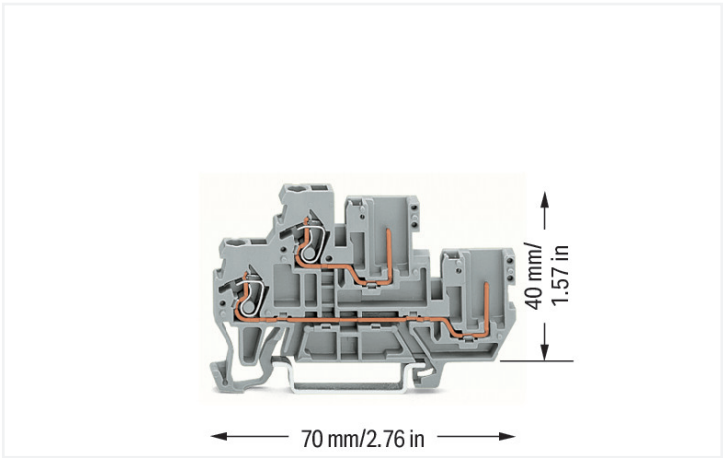


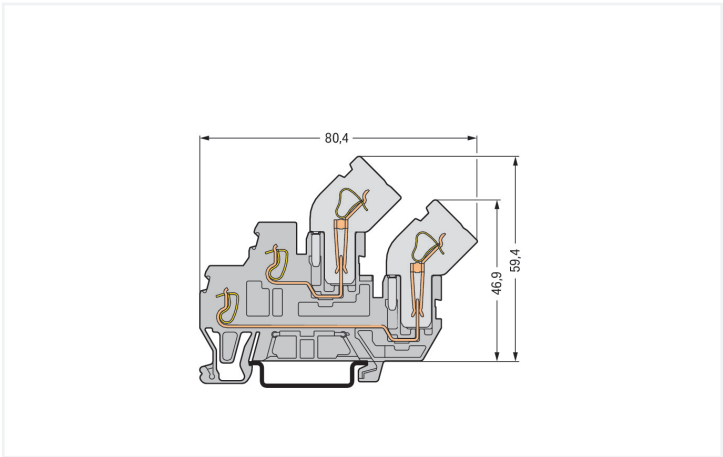
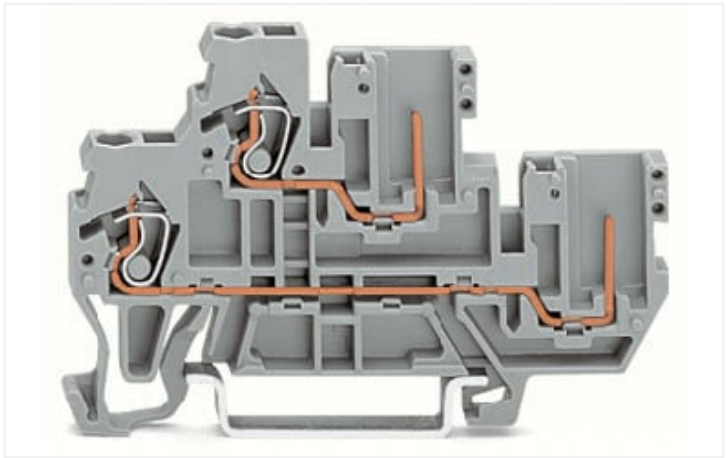
Data Sheet | Item Number: 870-101

1-conductor/1-pin double deck receptacle terminal block; Through/through terminal block; 2.5 mm²; L/L; for DIN-rail 35 x 15 and 35 x 7.5; CAGE CLAMP®; 2,50 mm²; gray

<https://www.wago.com/870-101>



Color: ■ gray



Carrier terminal block

| Notes                |                                          |
|----------------------|------------------------------------------|
| Safety information   | Max. insulation diameter: 4.4 mm         |
| Safety information 2 | 2-conductor female plugs cannot be used. |

| Electrical data               |                                                           |                                                              |           |   |
|-------------------------------|-----------------------------------------------------------|--------------------------------------------------------------|-----------|---|
| Ratings per IEC/EN            |                                                           | Approvals per                                                |           |   |
| Nominal voltage (III/3)       | 500 V                                                     | UL 1059                                                      |           |   |
| Rated impulse voltage (III/3) | 6 kV                                                      | Use group                                                    | B         | C |
| Rated current                 | 16 A                                                      | Rated voltage                                                | -         | - |
| Legend (ratings)              | (III / 3) Δ Overvoltage category III / Pollution degree 3 | Rated current                                                | -         | - |
| Approvals per                 |                                                           | Power Loss                                                   |           |   |
| Use group                     | B                                                         | Power loss, per pole (potential)                             | 0.3405 W  |   |
| Rated voltage                 | -                                                         | Rated current I <sub>N</sub> for specified power loss        | 16 A      |   |
| Rated current                 | -                                                         | Resistance value for specified, current-dependent power loss | 0.00133 Ω |   |



| Connection data                                 |                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |             |                |                |                                 |        |                 |                                  |                         |                                |                                                 |                                  |              |                                   |                  |                    |
|-------------------------------------------------|-----------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|-------------|----------------|----------------|---------------------------------|--------|-----------------|----------------------------------|-------------------------|--------------------------------|-------------------------------------------------|----------------------------------|--------------|-----------------------------------|------------------|--------------------|
| Connection points                               | 2                                 | <div>Connection 1</div> <table><tr><td>Connection technology</td><td>CAGE CLAMP®</td></tr><tr><td>Actuation type</td><td>Operating tool</td></tr><tr><td>Connectable conductor materials</td><td>Copper</td></tr><tr><td>Solid conductor</td><td>0.08 ... 2.5 mm² / 28 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor</td><td>0.08 ... 4 mm² / 28 ... 12 AWG</td></tr><tr><td>Fine-stranded conductor; with insulated ferrule</td><td>0.08 ... 1.5 mm² / 28 ... 14 AWG</td></tr><tr><td>Strip length</td><td>6 ... 7 mm / 0.24 ... 0.28 inches</td></tr><tr><td>Wiring direction</td><td>Front-entry wiring</td></tr></table> | Connection technology | CAGE CLAMP® | Actuation type | Operating tool | Connectable conductor materials | Copper | Solid conductor | 0.08 ... 2.5 mm² / 28 ... 12 AWG | Fine-stranded conductor | 0.08 ... 4 mm² / 28 ... 12 AWG | Fine-stranded conductor; with insulated ferrule | 0.08 ... 1.5 mm² / 28 ... 14 AWG | Strip length | 6 ... 7 mm / 0.24 ... 0.28 inches | Wiring direction | Front-entry wiring |
| Connection technology                           | CAGE CLAMP®                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |             |                |                |                                 |        |                 |                                  |                         |                                |                                                 |                                  |              |                                   |                  |                    |
| Actuation type                                  | Operating tool                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |             |                |                |                                 |        |                 |                                  |                         |                                |                                                 |                                  |              |                                   |                  |                    |
| Connectable conductor materials                 | Copper                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |             |                |                |                                 |        |                 |                                  |                         |                                |                                                 |                                  |              |                                   |                  |                    |
| Solid conductor                                 | 0.08 ... 2.5 mm² / 28 ... 12 AWG  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |             |                |                |                                 |        |                 |                                  |                         |                                |                                                 |                                  |              |                                   |                  |                    |
| Fine-stranded conductor                         | 0.08 ... 4 mm² / 28 ... 12 AWG    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |             |                |                |                                 |        |                 |                                  |                         |                                |                                                 |                                  |              |                                   |                  |                    |
| Fine-stranded conductor; with insulated ferrule | 0.08 ... 1.5 mm² / 28 ... 14 AWG  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |             |                |                |                                 |        |                 |                                  |                         |                                |                                                 |                                  |              |                                   |                  |                    |
| Strip length                                    | 6 ... 7 mm / 0.24 ... 0.28 inches |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |             |                |                |                                 |        |                 |                                  |                         |                                |                                                 |                                  |              |                                   |                  |                    |
| Wiring direction                                | Front-entry wiring                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |             |                |                |                                 |        |                 |                                  |                         |                                |                                                 |                                  |              |                                   |                  |                    |
| Total number of potentials                      | 2                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |             |                |                |                                 |        |                 |                                  |                         |                                |                                                 |                                  |              |                                   |                  |                    |
| Number of levels                                | 2                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                       |             |                |                |                                 |        |                 |                                  |                         |                                |                                                 |                                  |              |                                   |                  |                    |

| Physical data                     |  |                      |
|-----------------------------------|--|----------------------|
| Width                             |  | 5 mm / 0.197 inches  |
| Height                            |  | 70 mm / 2.756 inches |
| Depth from upper-edge of DIN-rail |  | 40 mm / 1.575 inches |

| Mechanical data   |  |                 |
|-------------------|--|-----------------|
| Potential marking |  | L/L             |
| Design            |  | horizontal type |
| Mounting type     |  | DIN-35 rail     |
| Marking level     |  | Side marking    |

| Material data               |  |                                                                               |
|-----------------------------|--|-------------------------------------------------------------------------------|
| Note (material data)        |  | <a href="_blank">Information on material specifications can be found here</a> |
| Color                       |  | gray                                                                          |
| Material group              |  | I                                                                             |
| Insulation material         |  | Polyamide (PA66)                                                              |
| Flammability class per UL94 |  | V0                                                                            |
| Fire load                   |  | 0.193 MJ                                                                      |
| Weight                      |  | 9.1 g                                                                         |

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

| Commercial data       |  |               |
|-----------------------|--|---------------|
| eCl@ss 10.0           |  | 27-14-11-20   |
| eCl@ss 9.0            |  | 27-14-11-20   |
| ETIM 8.0              |  | EC000897      |
| ETIM 7.0              |  | EC000897      |
| PU (SPU)              |  | 50 pcs        |
| Packaging type        |  | Box           |
| Country of origin     |  | DE            |
| GTIN                  |  | 4045454004446 |
| Customs tariff number |  | 85366990990   |



| Environmental Product Compliance                                 |                   |                                                                                       |
|------------------------------------------------------------------|-------------------|---------------------------------------------------------------------------------------|
| RoHS Compliance Status                                           |                   | Compliant, No Exemption                                                               |
| Approvals / Certificates                                         |                   |                                                                                       |
| General approvals                                                |                   | Declarations of conformity and manufacturer's declarations                            |
| <div><div>CCA</div><div>KEMA<br/>EUR</div><div>cULus</div></div> |                   |                                                                                       |
| Approval                                                         | Standard          | Certificate Name                                                                      |
| CCA<br>DEKRA Certification B.V.                                  | EN 60947          | NTR NL 7468                                                                           |
| CCA<br>DEKRA Certification B.V.                                  | EN 60947          | 2189801.01                                                                            |
| cURus<br>UL International Germany GmbH                           | UL 1059           | E45172                                                                                |
| Approvals for marine applications                                |                   |                                                                                       |
| <div><div>ABS</div><div>LR</div></div>                           |                   |                                                                                       |
| Approval                                                         | Standard          | Certificate Name                                                                      |
| ABS<br>American Bureau of Ship-<br>ping                          | -                 | 20-HG1941090-PDA                                                                      |
| LR<br>Lloyds Register                                            | EN 60947          | 91/20112 (E9)                                                                         |
| Downloads                                                        |                   |                                                                                       |
| Environmental Product Compliance                                 |                   |                                                                                       |
| Compliance Search                                                |                   |                                                                                       |
| Environmental Product<br>Compliance 870-101                      |                   |    |
| Documentation                                                    |                   |                                                                                       |
| Additional Information                                           |                   | Bid Text                                                                              |
| Technical Section                                                | pdf<br>2142.18 KB |    |
|                                                                  |                   | 870-101                                                                               |
|                                                                  |                   | 19.02.2019                                                                            |
|                                                                  |                   | xml<br>3.20 KB                                                                        |
|                                                                  |                   |  |
|                                                                  |                   | 870-101                                                                               |
|                                                                  |                   | 04.10.2017                                                                            |
|                                                                  |                   | doc<br>24.50 KB                                                                       |
|                                                                  |                   |  |
| CAD/CAE-Data                                                     |                   |                                                                                       |



| CAD data                                                                                               |
|--------------------------------------------------------------------------------------------------------|
| 2D/3D Models 870-101  |

| CAE data                                                                                                      |
|---------------------------------------------------------------------------------------------------------------|
| EPLAN Data Portal 870-101  |
| WSCAD Universe 870-101     |
| ZUKEN Portal 870-101       |

| 1 Compatible Products         |
|-------------------------------|
| 1.1 System counterpart        |
| 1.1.1 Female connector/socket |



|                                                                                                                                                       |                                                                                                                                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>Item No.: 769-101/022-000</b><br>1-conductor female connector, angled; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 1-pole; coding finger; 4,00 mm²; gray | <b>Item No.: 769-101</b><br>1-conductor female connector; CAGE CLAMP®; 4 mm²; Pin spacing 5 mm; 1-pole; coding finger; 4,00 mm²; gray |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|

| 1.2 Required Accessories |
|--------------------------|
| 1.2.1 End plate          |
| 1.2.1.1 End plate        |



|                                                                          |                                                                            |
|--------------------------------------------------------------------------|----------------------------------------------------------------------------|
| <b>Item No.: 870-118</b><br>End and intermediate plate; 1 mm thick; gray | <b>Item No.: 870-119</b><br>End and intermediate plate; 1 mm thick; orange |
|--------------------------------------------------------------------------|----------------------------------------------------------------------------|

| 1.3 Optional Accessories |
|--------------------------|
| 1.3.1 Coding             |
| 1.3.1.1 Coding           |



|                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------|
| <b>Item No.: 769-435</b><br>Coding pin; for coding of female plugs; for carrier terminal blocks / male connectors; orange |
|---------------------------------------------------------------------------------------------------------------------------|

| 1.3.2 Cover |
|-------------|
|-------------|

### 1.3.2.1 Cover



**Item No.: 769-438**

Pin cover; with marker slot for miniature WSB; gray



**Item No.: 769-439**

Pin cover; with marker slot for miniature WSB; orange

### 1.3.3 DIN-rail

#### 1.3.3.1 Mounting accessories



**Item No.: 210-196**

Aluminum carrier rail; 35 x 8.2 mm; 1.6 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored



**Item No.: 210-198**

Copper carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; copper-colored



**Item No.: 210-508**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; galvanized; similar to EN 60715; silver-colored



**Item No.: 210-197**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; slopped; similar to EN 60715; silver-colored



**Item No.: 210-506**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; galvanized; similar to EN 60715; silver-colored



**Item No.: 210-114**

Steel carrier rail; 35 x 15 mm; 1.5 mm thick; 2 m long; unslopped; similar to EN 60715; silver-colored



**Item No.: 210-118**

Steel carrier rail; 35 x 15 mm; 2.3 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored



**Item No.: 210-115**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; according to EN 60715; "Hole width 18 mm; silver-colored



**Item No.: 210-112**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; according to EN 60715; "Hole width 25 mm; silver-colored



**Item No.: 210-504**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; slopped; galvanized; according to EN 60715; silver-colored



**Item No.: 210-113**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslopped; according to EN 60715; silver-colored



**Item No.: 210-505**

Steel carrier rail; 35 x 7.5 mm; 1 mm thick; 2 m long; unslopped; galvanized; according to EN 60715; silver-colored

### 1.3.4 Ferrule

#### 1.3.4.1 Ferrule



**Item No.: 216-321**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; insulated; electro-tin plated; yellow



**Item No.: 216-131**

Ferrule; Sleeve for 0.25 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-322**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / 22 AWG; insulated; electro-tin plated; light turquoise



**Item No.: 216-132**

Ferrule; Sleeve for 0.34 mm<sup>2</sup> / AWG 24; uninsulated; electro-tin plated



**Item No.: 216-221**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / 20 AWG; insulated; electro-tin plated; white



**Item No.: 216-121**

Ferrule; Sleeve for 0.5 mm<sup>2</sup> / AWG 22; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-222**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / 18 AWG; insulated; electro-tin plated; gray



**Item No.: 216-122**

Ferrule; Sleeve for 0.75 mm<sup>2</sup> / AWG 20; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-223**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; insulated; electro-tin plated; red



**Item No.: 216-123**

Ferrule; Sleeve for 1 mm<sup>2</sup> / AWG 18; uninsulated; electro-tin plated; silver-colored



**Item No.: 216-224**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; insulated; electro-tin plated; black



**Item No.: 216-124**

Ferrule; Sleeve for 1.5 mm<sup>2</sup> / AWG 16; uninsulated; electro-tin plated

### 1.3.5 Installation



1.3.5.1 Mounting accessories



**Item No.: 209-106**  
Mounting carrier; for isolated mounting on DIN 35 rails; gray



**Item No.: 249-116**  
Screwless end stop; 6 mm wide; for DIN-rail 35 x 15 and 35 x 7.5; gray

1.3.6 Insulation stop

1.3.6.1 Insulation stop



**Item No.: 280-470**  
Insulation stop; 0.08 - 0.2 mm² "s" (0.14 mm² "f-st"); 5 pieces/strip; white



**Item No.: 280-471**  
Insulation stop; 0.25 - 0.5 mm²; 5 pieces/strip; light gray



**Item No.: 280-472**  
Insulation stop; 0.75 - 1 mm²; 5 pieces/strip; black

1.3.7 Jumper

1.3.7.1 Jumper



**Item No.: 870-405/011-000**



**Item No.: 870-407/011-000**



**Item No.: 870-409/011-000**



**Item No.: 870-406/020-000**  
Delta jumper; insulated; light gray



**Item No.: 870-410**  
Jumper; 10-way; insulated; light gray



**Item No.: 870-402**  
Jumper; 2-way; insulated; light gray



**Item No.: 870-403**  
Jumper; 3-way; insulated; light gray



**Item No.: 870-404**  
Jumper; 4-way; insulated; light gray



**Item No.: 870-405**  
Jumper; 5-way; insulated; light gray



**Item No.: 870-406**  
Jumper; 6-way; insulated; light gray



**Item No.: 870-407**  
Jumper; 7-way; insulated; light gray



**Item No.: 870-408**  
Jumper; 8-way; insulated; light gray



**Item No.: 870-409**  
Jumper; 9-way; insulated; light gray



**Item No.: 870-440**  
Jumper; from 1 to 10; insulated; light gray



**Item No.: 870-433**  
Jumper; from 1 to 3; insulated; light gray



**Item No.: 870-434**  
Jumper; from 1 to 4; insulated; light gray



**Item No.: 870-435**  
Jumper; from 1 to 5; insulated; light gray

1.3.8 Marking

1.3.8.1 Group marker carrier



**Item No.: 870-182**  
Adaptor; gray



**Item No.: 870-183**  
Adaptor; gray



**Item No.: 870-184**  
Adaptor; gray



1.3.8.2 Marker



**Item No.: 2009-145**  
Mini-WSB Inline; for Smart Printer; 1700 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 248-501**  
Mini-WSB marking card; as card; not stretchable; plain; snap-on type; white



**Item No.: 793-5501**  
WMB marking card; as card; for terminal block width 5 - 17.5 mm; stretchable 5 - 5.2 mm; plain; snap-on type; white



**Item No.: 793-501**  
WMB marking card; as card; not stretchable; plain; snap-on type; white



**Item No.: 2009-115**  
WMB-Inline; for Smart Printer; 1500 pieces on roll; stretchable 5 - 5.2 mm; plain; snap-on type; white

1.3.8.3 Marker carrier



**Item No.: 2009-198**  
Adaptor; gray

1.3.9 Protective warning marker

1.3.9.1 Cover



**Item No.: 280-405**  
Protective warning marker; for 5 terminal blocks; with high-voltage symbol, black; yellow

1.3.10 Test and measurement

1.3.10.1 Testing accessories



**Item No.: 870-427**  
Spacer module; modular; bridging commoned terminal blocks; gray



**Item No.: 870-426**  
Tap-off module; modular; suitable for 870 Series terminal blocks with jumper slots in the current bar; gray



**Item No.: 870-425**  
Tap-off module; with anti-rotation protection; modular; suitable for 870 Series terminal blocks with jumper slots in the current bar; gray

1.3.11 Tool

1.3.11.1 Operating tool

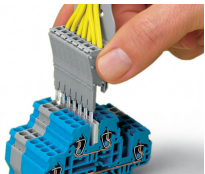


**Item No.: 210-720**  
Operating tool; Blade: 3.5 x 0.5 mm; with a partially insulated shaft; multicoloured

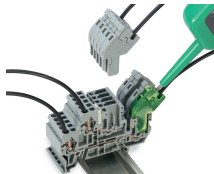
Installation Notes



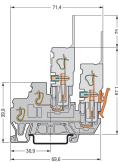
Commoning a double-deck through terminal block (870-501) with a 1-conductor/1-pin double-deck terminal block (870-101) via push-in type jumper bar.



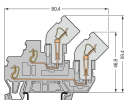
Testing is also possible using a pre-wired tap-off module assembly in the very same way as test plugs.



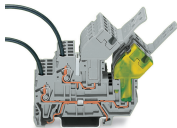
Testing with voltage tester.



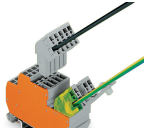
Carrier terminal block



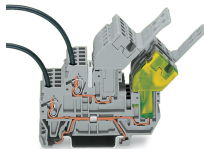
Carrier terminal block



Angled female plugs provide reduced installation height.



1-conductor/1-pin double-deck carrier terminal block  
1-conductor female plug, angled\*  
\*1-conductor straight female plug is also possible!



1-conductor female plug, angled  
Double-deck carrier terminal blocks can be commoned via 870 Series Push-In Type Jumper Bars.