

# ST-3ES1N8AAD00S - Device connector front mounting



1607691

<https://www.phoenixcontact.com/us/products/1607691>

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Device connector front mounting, angled rotatable, SPEEDCON, M17, number of positions: 3+PE, contact connection type: Socket, Axial O-ring, 4x Ø2,7, shielded: yes, flange dimensions: 21.6 mm x 21.6 mm, degree of protection: IP67, number of positions: 4, connection method: Crimp connection, series: ST

## Commercial data

Item number	1607691
Packing unit	16 pc
Minimum order quantity	16 pc
Note	Made to order (non-returnable)
Sales key	AB32
Product key	ABRBEM
GTIN	4046356273961
Weight per piece (including packing)	89.25 g
Weight per piece (excluding packing)	0.46 g
Customs tariff number	85366990
Country of origin	DE

## Technical data

### Notes

Order information:	Order 4 x Ø 2 mm crimp contacts separately
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### 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"> <li>• 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.</li> </ul>
	<ul style="list-style-type: none"> <li>• 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.</li> </ul>
	<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</li> </ul>	

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warnings (e.g. DIN EN ISO 13732-1:2008-12).

## Mounting

Mounting type	Front mounting
Mounting	4x Ø2,7

## Product properties

Product type	Circular connectors (device side)
Series	ST
Application	Power
Number of positions	4
Connection profile	3+PE
Shielded	yes
Coding	N
Thread type	M17

## Dimensions

### Housing

Flange dimensions	21.6 mm x 21.6 mm
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## Material specifications

Seal material	FPM
Housing material	Metal
Housing material	Turned parts: copper zinc alloy (CuZn), die-cast parts: zinc (GD-Zn)
Insulator material	PA 6.6
Gasket and O-ring material	FPM

## Electrical properties

### Contact

Contact diameter	2 mm
Max. current	20 A
Nominal voltage $U_N$	630 V
Overvoltage category	III
Degree of pollution	3
Rated surge voltage	6 kV

### Contact

Contact diameter	2 mm
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## Connection data

### Conductor connection

Connection method	Crimp connection
Contact connection type	Socket

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## Connector

Type	angled rotatable
Direction of rotation	Standard

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP67
Ambient temperature (operation)	-40 °C ... 125 °C
Altitude	3000 m

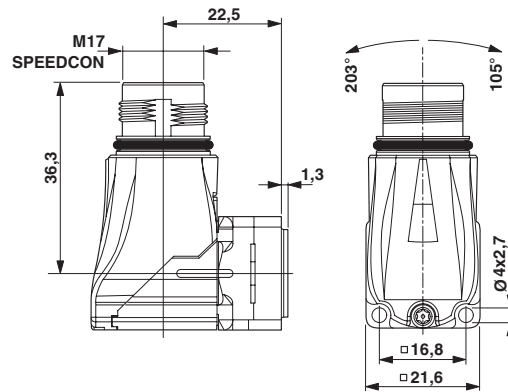
# ST-3ES1N8AAD00S - Device connector front mounting

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<https://www.phoenixcontact.com/us/products/1607691>

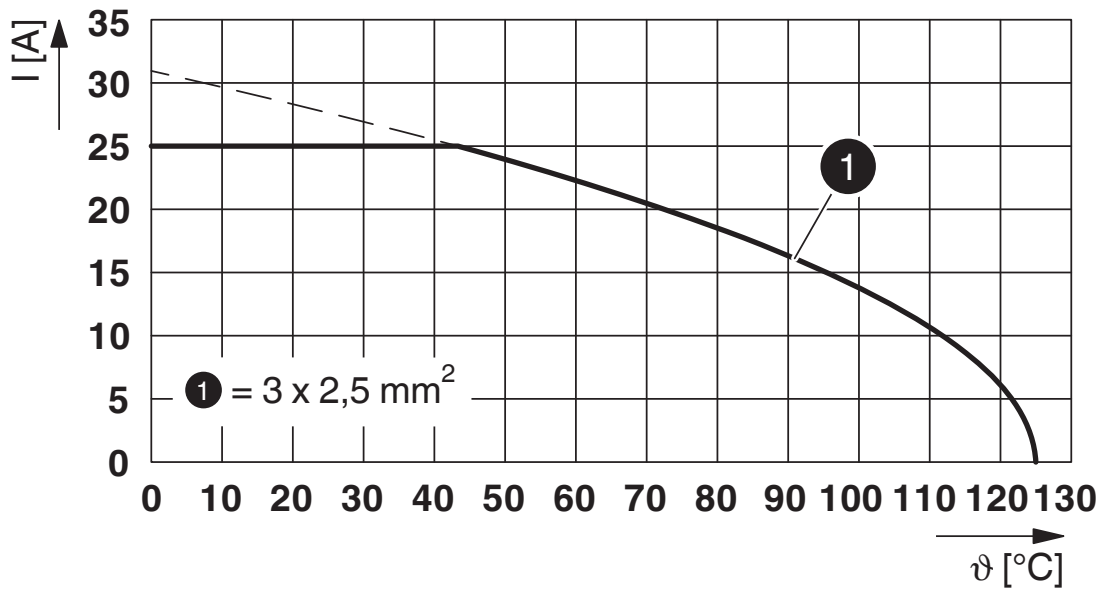
## Drawings

Dimensional drawing



Dimensional drawing

Diagram



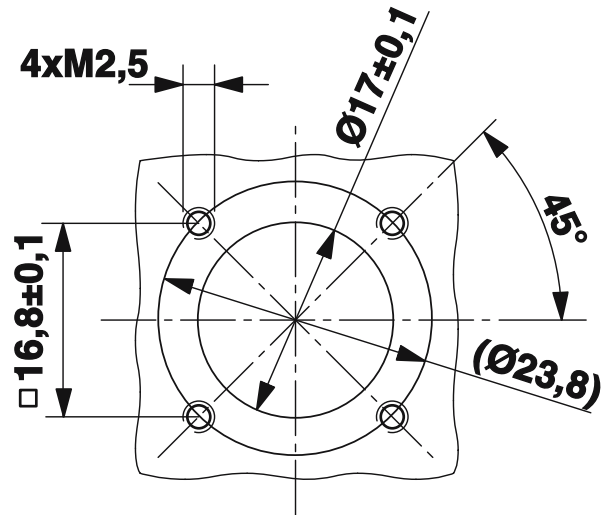
$I$  = current strength,  $\vartheta$  = ambient temperature, 3x 25 A

# ST-3ES1N8AAD00S - Device connector front mounting

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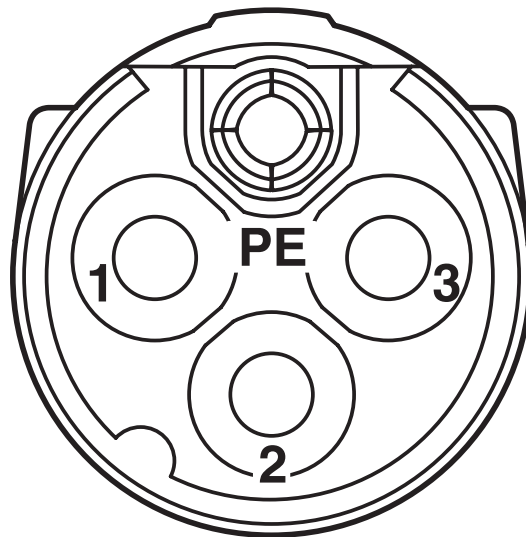
<https://www.phoenixcontact.com/us/products/1607691>

Dimensional drawing



Installation dimensions

Schematic diagram



Connector pin assignment

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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1607691>



**cUL Recognized**  
Approval ID: E335019-20111129



**UL Recognized**  
Approval ID: E335019-20111129



**UL Listed**  
Approval ID: E468743-20210825

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Power	600 V	20 A	-	14 - 14



**cUL Listed**  
Approval ID: E468743-20210825

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
Power	600 V	18 A	14 - 14	-



**UL Recognized**  
Approval ID: E153698-20140124



**cUL Recognized**  
Approval ID: E153698-20140124

**cULus Listed**

1607691

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## Classifications

### ECLASS

ECLASS-11.0	27440109
ECLASS-12.0	27440109
ECLASS-13.0	27440109

### ETIM

ETIM 9.0	EC003569
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### UNSPSC

UNSPSC 21.0	39121400
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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## Accessories

### ST-20KS010 - Crimp contact

1607657

<https://www.phoenixcontact.com/us/products/1607657>



Crimp contact, Socket, turned, contact diameter: 2 mm, crimp range: 0.25 mm<sup>2</sup> .. 1 mm<sup>2</sup>, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1237423

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### ST-20KS020 - Crimp contact

1607658

<https://www.phoenixcontact.com/us/products/1607658>



Crimp contact, Socket, turned, Single contact, contact diameter: 2 mm, crimp range: 1 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1237423

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## ST-Z0019 - Color coding

1620621

<https://www.phoenixcontact.com/us/products/1620621>

Color coding, color: green



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## ST-Z0020 - Color coding

1620622

<https://www.phoenixcontact.com/us/products/1620622>

Color coding, color: orange



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## ST-Z0021 - Color coding

1620623

<https://www.phoenixcontact.com/us/products/1620623>

Color coding, color: black



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## ST-Z0014 - Metal protective cap

1616069

<https://www.phoenixcontact.com/us/products/1616069>



Metal protective cap, M17, degree of protection: IP67, series: ST, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1243010

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## ST-Z0013 - Metal protective cap

1616068

<https://www.phoenixcontact.com/us/products/1616068>

Metal protective cap, M17, degree of protection: IP67, series: ST, Alternative product in accordance with RoHS II without Exemption 6c (Pb < 0.1 %) item no.: 1243009



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## PROT-M17PRO-OT-IP20 - Plastic protective cap

1055708

<https://www.phoenixcontact.com/us/products/1055708>

Plastic protective cap, M17, degree of protection: IP20, series: M17 PRO



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