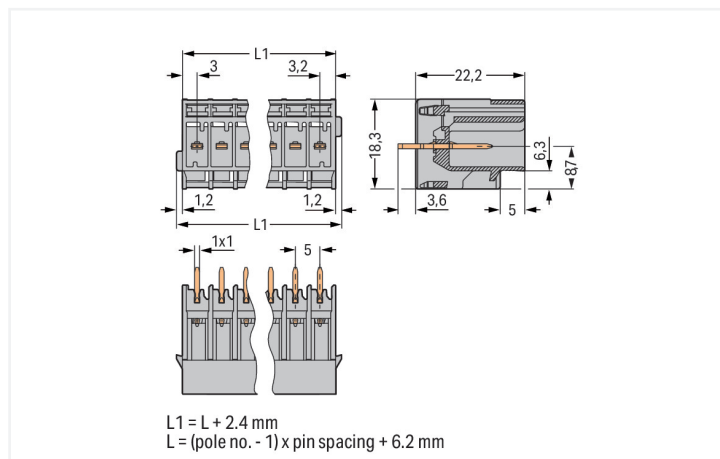


<https://www.wago.com/769-643>



Dimensions in mm



Our male connector (item number 769-643) is designed for seamless electrical installations.

THT is used to solder the pcb connector.

### Ratings per IEC/EN

|                                           |                                                           |
|-------------------------------------------|-----------------------------------------------------------|
| Nominal voltage (III/3)                   | 250 V                                                     |
| Rated impulse withstand voltage (III / 3) | 4 kV                                                      |
| Rated voltage (III/2)                     | 500 V                                                     |
| Rated impulse withstand voltage (III/2)   | 4 kV                                                      |
| Rated current                             | 32 A                                                      |
| Legend (ratings)                          | (III / 3) ≙ Overvoltage category III / Pollution degree 3 |

|                            |    |
|----------------------------|----|
| Total number of potentials | 13 |
| Number of levels           | 1  |
| Preceding contacts         | No |

| Connection 1 |    |
|--------------|----|
| Pole number  | 13 |

**Physical data**

|                         |                        |
|-------------------------|------------------------|
| Pin spacing             | 5 mm / 0.197 inches    |
| Width                   | 68.6 mm / 2.701 inches |
| Height from the surface | 22.2 mm / 0.874 inches |
| Depth                   | 18.3 mm / 0.72 inches  |

**Mechanical data**

|                          |     |
|--------------------------|-----|
| Variable coding          | Yes |
| Mounting type            | PCB |
| Anti-rotation protection | Yes |

**Plug-in connection**

|                                    |                     |
|------------------------------------|---------------------|
| Contact type (pluggable connector) | Male connector/plug |
| Connector (connection type)        | for PCB             |
| Mismating protection               | No                  |
| Mating direction to the PCB        | 90 °                |

**PCB contact**

|             |     |
|-------------|-----|
| PCB contact | THT |
|-------------|-----|

**Material data**

|                                    |                                                                          |
|------------------------------------|--------------------------------------------------------------------------|
| Note (material data)               | <a href="#">Information on material specifications can be found here</a> |
| Color                              | gray                                                                     |
| Material group                     | I                                                                        |
| Insulation material (main housing) | Polyamide (PA66)                                                         |
| Flammability class per UL94        | V0                                                                       |
| Fire load                          | 0.276 MJ                                                                 |
| Weight                             | 13.1 g                                                                   |

**Environmental requirements**

|                                  |                 |
|----------------------------------|-----------------|
| Processing temperature           | -35 ... +85 °C  |
| Continuous operating temperature | -60 ... +105 °C |

**Commercial data**

|                       |                   |
|-----------------------|-------------------|
| Product Group         | 18 (X-COM-System) |
| PU (SPU)              | 25 pcs            |
| Packaging type        | Box               |
| Country of origin     | PL                |
| GTIN                  | 4017332602655     |
| Customs tariff number | 85366930000       |



| Product Classification |  |                      |
|------------------------|--|----------------------|
| UNSPSC                 |  | 39121409             |
| eCl@ss 10.0            |  | 27-44-04-02          |
| eCl@ss 9.0             |  | 27-44-04-02          |
| ETIM 9.0               |  | EC002637             |
| ETIM 10.0              |  | EC002637             |
| ECCN                   |  | NO US CLASSIFICATION |

| Environmental Product Compliance |  |                         |
|----------------------------------|--|-------------------------|
| RoHS Compliance Status           |  | Compliant, No Exemption |

Approvals / Certificates

General approvals



| Approval                              | Standard  | Certificate Name |
|---------------------------------------|-----------|------------------|
| CCA<br>DEKRA Certification B.V.       | EN 60947  | NTR NL-7626      |
| CCA<br>DEKRA Certification B.V.       | EN 61984  | 2190419.02       |
| CCA<br>DEKRA Certification B.V.       | IEC 61984 | NL-47799/A1      |
| CSA<br>CSA Group                      | C22.2     | 1101144          |
| KEMA/KEUR<br>DEKRA Certification B.V. | EN 60947  | 2190419.01       |
| UL<br>Underwriters Laboratories Inc.  | UL 1059   | E45172           |
| UL<br>Underwriters Laboratories Inc.  | UL 1977   | E 45171          |

Declarations of conformity and manufacturer's declarations



| Approval                                                | Standard | Certificate Name |
|---------------------------------------------------------|----------|------------------|
| EU-Declaration of Confor-<br>mity<br>WAGO GmbH & Co. KG | -        | -                |
| Railway<br>WAGO GmbH & Co. KG                           | -        | Z00004428.000    |

Approvals for marine applications



| Approval                                              | Standard | Certificate Name  |
|-------------------------------------------------------|----------|-------------------|
| DNV GL<br>Det Norske Veritas, Ger-<br>manischer Lloyd | -        | TAE00001V2        |
| PRS<br>Polski Rejestr Statków                         | -        | TE/1094/880590/23 |



Downloads

Environmental Product Compliance

|                                          |  |  |  |
|------------------------------------------|--|--|--|
| Compliance Search                        |  |  |  |
| Environmental Product Compliance 769-643 |  |  |  |

Documentation

|          |            |                 |  |
|----------|------------|-----------------|--|
| Bid Text |            |                 |  |
| 769-643  | 19.02.2019 | xml<br>2.96 KB  |  |
| 769-643  | 04.10.2017 | doc<br>24.50 KB |  |

CAD/CAE-Data

|                      |  |
|----------------------|--|
| CAD data             |  |
| 2D/3D Models 769-643 |  |

|                      |  |
|----------------------|--|
| CAE data             |  |
| ZUKEN Portal 769-643 |  |

|                                                  |  |
|--------------------------------------------------|--|
| PCB Design                                       |  |
| Symbol and Footprint via SamacSys 769-643        |  |
| Symbol and Footprint via Ultra Librarian 769-643 |  |

1 Compatible Products

1.1 System counterpart

1.1.1 Female connector/socket



[Item No.: 769-113](#)  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 13-pole; coding finger; 4,00 mm²; gray

[Item No.: 769-113/021-000](#)  
1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 13-pole; coding finger; Lateral locking levers; 4,00 mm²; gray

[Item No.: 769-133](#)  
2-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 13-pole; coding finger; 4,00 mm²; gray

## 1.2 Optional Accessories

### 1.2.1 Coding

### 1.2.1.1 Coding



Item No.: 769-435

Coding pin; for coding of female plugs; for carrier terminal blocks / male connectors; orange

### 1.2.2 Marking

### 1.2.2.1 Marking strip

Item No.: 210-833

Marking strips; 25 m on roll; 6 mm wide;  
plain; Self-adhesive; white



Item No.: 210-831

Marking strips; on reel; 2.3 mm wide;  
plain; Self-adhesive; white



Item No.: 210-832

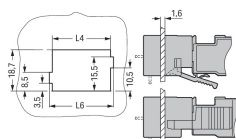
Marking strips; on reel; 3 mm wide; plain;  
Self-adhesive; white

Item No.: 210-834

Marking strips; on reel; 5 mm wide; plain;  
Self-adhesive; white

## Installation Notes

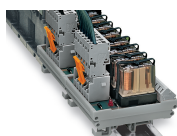
## Installation



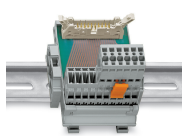
L6 = L4 + 2.6 mm  
L4 = pole no. x pin spacing + 1.7 mm

Cutout  
Male headers with solder pins

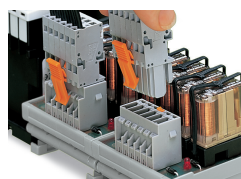
## Application



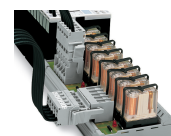
Male headers with straight solder pins and 1-conductor female plugs (picture shows a relay module)



Male headers with solder pins for printed circuit boards



Pluggable PCB connection  
Connection to a relay module inside the  
switchgear cabinet



Male headers with solder pins  
Integrating PCB components into the sys-  
tem wiring.