

Coupler connector - M23-1RP1N8A90DUS - 1629096

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Coupler connector, M23 PRO, straight, shielded: yes, for standard and ONECLICK fast locking system, M23, No. of pos.: 16+2+PE, Direction of rotation: Standard, type of contact: Pin, Crimp connection, cable diameter range: 3 mm ... 15 mm, coding:N

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	 4 0 5 5 6 2 6 7 6 2 3 3 3
GTIN	4055626762333
Weight per Piece (excluding packing)	115.500 g
Custom tariff number	85366990
Sales Key	ABRBHI

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.

Coupler connector - M23-1RP1N8A90DUS - 1629096

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

Data of the 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
Insulator material	PA 6.6
Contact connection method	Crimp connection
Type of contacts	Pin
Application	Signal
Number of positions	19
Direction of rotation	Standard
Contact diameter of power contacts	1.5 mm
Litz wire cross section of power contacts min.	0.08 mm ²
Litz wire cross section of power contacts max.	1 mm ²
Rated current for power contacts	10 A

Coupler connector - M23-1RP1N8A90DUS - 1629096

Technical data

Data of the insulating body

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 of signal contacts	1 mm
Litz wire cross section of signal contacts min.	0.08 mm ²
Litz wire cross section of signal contacts max.	1 mm ²
Nominal current per signal contact	8 A
Note	for max. connection cross section
Rated voltage of signal contact	150 V
Overvoltage category	II
Degree of pollution	3
Note	for max. connection cross section
Installation height	2000 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

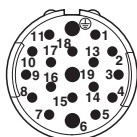
Cable diameter	3 mm ... 15 mm (Universal gasket)
Sealing material	FKM

Environmental Product Compliance

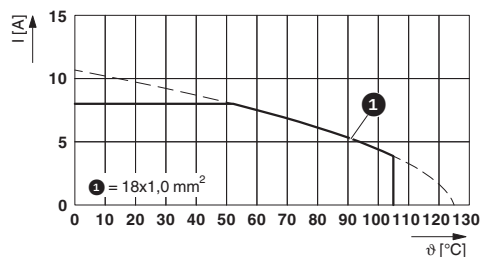
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Schematic diagram



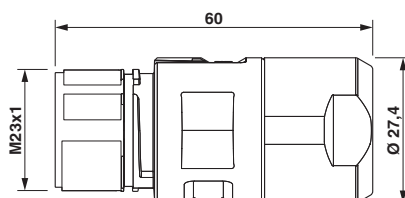
Diagram



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

Coupler connector - M23-1RP1N8A90DUS - 1629096

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 Recognized / cUL Recognized / cULus Recognized

Ex Approvals


Approval details


UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E335019-20141210
Nominal voltage UN	150 V	
Nominal current IN	8 A	

Coupler connector - M23-1RP1N8A90DUS - 1629096

Approvals

mm²/AWG/kcmil	18

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm E335019-20141210
Nominal voltage UN		150 V
Nominal current IN		5 A
mm²/AWG/kcmil		18

cULus Recognized	
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Accessories

Accessories

Crimp contact

Crimp contact - RC-15P2000 - 1623779



Crimp contact, turned, contact diameter: 1.5 mm, crimp range: 0.5 mm² ... 1 mm²

Crimp contact - RC-15P2010 - 1623776



Crimp contact, turned, contact diameter: 1 mm, crimp range: 0.08 mm² ... 0.22 mm²

Crimp contact - RC-15P2020 - 1623777



Crimp contact, turned, contact diameter: 1 mm, crimp range: 0.14 mm² ... 0.56 mm²

Coupler connector - M23-1RP1N8A90DUS - 1629096

Accessories

Crimp contact - RC-15P2030 - 1623778



Crimp contact, turned, contact diameter: 1 mm, crimp range: 0.5 mm² ... 1 mm²

Crimp contact - RC-15P2100 - 1623780



Crimp contact, leading (PE), turned, contact diameter: 1.5 mm, crimp range: 0.5 mm² ... 1 mm²

Crimp contact - RC-15P2200 - 1627292



Crimp contact, turned, contact diameter: 1.5 mm, crimp range: 0.08 mm² ... 0.22 mm²

Crimp contact - RC-15P2300 - 1627291



Crimp contact, turned, contact diameter: 1.5 mm, crimp range: 0.14 mm² ... 0.56 mm²

Protective cover

Protective cap - RC-Z2059 - 1604225



Plastic protection cap for connectors with M23 external thread

Coupler connector - M23-1RP1N8A90DUS - 1629096

Accessories

Metal protective cap - RC-Z2104 - 1604260



Metal protection cap for signal connectors with M23 external thread