

## Coupler connector - M23-7EP198A9L24S - 1628782

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Coupler connector, M23 PRO, straight, shielded: yes, for standard and ONECLICK fast locking system, M23, No. of pos.: 4+3+PE, type of contact: Pin, Crimp connection, cable diameter range: 9.5 mm ... 14.5 mm

### 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



### Key Commercial Data

|                                      |   |
|--------------------------------------|---|
| Packing unit                         | 1 pc  |
| GTIN                                 | <br>4 055626 763101 |
| GTIN                                 | 4055626763101   |
| Weight per Piece (excluding packing) | 119.000 g   |
| Custom tariff number                 | 85366990  |
| Sales Key                            | ABRCII  |

### Technical data

#### Temperature range

|                            |                                     |
|----------------------------|-------------------------------------|
| Ambient temperature        | -40 °C ... 105 °C (see to derating) |
| max. operating temperature | 125 °C (DIN EN 60512-9-2 / 1000 h)  |

#### Standards and Regulations

|             |   |
|-------------|---|
| Safety note | WARNING: The connectors may not be plugged in or disconnected under load. Ignoring the warning or improper use may damage persons and/or property.  |
|             | • 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.   |

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## Technical data

### Standards and Regulations

|  |  |
|--|--|
|  | 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. |
|  | <ul style="list-style-type: none"> <li>The products are suitable for applications in plant, controller, and electrical device engineering.</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>When operating the connectors in outdoor applications, they must be separately protected against environmental influences.</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>Assembled products may not be manipulated or improperly opened.</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>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 <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a>).</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>When using the product in direct connection with third-party manufacturers, the user is responsible.</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>For operating voltages &gt; 50 V AC, conductive connector housings must be grounded</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>Ensure that the protective or functional ground has been properly connected.</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>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</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>Only use tools recommended by Phoenix Contact</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>The installation notes/Design In documents online on the download page at <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> must be observed for this product.</li> </ul>   |
|  | <ul style="list-style-type: none"> <li>Operate the connector only when it is fully plugged in and interlocked.</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>Ensure that when laying the cable, the tensile load on the connectors does not exceed the upper limit specified in the standards.</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>Observe the minimum bending radius of the cable. Lay the cable without twisting it.</li> </ul>  |
|  | <ul style="list-style-type: none"> <li>The connector warms up in normal operation. Depending on the 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).</li> </ul>         |

### Data of the insulating body

|  |   |
|--|---|
| Note   | Order information: Order crimp contacts 4 x Ø 1 mm, 4 x Ø 2 mm separately |
| Insulator material                             | PA 6.6  |
| Contact connection method                      | Crimp connection  |
| Type of contacts                               | Pin   |
| Application                                    | Power   |
| Number of positions                            | 8   |
| Contact diameter of power contacts             | 2 mm  |
| Litz wire cross section of power contacts min. | 0.25 mm <sup>2</sup>  |
| Litz wire cross section of power contacts max. | 4 mm <sup>2</sup>   |
| Rated current for power contacts               | 30 A  |
| Note   | for max. connection cross section   |
| Rated voltage                                  | 630 V   |

# Coupler connector - M23-7EP198A9L24S - 1628782

## Technical data

### Data of the insulating body

|   |                                   |
|---|-----------------------------------|
| Rated surge voltage                             | 6 kV                              |
| Overvoltage category                            | III                               |
| Degree of pollution                             | 3                                 |
| Contact diameter of signal contacts             | 1 mm                              |
| Litz wire cross section of signal contacts min. | 0.06 mm <sup>2</sup>              |
| Litz wire cross section of signal contacts max. | 1 mm <sup>2</sup>                 |
| Nominal current per signal contact              | 9 A                               |
| Note  | for max. connection cross section |
| Rated voltage of signal contact                 | 250 V                             |
| Rated surge voltage                             | 4 kV                              |
| Overvoltage category                            | III                               |
| Degree of pollution                             | 3                                 |
| Note  | for max. connection cross section |
| Installation height                             | 3000 m                            |

### Housing data

|  |   |
|--|---|
| Housing material                       | GD-Zn   |
| Type of locking                        | for standard and ONECLICK fast locking system |
| Degree of protection (when plugged in) | IP66 / IP68 (2 m / 24 h)                      |
| Thread type                            | M23   |

### Cable seal data

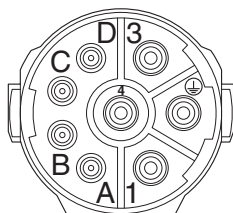
|                  |                    |
|------------------|--------------------|
| Cable diameter   | 9.5 mm ... 14.5 mm |
| Sealing material | FKM                |

### Environmental Product Compliance

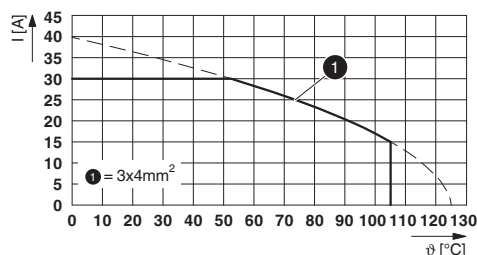
|            |   |
|------------|---|
| China RoHS | Environmentally friendly use period: unlimited = EFUP-e |
|            | No hazardous substances above threshold values          |

## Drawings

Schematic diagram



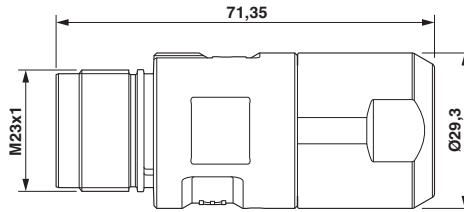
Diagram



I = current strength, T = ambient temperature

# Coupler connector - M23-7EP198A9L24S - 1628782

Dimensional drawing



Dimensional drawing

## Classifications

eCl@ss

|               |          |
|---------------|----------|
| eCl@ss 10.0.1 | 27440102 |
| eCl@ss 11.0   | 27440102 |
| eCl@ss 9.0    | 27440102 |

ETIM

|          |          |
|----------|----------|
| ETIM 7.0 | EC002635 |
|----------|----------|

UNSPSC

|             |          |
|-------------|----------|
| UNSPSC 18.0 | 39121413 |
| UNSPSC 19.0 | 39121413 |
| UNSPSC 20.0 | 39121413 |
| UNSPSC 21.0 | 39121413 |

## Approvals

Approvals

Approvals

UL Listed / cUL Listed / cULus Listed

Ex Approvals

## Approval details

|                    |       |  |
|--------------------|-------|--|
| UL Listed          |       | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> E468743-20190627 |
| Nominal voltage UN | 600 V |  |
| Nominal current IN | 24 A  |  |

# Coupler connector - M23-7EP198A9L24S - 1628782

## Approvals

|               |    |
|---------------|----|
| mm²/AWG/kcmil | 10 |
|---------------|----|

|                    |  |  |
|--------------------|--|--|
| cUL Listed         |  | <a href="http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm">http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm</a> E468743-20190627 |
| Nominal voltage UN |  | 600 V  |
| Nominal current IN |  | 20 A   |
| mm²/AWG/kcmil      |  | 10   |

|              |  |
|--------------|--|
| cULus Listed |  |
|--------------|--|

## Accessories

### Accessories

#### Crimp contact

Crimp contact - SF-20KP011 - 1050147



Crimp contact, turned, contact diameter: 2 mm, crimp range: 0.25 mm² ... 1 mm²

Crimp contact - SF-20KP012 - 1050205



Crimp contact

Crimp contact - SF-20KP013 - 1050210



Crimp contact

## Coupler connector - M23-7EP198A9L24S - 1628782

### Accessories

Crimp contact - ST-10KP010 - 1618255



Crimp contact, turned, Single contact, contact diameter: 1 mm, crimp range: 0.06 mm<sup>2</sup> ... 0.25 mm<sup>2</sup>

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Crimp contact - ST-10KP035 - 1618458



Crimp contact, turned, contact diameter: 1 mm, crimp range: 0.25 mm<sup>2</sup> ... 1 mm<sup>2</sup>

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### Protective cover

Protective cap - RC-Z2058 - 1604223



Plastic protection cap for connectors with M23 knurled nut

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Metal protective cap - SC-Z2319 - 1605456



Metal protection cap for power connectors with M23 external thread

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