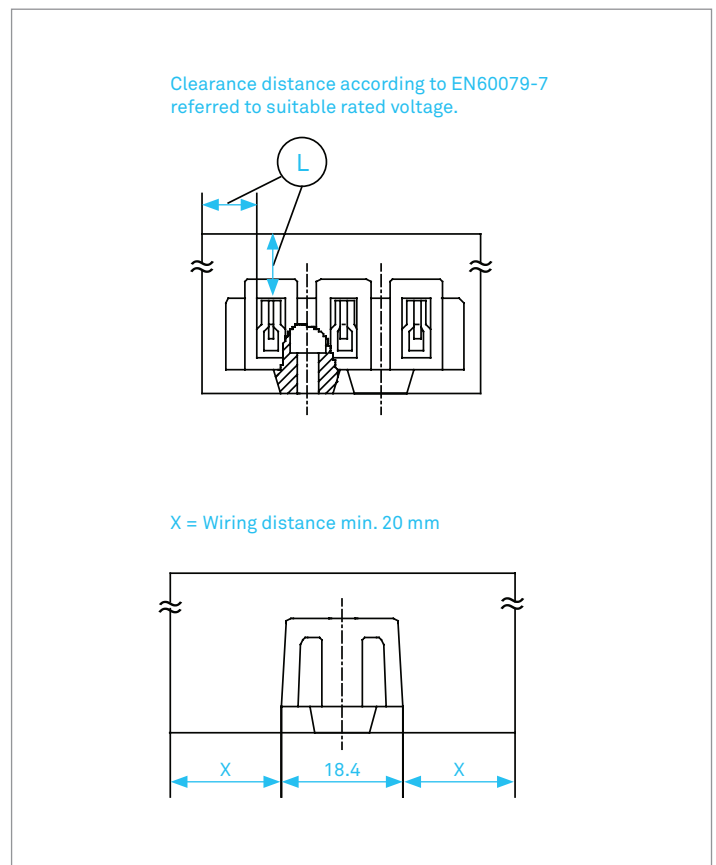
**Risk of injury due to incorrect proceedings.**

- 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.
- Clearance distances according IEC 60079-7 and Wiring distances.



**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 with the specified tightening torque.

## 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

Repairs to explosion-protected equipment may only be carried out by the manufacturer or by persons authorized and trained for this purpose. If you have any questions, please contact BARTEC GmbH.

**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.

The 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.

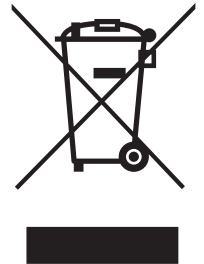
Therefore the statutory requirements for disposing of electronic scrap must be observed (e.g. disposal by an approved disposal company).

## Service-Address

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

Tel.: +49 7931 597-0  
 Fax: +49 7931 597-119  
 E-Mail: info@bartec.com

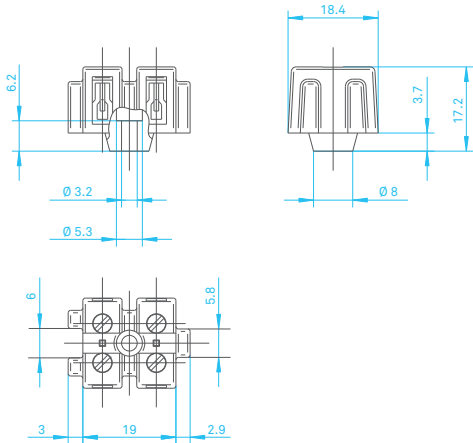
www.bartec.com



Dimensions in mm

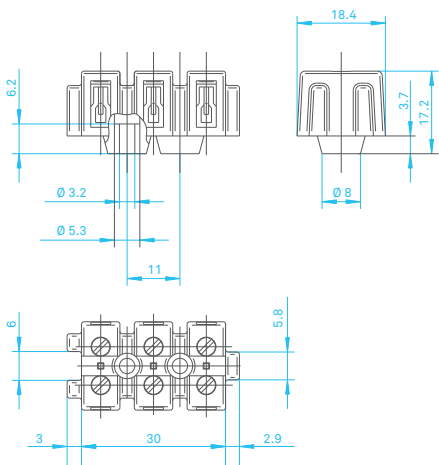
Selection chart

Order no.



Mini-terminal 2-pole, Ex e, grey  
Mini-terminal 2-pole, blue

07-9702-0220/1  
07-9702-0220/2



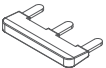
Mini-terminal 3-pole, Ex e, grey  
Mini-terminal 3-pole, blue

07-9702-0320/1  
07-9702-0320/2



2-pole bridge

05-0120-0004



3-pole bridge

05-0120-0005



Rotation stop for base mounting  
required when a single 2-pole terminal is mounted

05-0010-0002



Rotation stop for rail mounting  
required when a single 2-pole terminal is mounted

05-0106-0015



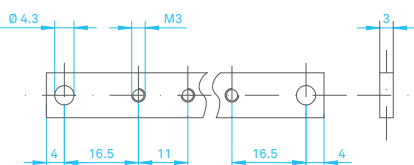
Label  
not printed  
printed  
0-99, A-Z, symbols on request  
1 unit = 100 labels  
with the same markings

05-1144-0001  
05-1144-0002



Screw combination, M3 l = 11 mm  
unit 100 pieces l = 12 mm  
l = 15 mm  
Similar to DIN EN ISO 1207 (DIN 84)

03-1830-0001  
03-1830-0004  
03-1830-0005



Mounting rail  
3 x 10 mm or 5 x 10 mm

on request

EU Declaration of Conformity

Konformitätsbescheinigung  
 Attestation of Conformity  
 Attestation de conformité



Nº 01-9702-7C0001\_D

Wir	We	Nous
<b>BARTEC GmbH</b> Max-Eyth-Straße 16 97980 Bad Mergentheim Germany		

erklären in alleiniger Verantwortung, dass das Produkt <b>Miniklemme</b>	declare under our sole responsibility that the product <b>Mini Terminal</b>	attestons sous notre seule responsabilité que le produit <b>Minibornes</b>
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**Typ 07-9702-0\*2\*/\*\*\*\***

auf das sich diese Erklärung bezieht den Anforderungen der folgenden <b>Richtlinien (RL)</b> entspricht <b>ATEX-Richtlinie 2014/34/EU</b> <b>RoHS-Richtlinie 2011/65/EU</b> und mit folgenden Normen oder normativen Dokumenten übereinstimmt	to which this declaration relates is in accordance with the provision of the following <b>directives (D)</b> <b>ATEX-Directive 2014/34/EU</b> <b>RoHS-Directive 2011/65/EU</b> and is in conformity with the following standards or other normative documents	se référant à cette attestation correspond aux dispositions des <b>directives (D)</b> suivantes <b>Directive ATEX 2014/34/UE</b> <b>Directive RoHS 2011/65/UE</b> et est conforme aux normes ou documents normatifs ci-dessous
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**EN IEC 60079-0:2018/AC:2020**                      **EN 60947-7-1:2009**  
**EN IEC 60079-7:2015/A1:2018**            **EN 60947-1+A1:2012+A2:2014**

<b>Verfahren der EU-Baumusterprüfung / Benannte Stelle</b>	<b>Procedure of EU-Type Examination / Notified Body</b>	<b>Procédure d'examen UE de type / Organisme Notifié</b>
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**EPS 21 ATEX 1101 U<sup>(\*)</sup>**

**2004, Bureau Veritas Germany GmbH, 86842 Türkheim**

<p>(*) Die Ex-Komponente ist Teil eines elektrischen Betriebsmittels oder eines Moduls, gekennzeichnet mit dem Symbol „U“, das nicht für sich allein verwendet werden darf und über dessen Einbau in elektrische Betriebsmittel oder Systeme zur Verwendung in explosionsgefährdeten Bereichen gesondert entschieden werden muss.</p> <p>Merkmale dieser Komponente sowie die Bedingungen für ihren Einbau in Geräte und Schutzsysteme siehe Betriebsanleitung der Komponente.</p>	<p>(*) The Ex-component is a part of an electrical apparatus or a module, marked with the symbol "U", which is not intended to be used alone and requires additional consideration when incorporated into electrical apparatus or systems for use in explosive atmospheres.</p> <p>Characteristics and how the component must be incorporated into equipment or protective systems see operation manual of the component.</p>	<p>(*) Le composant Ex est partie de matériel électrique ou de module, marquée du symbol « U », ne devant pas être utilisée seule et nécessitant une certification complémentaire lorsqu'elle est incorporée a un matériel électrique ou à un système pour atmosphères explosives.</p> <p>Les caractéristiques du composant ainsi que les conditions d'incorporation dans des appareils ou des systèmes de protection regarde voir l'instruction d'emploi du composant.</p>
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**0044**

Bad Mergentheim, 29.03.2022

*i. A. Simon Dyhringer*  
i.A. Simon Dyhringer

Product Manager Ex e

*S. Mika*  
i.A. Steffen Mika

Certification Manager R&D

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