

**AITB 2.5 BB N-L-PE DL****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**General ordering data**

|            |   |
|------------|---|
| Version    | Multi level installation terminal block, PUSH IN, 2.5 mm², 250 V, 24 A, Number of connections: 5, Number of levels: 3, dark beige |
| Order No.  | <a href="#">2782600000</a>  |
| Type       | AITB 2.5 BB N-L-PE DL   |
| GTIN (EAN) | 4064675058731   |
| Qty.       | 50 pc(s).   |

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**Technical data**
**Dimensions and weights**

|            |          |                 |            |
|------------|----------|-----------------|------------|
| Depth      | 50.1 mm  | Depth (inches)  | 1.972 inch |
| Height     | 103 mm   | Height (inches) | 4.055 inch |
| Width      | 5.1 mm   | Width (inches)  | 0.201 inch |
| Net weight | 19.375 g |                 |            |

**Temperatures**

|                                  |                |                                  |        |
|----------------------------------|----------------|----------------------------------|--------|
| Storage temperature              | -25 °C...55 °C | Continuous operating temp., min. | -60 °C |
| Continuous operating temp., max. | 130 °C         |                                  |        |

**Material data**

|                                |        |                           |            |
|--------------------------------|--------|---------------------------|------------|
| Material                       | Wemid  | Colour                    | dark beige |
| Colour of operational elements | orange | UL 94 flammability rating | V-0        |

**System specifications**

|                          |       |                                     |    |
|--------------------------|-------|-------------------------------------|----|
| End cover plate required | Yes   | Number of potentials                | 3  |
| Number of levels         | 3     | Number of clamping points per level | 2  |
| Rail                     | TS 35 | N-function                          | No |
| PE function              | Yes   | PEN function                        | No |

**Additional technical data**

|                  |         |         |     |
|------------------|---------|---------|-----|
| Open sides       | right   | Snap-on | Yes |
| Type of mounting | Snap-on |         |     |

**Conductors for clamping (rated connection)**

|  |  |      |                      |
|--|--|------|----------------------|
| Blade size   | 0.6 x 3.5 mm                           |      |                      |
| Clamping range, max.   | 4 mm <sup>2</sup>                      |      |                      |
| Clamping range, min.   | 0.14 mm <sup>2</sup>                   |      |                      |
| Connection cross-section, stranded, max.                         | 4 mm <sup>2</sup>                      |      |                      |
| Connection cross-section, stranded, min.                         | 0.5 mm <sup>2</sup>                    |      |                      |
| Connection direction   | top                                    |      |                      |
| Gauge to IEC 60947-1   | A3                                     |      |                      |
| Number of connections  | 5                                      |      |                      |
| Stripping length   | 10 mm                                  |      |                      |
| Tube length for twin wire-end ferrule                            | Tube length                            | max. | 12 mm                |
|  |  | min. | 8 mm                 |
|  | Cross-section for conductor connection | min. | 0.5 mm <sup>2</sup>  |
|  |  | max. | 0.75 mm <sup>2</sup> |
| Tube length for wire-end ferrule with plastic collar DIN 46228/4 | Cross-section for conductor connection | min. | 0.14 mm <sup>2</sup> |
|  |  | max. | 0.34 mm <sup>2</sup> |
|  | Tube length                            | max. | 8 mm                 |
|  |  | min. | 6 mm                 |
|  | Cross-section for conductor connection | min. | 0.5 mm <sup>2</sup>  |
|  |  | max. | 1 mm <sup>2</sup>    |
|  | Tube length                            | max. | 12 mm                |
|  |  | min. | 6 mm                 |
|  | Cross-section for conductor connection | min. | 1.5 mm <sup>2</sup>  |
|  |  | max. | 2.5 mm <sup>2</sup>  |
|  | Tube length                            | max. | 12 mm                |
|  |  | min. | 8 mm                 |

Creation date July 5, 2024 2:26:14 AM CEST

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## Technical data

|   |  |         |                      |
|---|--|---------|----------------------|
| Tube length for wire-end ferrule without plastic collar DIN 46228/1                     | Cross-section for conductor connection | nominal | 0.25 mm <sup>2</sup> |
|   | Tube length                            | nominal | 5 mm                 |
|   | Cross-section for conductor connection | min.    | 0.5 mm <sup>2</sup>  |
|   |  | max.    | 1 mm <sup>2</sup>    |
|   | Tube length                            | max.    | 10 mm                |
|   |  | min.    | 6 mm                 |
|   | Cross-section for conductor connection | min.    | 1.5 mm <sup>2</sup>  |
|   |  | max.    | 2.5 mm <sup>2</sup>  |
| Tube length   | max.                                   | 12 mm   |                      |
|   | min.                                   | 7 mm    |                      |
| Twin wire-end ferrules, max.  | 0.75 mm <sup>2</sup>                   |         |                      |
| Twin wire-end ferrules, min.  | 0.5 mm <sup>2</sup>                    |         |                      |
| Type of connection  | PUSH IN                                |         |                      |
| Wire connection cross section AWG, max.   | AWG 12                                 |         |                      |
| Wire connection cross section AWG, min.   | AWG 28                                 |         |                      |
| Wire connection cross section, finely stranded, max.                                    | 4 mm <sup>2</sup>                      |         |                      |
| Wire connection cross section, finely stranded, min.                                    | 0.5 mm <sup>2</sup>                    |         |                      |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/1, max. | 4 mm <sup>2</sup>                      |         |                      |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/1, min. | 0.5 mm <sup>2</sup>                    |         |                      |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 2.5 mm <sup>2</sup>                    |         |                      |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.5 mm <sup>2</sup>                    |         |                      |
| Wire connection cross-section, solid core, max.   | 4 mm <sup>2</sup>                      |         |                      |
| Wire connection cross-section, solid core, min.   | 0.5 mm <sup>2</sup>                    |         |                      |

## General

|   |        |   |                      |
|---|--------|---|----------------------|
| Rail                                    | TS 35  | Standards                               | IEC 60947-7-1 (-7-2) |
| Wire connection cross section AWG, max. | AWG 12 | Wire connection cross section AWG, min. | AWG 28               |

## Rating data

|  |                     |                                 |                      |
|--|---------------------|---------------------------------|----------------------|
| Rated cross-section                          | 2.5 mm <sup>2</sup> | Rated voltage                   | 250 V                |
| Rated DC voltage                             | 250 V               | Rated current                   | 24 A                 |
| Current at maximum wires                     | 27 A                | Standards                       | IEC 60947-7-1 (-7-2) |
| Volume resistance according to IEC 60947-7-x | 1.33 mΩ             | Rated impulse withstand voltage | 4 kV                 |
| Rated voltage (L / L)                        | 400 V               | Rated voltage (L / N)           | 250 V                |
| Rated voltage (L / PE)                       | 250 V               | Pollution severity              | 3                    |
| Surge voltage category                       | III                 |                                 |                      |

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## Technical data

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC001329    | ETIM 7.0    | EC001329    |
| ETIM 8.0    | EC001329    | ETIM 9.0    | EC001329    |
| ECLASS 9.0  | 27-14-11-25 | ECLASS 9.1  | 27-14-11-25 |
| ECLASS 10.0 | 27-14-11-25 | ECLASS 11.0 | 27-14-11-25 |
| ECLASS 12.0 | 27-14-11-25 | ECLASS 13.0 | 27-25-01-10 |

## Environmental Product Compliance

REACH SVHC /

## Approvals

Approvals



## Downloads

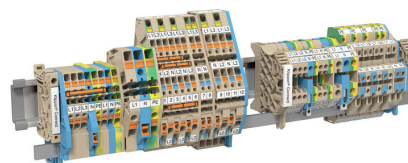
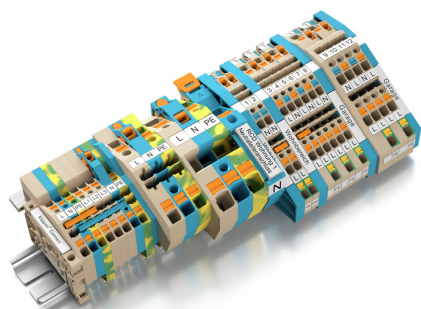
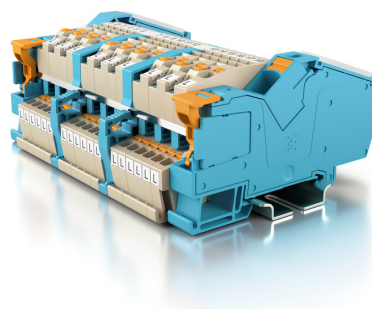
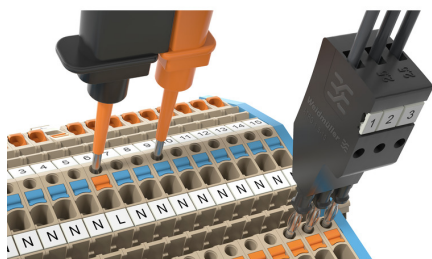
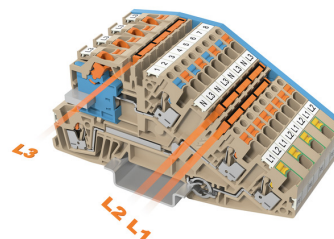
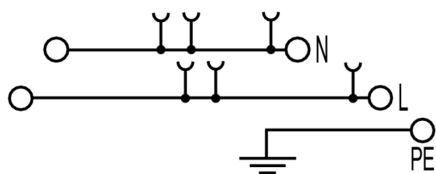
|   |  |
|---|--|
| Approval/Certificate/Document of Conformity | <a href="#">CE Declaration of Conformity</a> |
| Engineering Data                            | <a href="#">CAD data – STEP</a>              |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>     |

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# Drawings



## AITB 2.5 BB N-L-PE DL

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## Accessories

## Slotted screwdriver



VDE insulated screwdriver sets, for working on live parts up to 1000 V AC and 1500 V DC, DIN EN 60900. IEC 900. Each piece is "GS" safety tested. Blade made from fully hardened, high-alloy chromium-vanadium-molybdenum steel, gun-metal finish.

## General ordering data

|            |                            |   |
|------------|----------------------------|---|
| Type       | SDIS SLIM 0.6X3.5X100      | Version   |
| Order No.  | <a href="#">2749610000</a> | Mounting tool, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade |
| GTIN (EAN) | 4050118896350              | thickness (A): 0.6 mm   |
| Qty.       | 1 pc(s).                   |   |

## Copper



Of all the metals used, copper has the best electrical conductivity, which results in the highest short-circuit resistance. This makes the copper busbar the most widely used variant.

## General ordering data

|            |                            |                   |
|------------|----------------------------|-------------------|
| Type       | SSCH 10X3X1000 CU/SN       | Version           |
| Order No.  | <a href="#">0348900000</a> | Busbar (terminal) |
| GTIN (EAN) | 4008190024802              |                   |
| Qty.       | 1 m                        |                   |

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## Accessories

### Additional accessories



#### No task is too small when creating the perfect solution.

Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated.

A system is not a system without small but essential details:

- Test plugs ensure reliable pick-up from diagnostic sockets

In tandem with the manufacturing process and application.

### General ordering data

| Type       | PS 2.0 MC                  | Version  | Product data | Packaging |
|------------|----------------------------|--|--------------|-----------|
| Order No.  | <a href="#">0310000000</a> | PCB plug-in connector, Accessories, Test plug, red, Number of poles: 1 |              | Box       |
| GTIN (EAN) | 4008190000059              |  |              |           |
| Qty.       | 20 pc(s).                  |  |              |           |

### 16 mm<sup>2</sup>



#### Building installation wiring

For building installations, we offer a complete system that revolves around the 10×3 copper rail and comprises perfectly coordinated components: from installation terminal blocks, neutral conductor terminal blocks and distribution terminal blocks to comprehensive accessories such as busbars and busbar holders.

### General ordering data

| Type       | AITB 16 BB NLO BL          | Version  |
|------------|----------------------------|--|
| Order No.  | <a href="#">2669140000</a> | Multi level installation terminal block, PUSH IN, 16 mm², 1000 V, 76 |
| GTIN (EAN) | 4064675266372              | A, Number of connections: 2, Number of levels: 1, blue               |
| Qty.       | 20 pc(s).                  |  |

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## Accessories

## A-Series



## Building installation wiring

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## General ordering data

|            |                            |                     |
|------------|----------------------------|---------------------|
| Type       | APP ITB 2.5 BB BL          | Version             |
| Order No.  | <a href="#">2668970000</a> | A-series, End plate |
| GTIN (EAN) | 4064675030553              |                     |
| Qty.       | 20 pc(s).                  |                     |

## A-Series



Weidmüller's range of products includes end brackets that guarantee a permanent, reliable mounting on the terminal rail and prevent sliding. Versions with and without screws are available. The end brackets include marking options, also for group markers, and also a test plug holder.

## General ordering data

|            |                            |                       |
|------------|----------------------------|-----------------------|
| Type       | AEB 35 SCL/1 V0            | Version               |
| Order No.  | <a href="#">2661280000</a> | A-series, End bracket |
| GTIN (EAN) | 4050118702163              |                       |
| Qty.       | 20 pc(s).                  |                       |
| Type       | AEB 35 SCL/1 V0 GY         | Version               |
| Order No.  | <a href="#">2661290000</a> | A-series, End bracket |
| GTIN (EAN) | 4050118702170              |                       |
| Qty.       | 20 pc(s).                  |                       |
| Type       | AEB 35 SC/1                | Version               |
| Order No.  | <a href="#">1991920000</a> | A-series, End bracket |
| GTIN (EAN) | 4050118376722              |                       |
| Qty.       | 50 pc(s).                  |                       |
| Type       | AEB 35 SCL/1 V0 BK         | Version               |
| Order No.  | <a href="#">2661300000</a> | A-series, End bracket |
| GTIN (EAN) | 4050118702187              |                       |
| Qty.       | 20 pc(s).                  |                       |

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## Accessories

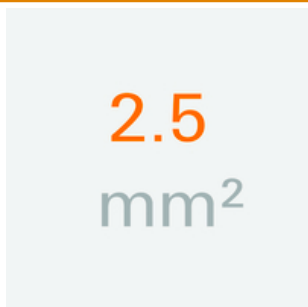
2.5 mm<sup>2</sup>

## Building installation wiring

For building installations, we offer a complete system that revolves around the 10×3 copper rail and comprises perfectly coordinated components: from installation terminal blocks, neutral conductor terminal blocks and distribution terminal blocks to comprehensive accessories such as busbars and busbar holders.

## General ordering data

|            |                            |                     |
|------------|----------------------------|---------------------|
| Type       | AEP ITB 2.5 BB             | Version             |
| Order No.  | <a href="#">2668960000</a> | A-series, End plate |
| GTIN (EAN) | 4064675030546              |                     |
| Qty.       | 20 pc(s).                  |                     |

2.5 mm<sup>2</sup>

The plug-in cross-connections feature easy handling and quick installation. This saves a great deal of time during installation in comparison with screwed solutions.

## General ordering data

|            |                            |  |
|------------|----------------------------|--|
| Type       | ZQV 2.5N/8                 | Version  |
| Order No.  | <a href="#">1527670000</a> | Cross-connector (terminal), Plugged, Number of poles: 8, Pitch in mm |
| GTIN (EAN) | 4050118448405              | (P): 5.10, Insulated: Yes, 24 A, orange                              |
| Qty.       | 20 pc(s).                  |  |
| Type       | ZQV 2.5N/7                 | Version  |
| Order No.  | <a href="#">1527640000</a> | Cross-connector (terminal), Plugged, Number of poles: 7, Pitch in mm |
| GTIN (EAN) | 4050118448412              | (P): 5.10, Insulated: Yes, 24 A, orange                              |
| Qty.       | 20 pc(s).                  |  |
| Type       | ZQV 2.5N/9                 | Version  |
| Order No.  | <a href="#">1527680000</a> | Cross-connector (terminal), Plugged, Number of poles: 9, Pitch in mm |
| GTIN (EAN) | 4050118447996              | (P): 5.10, Insulated: Yes, 24 A, orange                              |
| Qty.       | 20 pc(s).                  |  |
| Type       | ZQV 2.5N/2                 | Version  |
| Order No.  | <a href="#">1527540000</a> | Cross-connector (terminal), Plugged, Number of poles: 2, Pitch in mm |
| GTIN (EAN) | 4050118448467              | (P): 5.10, Insulated: Yes, 24 A, orange                              |
| Qty.       | 60 pc(s).                  |  |
| Type       | ZQV 2.5N/5                 | Version  |
| Order No.  | <a href="#">1527620000</a> | Cross-connector (terminal), Plugged, Number of poles: 5, Pitch in mm |
| GTIN (EAN) | 4050118448436              | (P): 5.10, Insulated: Yes, 24 A, orange                              |
| Qty.       | 20 pc(s).                  |  |

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## Accessories

|            |                            |   |
|------------|----------------------------|---|
| Type       | ZQV 2.5N/4                 | Version   |
| Order No.  | <a href="#">1527590000</a> | Cross-connector (terminal), Plugged, Number of poles: 4, Pitch in mm  |
| GTIN (EAN) | 4050118448443              | (P): 5.10, Insulated: Yes, 24 A, orange                               |
| Qty.       | 60 pc(s).                  |   |
| Type       | ZQV 2.5N/10                | Version   |
| Order No.  | <a href="#">1527690000</a> | Cross-connector (terminal), Plugged, Number of poles: 10, Pitch in mm |
| GTIN (EAN) | 4050118447989              | (P): 5.10, Insulated: Yes, 24 A, orange                               |
| Qty.       | 20 pc(s).                  |   |
| Type       | ZQV 2.5N/20                | Version   |
| Order No.  | <a href="#">1527720000</a> | Cross-connector (terminal), Plugged, Number of poles: 20, Pitch in mm |
| GTIN (EAN) | 4050118447972              | (P): 5.10, Insulated: Yes, 24 A, orange                               |
| Qty.       | 20 pc(s).                  |   |
| Type       | ZQV 2.5N/50                | Version   |
| Order No.  | <a href="#">1527730000</a> | Cross-connector (terminal), Plugged, Number of poles: 50, Pitch in mm |
| GTIN (EAN) | 4050118411362              | (P): 5.10, Insulated: Yes, 24 A, orange                               |
| Qty.       | 5 pc(s).                   |   |
| Type       | ZQV 2.5N/6                 | Version   |
| Order No.  | <a href="#">1527630000</a> | Cross-connector (terminal), Plugged, Number of poles: 6, Pitch in mm  |
| GTIN (EAN) | 4050118448429              | (P): 5.10, Insulated: Yes, 24 A, orange                               |
| Qty.       | 20 pc(s).                  |   |
| Type       | ZQV 2.5N/3                 | Version   |
| Order No.  | <a href="#">1527570000</a> | Cross-connector (terminal), Plugged, Number of poles: 3, Pitch in mm  |
| GTIN (EAN) | 4050118448450              | (P): 5.10, Insulated: Yes, 24 A, orange                               |
| Qty.       | 60 pc(s).                  |   |

## A-Series



Test adapters and test plugs are used for the electrical connection between terminal blocks and the test equipment. In this way, an electrical contact can be established in the wired state and measurements can be done easily.

## General ordering data

|            |                            |   |
|------------|----------------------------|---|
| Type       | ATPG 1.5-10 L              | Version   |
| Order No.  | <a href="#">1991890000</a> | Test adapter (terminal), 1.5 mm <sup>2</sup> , 250 V, 0.2 A |
| GTIN (EAN) | 4050118376647              |   |
| Qty.       | 50 pc(s).                  |   |
| Type       | ATPG 2.5 MI-R              | Version   |
| Order No.  | <a href="#">1991960000</a> | Test adapter (terminal), 1.5 mm <sup>2</sup> , 250 V, 0.2 A |
| GTIN (EAN) | 4050118376685              |   |
| Qty.       | 50 pc(s).                  |   |
| Type       | ATPG 2.5/5                 | Version   |
| Order No.  | <a href="#">2041180000</a> | Test adapter (terminal), 1.5 mm <sup>2</sup> , 250 V, 0.2 A |
| GTIN (EAN) | 4050118409505              |   |
| Qty.       | 25 pc(s).                  |   |

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|            |                            |   |
|------------|----------------------------|---|
| Type       | ATPG 2.5/3                 | Version   |
| Order No.  | <a href="#">2041190000</a> | Test adapter (terminal), 1.5 mm <sup>2</sup> , 250 V, 0.2 A |
| GTIN (EAN) | 4050118409604              |   |
| Qty.       | 25 pc(s).                  |   |

**A-Series**

Warning covers with a flash symbol provide more safety for man and machine. They are used where external voltage must be indicated within the application.

**General ordering data**

|            |                            |   |
|------------|----------------------------|---|
| Type       | AAM 2.5 YE FLASH           | Version   |
| Order No.  | <a href="#">2635550000</a> | Terminal marker, 8 x 5.1 mm, Pitch in mm (P): 5.00 yellow |
| GTIN (EAN) | 4050118674095              |   |
| Qty.       | 40 pc(s).                  |   |