

M23-1RP1N8A90DUS - Coupler connector



1629096

<https://www.phoenixcontact.com/us/products/1629096>

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M23, Coupler connector, series: M23 PRO, straight, shielded: yes, for standard and ONECLICK fast locking system, No. of pos.: 16+2+PE, Direction of rotation: Standard, contact connection type: Pin, Crimp connection, cable diameter range: 3 mm ... 15 mm, coding: N, Item is lead-free in accordance with RoHS II without Exemption 6c (Pb <0.1%)

Your advantages

- Solutions with cross-manufacturer compatibility for standard and fast locking systems
- Modern, consistent design for highly convenient operation
- Easy, cost-effective cable assembly: uniform shielding of M17 to M40

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1629096 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | AB30 |
| Product key | ABRABG |
| GTIN | 4055626762333 |
| Weight per piece (including packing) | 115.5 g |
| Weight per piece (excluding packing) | 115.5 g |
| Customs tariff number | 85366990 |
| Country of origin | DE |

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Technical data

Notes

| | |
|---------|---|
| General | Order crimp contacts 16 x Ø 1 mm, 2 x Ø 1.5 mm, 1 x Ø 1.5 (PE) separately |
| General | Please observe the derating curve. |

Safety note

| | |
|-------------|--|
| Safety note | <p>WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.</p> <ul style="list-style-type: none">• WARNING: Commission properly functioning products only. The products must be regularly inspected for damage. Decommission defective products immediately. Replace damaged products. Repairs are not possible.• WARNING: Only electrically qualified personnel may install and operate the product. They must observe the following safety notes. The qualified personnel must be familiar with the basics of electrical engineering. They must be able to recognize and prevent danger. The relevant symbol on the packaging indicates that only personnel familiar with electrical engineering are allowed to install and operate the product.• The products are suitable for applications in plant, controller, and electrical device engineering.• When operating the connectors in outdoor applications, they must be separately protected against environmental influences.• Assembled products may not be manipulated or improperly opened.• Only use mating connectors that are specified in the technical data of the standards listed (e.g. the ones listed in the product accessories online at phoenixcontact.com/products).• When using the product in direct connection with third-party manufacturers, the user is responsible.• For operating voltages > 50 V AC, conductive connector housings must be grounded• Ensure that the protective or functional ground has been properly connected.• VDE 0100/1.97 § 411.1.3.2 and DIN EN 60 204/11.98 § 14.1.3 are applicable when combining several circuits in a cable and/or connector• Only use tools recommended by Phoenix Contact• The installation notes/Design In documents online on the download page at phoenixcontact.com/products must be observed for this product.• Operate the connector only when it is fully plugged in and interlocked.• Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.• Observe the minimum bending radius of the cable. Lay the cable without twisting it.• The connector warms up in normal operation. Depending on the |
|-------------|--|

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ambient conditions, the surface of the connector can continue to warm up. In this case, the user is responsible for posting warnings (e.g. DIN EN ISO 13732-1:2008-12).

Product properties

| | |
|--------------|---------------------------------|
| Product type | Circular connector (cable-side) |
|--------------|---------------------------------|

Connector

Insulating body

| | |
|---|--|
| Note | Order information: Order crimp contacts 16 x Ø 1 mm, 2 x Ø 1.5 mm, 1 x Ø 1.5 (PE) separately |
| Coding | N |
| Insulation body material | PA 6.6 |
| Insertion/withdrawal cycles | 100 |
| Connection method | Crimp connection |
| Contact switching type | Pin |
| Application | Signal |
| Number of positions | 19 |
| Direction of rotation | Standard |
| Connection profile | 16+2+PE |
| Contact diameter Power contacts | 1.5 mm |
| Litz wire cross-section Power contacts min. | 0.08 mm ² |
| Litz wire cross-section Power contacts max. | 1 mm ² |
| Rated current Power contacts | 10 A |
| Note | for max. connection cross section |
| Rated voltage | 150 V |
| Rated surge voltage | 1.5 kV |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Contact diameter Signal contacts | 1 mm |
| Litz wire cross-section Signal contacts min. | 0.08 mm ² |
| Litz wire cross-section Signal contacts max. | 1 mm ² |
| Nominal current per signal contact | 8 A |
| Note | for max. connection cross section |
| Rated voltage Signal contact | 150 V |
| Overvoltage category | II |
| Degree of pollution | 3 |
| Installation height | 2000 m |

Housing

| | |
|------------------|---|
| Housing material | GD-Zn |
| Type of locking | for standard and ONECLICK fast locking system |

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| | |
|-----------------------------------|--------------------------|
| Pg screw connection | none |
| Degree of protection (plugged in) | IP66 / IP68 (2 m / 24 h) |
| Thread type | M23 |

Seal

| | |
|-------------------------|-----------------------------------|
| External cable diameter | 3 mm ... 15 mm (Universal gasket) |
| Seal material | FKM |

Environmental and real-life conditions

Ambient conditions

| | |
|---------------------------------|-------------------------------------|
| Ambient temperature (operation) | -40 °C ... 105 °C (see to derating) |
| Altitude | 2000 m |
| Permanent temperature | 125 °C (DIN EN 60512-9-2 / 1000 h) |

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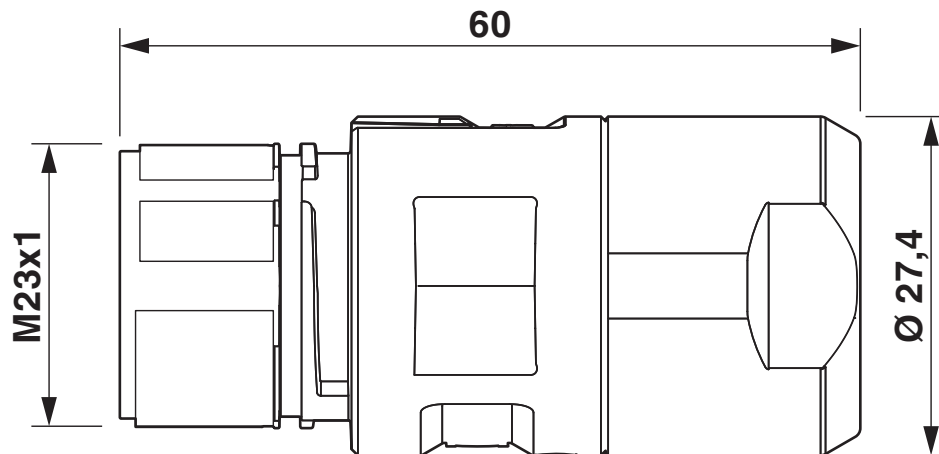
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Drawings

Dimensional drawing



Dimensional drawing

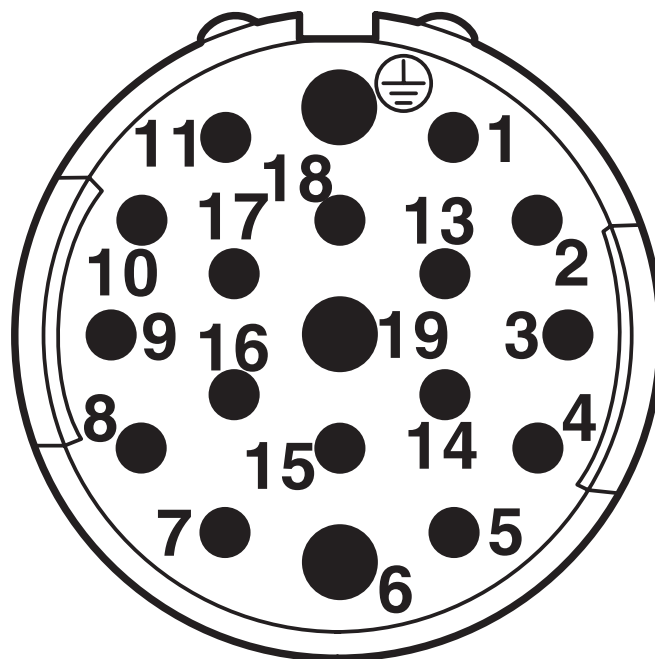
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Schematic diagram

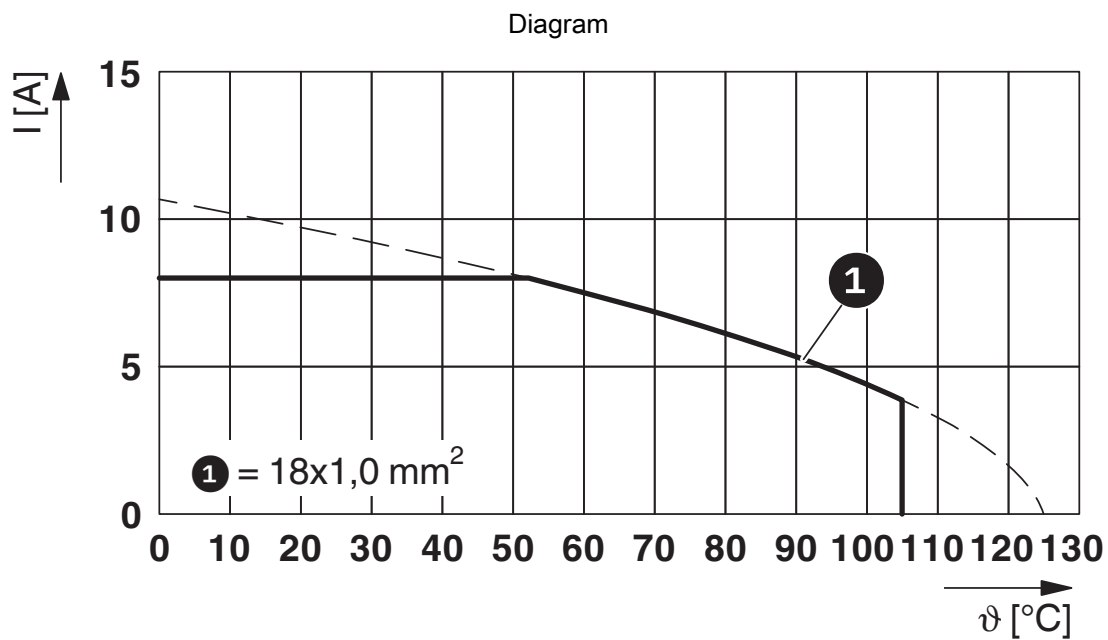


Connector pin assignment

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I = current strength, ϑ = ambient temperature, 18x 8 A

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1629096>



cUL Recognized
Approval ID: E335019-20141210



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cULus Recognized

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-11.0 | 27440102 |
| ECLASS-12.0 | 27440116 |
| ECLASS-13.0 | 27440116 |

ETIM

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| ETIM 9.0 | EC002635 |
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UNSPSC

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| UNSPSC 21.0 | 39121400 |
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Environmental product compliance

| | |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
| | No hazardous substances above threshold values |

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Accessories

FLANGE-M23PRO-SG - Square mounting flange

1055767

<https://www.phoenixcontact.com/us/products/1055767>

Square mounting flange, Axial seal, 4xM3



RC-15P2000 - Crimp contact

1623779

<https://www.phoenixcontact.com/us/products/1623779>

Crimp contact, Pin, turned, contact diameter: 1.5 mm, crimp range: 0.5 mm² ... 1 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1244973



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RC-15P2010 - Crimp contact

1623776

<https://www.phoenixcontact.com/us/products/1623776>



Crimp contact, Pin, turned, contact diameter: 1 mm, crimp range: 0.08 mm² ... 0.22 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1244971

RC-15P2020 - Crimp contact

1623777

<https://www.phoenixcontact.com/us/products/1623777>



Crimp contact, Pin, turned, contact diameter: 1 mm, crimp range: 0.14 mm² ... 0.56 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1244971

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RC-15P2030 - Crimp contact

1623778

<https://www.phoenixcontact.com/us/products/1623778>



Crimp contact, Pin, turned, contact diameter: 1 mm, crimp range: 0.5 mm² ... 1 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1244972

RC-15P2100 - Crimp contact

1623780

<https://www.phoenixcontact.com/us/products/1623780>



Crimp contact, Pin, leading, turned, contact diameter: 1.5 mm, crimp range: 0.5 mm² ... 1 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1244974

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RC-15P2200 - Crimp contact

1627292

<https://www.phoenixcontact.com/us/products/1627292>



Crimp contact, Pin, turned, contact diameter: 1.5 mm, crimp range: 0.08 mm² ... 0.22 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1245475

RC-15P2300 - Crimp contact

1627291

<https://www.phoenixcontact.com/us/products/1627291>



Crimp contact, Pin, turned, contact diameter: 1.5 mm, crimp range: 0.14 mm² ... 0.56 mm², Alternative product in accordance with RoHS II without Exemption 6c (Pb <0.1%) item no.: 1245475

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PROT-M23PRO-OT-IP20 - Plastic protective cap

1055753

<https://www.phoenixcontact.com/us/products/1055753>

Plastic protective cap, M23, degree of protection: IP20, series: M23 PRO



PROT-M23PRO-OT-IP67 - Plastic protective cap

1055749

<https://www.phoenixcontact.com/us/products/1055749>

Plastic protective cap, M23, degree of protection: IP67, series: M23 PRO Signal



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M23PRO-VIB-ORING-OR - Sealing ring

1521137

<https://www.phoenixcontact.com/us/products/1521137>

Vibration O-ring, optional accessory for M23 PRO device connectors

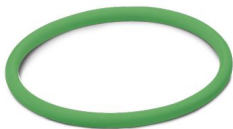


M23PRO-VIB-ORING-GN - Sealing ring

1521138

<https://www.phoenixcontact.com/us/products/1521138>

Vibration O-ring, optional accessory for M23 PRO device connectors



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Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com