

## Coupler connector - M23-7ES198A9L24S - 1628838

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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: Socket, 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	
GTIN	4055626763224
Weight per Piece (excluding packing)	22.220 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 phoenixcontact.com/products).</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 phoenixcontact.com/products 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	Socket
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

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## 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

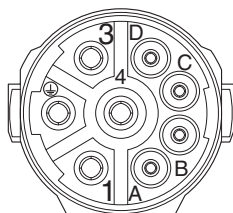
Cable diameter	9.5 mm ... 14.5 mm
Sealing material	FKM

### Environmental Product Compliance

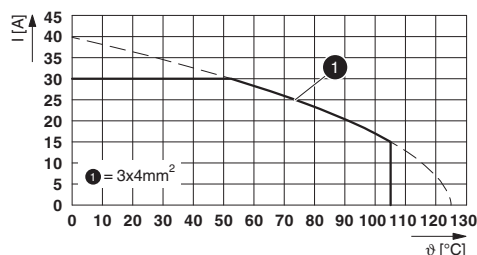
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

## Drawings

Schematic diagram



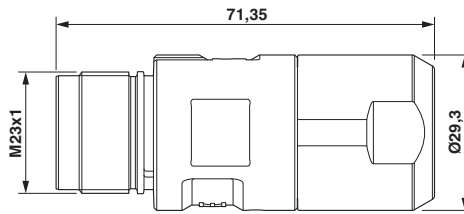
Diagram



I = current strength, T = ambient temperature

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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
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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	

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### Approvals

mm <sup>2</sup> /AWG/kcmil	10
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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
mm <sup>2</sup> /AWG/kcmil		10

cULus Listed	
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### Accessories

#### Accessories

#### Crimp contact

Crimp contact - SF-20KS021 - 1621576



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

Crimp contact - SF-20KS022 - 1621577



Crimp contact, turned, contact diameter: 2 mm, crimp range: 1.5 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>

Crimp contact - SF-20KS023 - 1621578



Crimp contact, turned, contact diameter: 2 mm, crimp range: 2.5 mm<sup>2</sup> ... 4 mm<sup>2</sup>

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### Accessories

Crimp contact - ST-10KS010 - 1618239



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-10KS035 - 1618464



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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