

## Cable connector - ST-6ES1N8A8K03S - 1618631

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Cable connector, straight, SPEEDCON locking, M17, number of positions: 6+PE, type of contact: Socket, shielded: yes, cable diameter range: 5 mm ... 9.2 mm, number of positions: 7, connection method: Crimp connection


The figure shows the 4-position version

### Your advantages

- ✓ Reduced size: ideal for compact devices
- ✓ Consistent EMC protection for reliable connection solutions in the industrial environment
- ✓ Crimping connection: vibration- and temperature-resistant assembly
- ✓ Flexible use: reliably connect various cable diameters



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 046356 807210
GTIN	4046356807210

### Technical data

#### General

Note	Order information: Order crimp contacts Ø 1 mm separately
Type of locking	SPEEDCON locking
Direction of rotation of contact chamber numbering	Standard
Coding	N
Contact connection method	Crimp connection
Type of contacts	Socket
Number of positions	7
Contact diameter of power contacts	1 mm
Rated current for power contacts	14 A
Contact diameter of signal contacts	1 mm
Conductor entry	5 mm ... 9.2 mm

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## Technical data

### General

Pg housing screw connection	none
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### Ambient conditions

Ambient temperature	-40 °C ... 125 °C
Degree of protection	IP67

### Specifications according to DIN EN 61984:2001

Installation height max.	3000 m
Nominal / operating voltage of power contacts	630 V
Rated surge voltage of power contacts	6 kV
Overvoltage category of power contacts	III
Degree of pollution of power contacts	3

### 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. 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 <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> ).
	• 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 <a href="https://www.phoenixcontact.com/products">phoenixcontact.com/products</a> 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.

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### Technical data

#### Standards and Regulations

	<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>

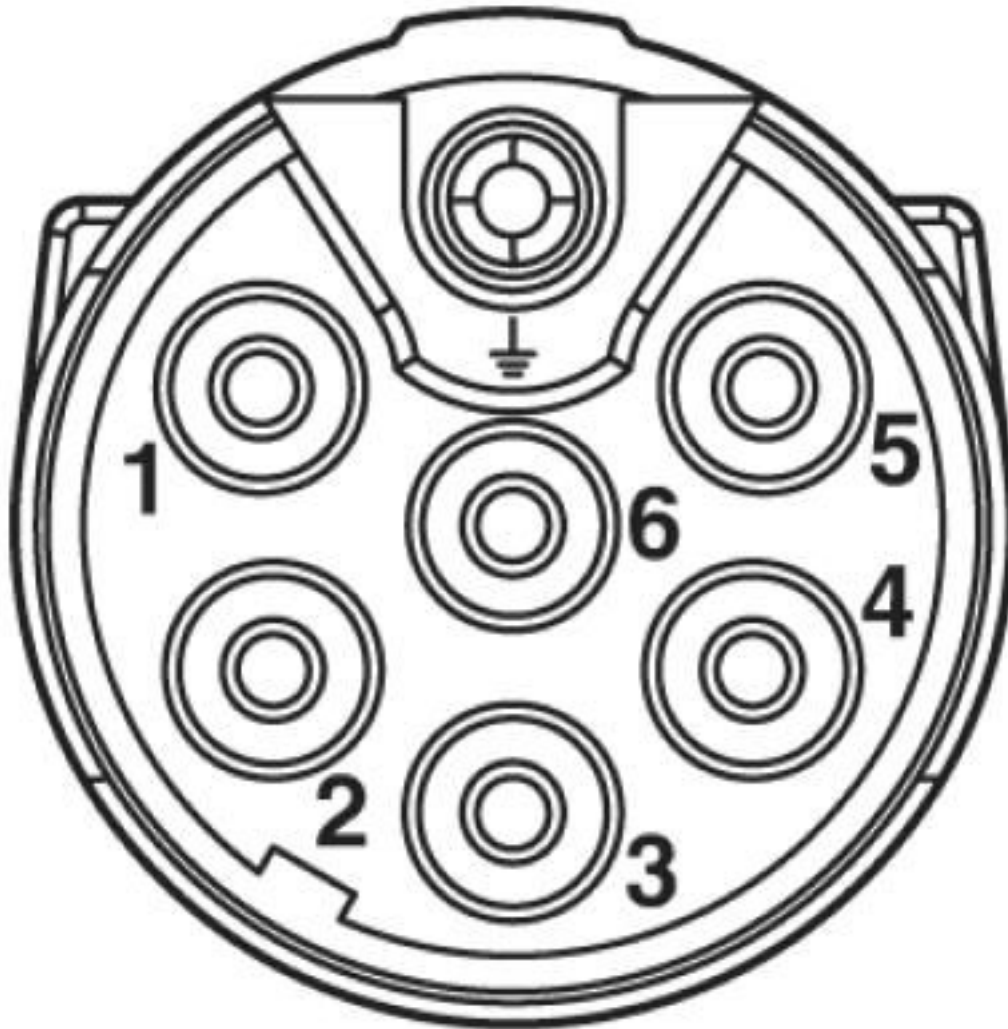
#### Environmental Product Compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

### Drawings

## Cable connector - ST-6ES1N8A8K03S - 1618631

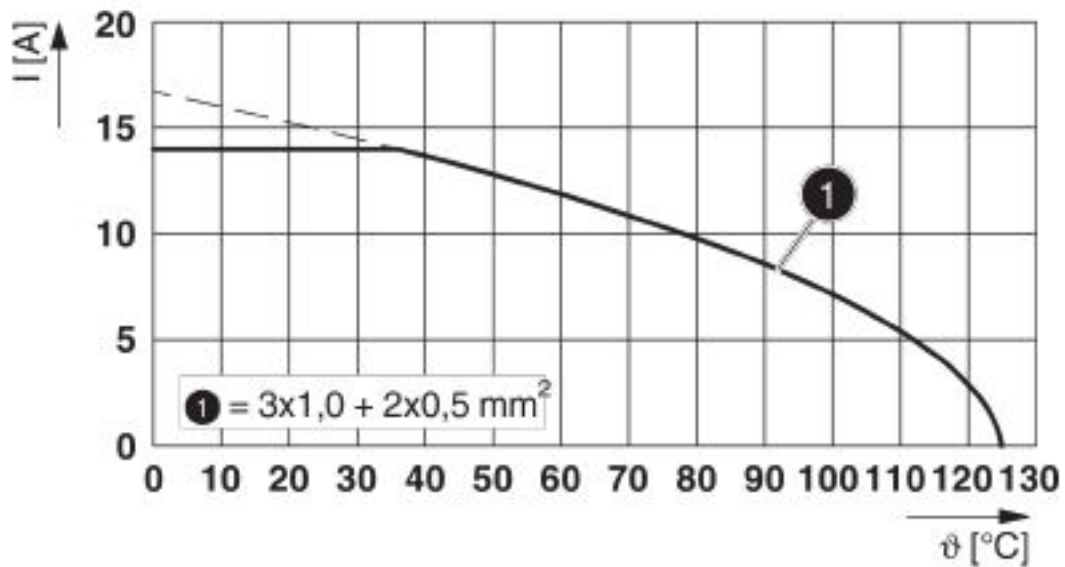
Schematic diagram



Connector pin assignment

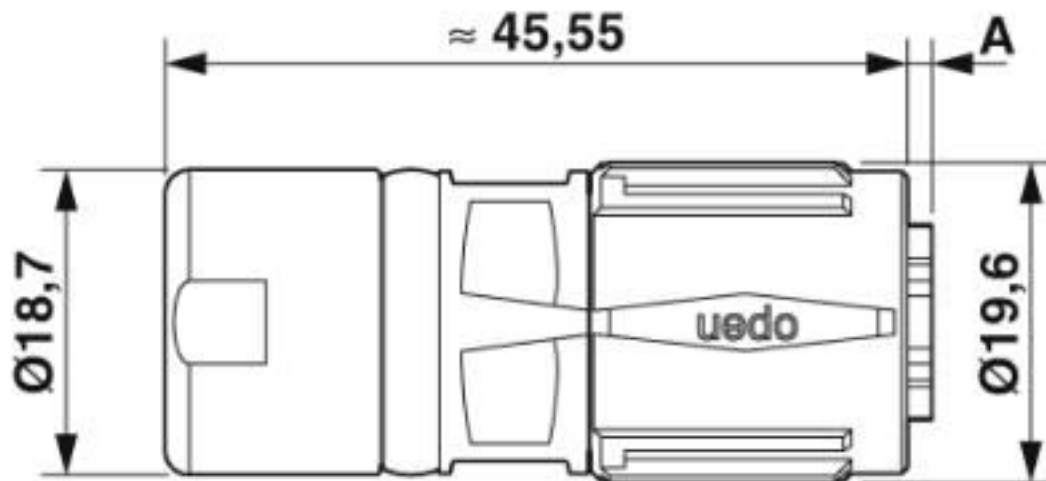
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Diagram



$I$  = current strength,  $\theta$  = ambient temperature, 3x 14 A + 2x 2 A constant

Dimensional drawing



### Classifications

eCl@ss

eCl@ss 10.0.1	27440102
eCl@ss 4.0	27260700
eCl@ss 4.1	27260700
eCl@ss 5.0	27260700
eCl@ss 5.1	27260700
eCl@ss 6.0	27260700

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### Classifications

#### eCl@ss

eCl@ss 7.0	27440102
eCl@ss 8.0	27440102
eCl@ss 9.0	27440102

#### ETIM

ETIM 3.0	EC001121
ETIM 4.0	EC002635
ETIM 5.0	EC002635
ETIM 6.0	EC002061

#### UNSPSC

UNSPSC 6.01	43172015
UNSPSC 7.0901	43201404
UNSPSC 11	43172015
UNSPSC 12.01	43201404
UNSPSC 13.2	39121413
UNSPSC 18.0	39121413
UNSPSC 19.0	39121413
UNSPSC 20.0	39121413
UNSPSC 21.0	39121413

### Approvals


#### Approvals

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UL Recognized / cUL Recognized / EAC / cULus Recognized


#### Ex Approvals

#### Approval details


UL Recognized		<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>	FILE E 335019
Nominal voltage UN	600 V		
Nominal current IN	6 A		
mm²/AWG/kcmil	18		

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EAC		B.01687
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cULus Recognized	
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### Accessories

#### Accessories

##### Crimp contact

Crimp contact - ST-10KS010 - 1618239



Crimp contact, turned, Single contact, contact diameter: 1 mm, crimp range: 0.06 mm² ... 0.25 mm²

Crimp contact - ST-10KS035 - 1618464



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

### Mounting material

Color-coding - ST-Z0017 - 1618049



Color-coding, color: orange

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### Accessories

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Color-coding - ST-Z0018 - 1618050



Color-coding, color: black

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Color-coding - ST-Z0016 - 1617993



Color-coding, color: green

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### Protective cover

Protective cap - ST-Z0024 - 1621904



Plastic protection cap for connectors with M17 compact knurled nut and M17 compact SPEEDCON knurled nut

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