

**OMNIMATE Signal - series RSV  
RSV1,6 B4 GR**

**Weidmüller Interface GmbH & Co. KG**  
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[www.weidmueller.com](http://www.weidmueller.com)



Rectangular plug-in connector for use with crimp contacts. Can be used as universal coupling, but also with the PCB variations. The crimp contacts guarantee a high connection density. CS 1.6 or CB 1.6 contacts can be used here. The plug-in connectors can be coded and locked to the mating connector. Supplied in cardboard box.

**General ordering data**

|              |                                                                                                                                             |
|--------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Type         | RSV1,6 B4 GR                                                                                                                                |
| Order No.    | <a href="#">1413000000</a>                                                                                                                  |
| Version      | PCB plug-in connector, female plug, 5.00 mm, No. of poles: 4, 180°, Crimp connection, Clamping range, rated connection, max.: 3.31 mm², Box |
| GTIN (EAN)   | 4008190076320                                                                                                                               |
| Qty.         | 25 pc(s).                                                                                                                                   |
| Product data | IEC: 630 V / 17 A<br>UL: 600 V / 10 A / AWG 26 - AWG 12                                                                                     |
| Packaging    | Box                                                                                                                                         |

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## Technical data

### Dimensions and weights

|            |        |
|------------|--------|
| Net weight | 5.24 g |
|------------|--------|

### System parameters

|                                            |                              |                                              |                        |
|--------------------------------------------|------------------------------|----------------------------------------------|------------------------|
| Product family                             | OMNIMATE Signal - series RSV | Type of connection                           | Field connection       |
| Wire connection method                     | Crimp connection             | Pitch in mm (P)                              | 5 mm                   |
| Pitch in inches (P)                        | 0.197 inch                   | Conductor outlet direction                   | 180°                   |
| No. of poles                               | 4                            | L1 in mm                                     | 5 mm                   |
| L1 in inches                               | 0.197 inch                   | Number of rows                               | 1                      |
| Pin series quantity                        | 2                            | Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch |
| Touch-safe protection acc. to DIN VDE 0470 | IP 20                        | Can be coded                                 | Yes                    |
| Stripping length                           | 4 mm                         | push-in force/pole                           | 9 N                    |
| Withdrawal force per pole                  | 18 N                         | Packaging                                    | Box                    |

### Material data

|                             |              |                                       |             |
|-----------------------------|--------------|---------------------------------------|-------------|
| Insulating material         | Wemid (PA)   | Colour                                | Pebble grey |
| Colour chart (similar)      | RAL 7032     | Insulating material group             | I           |
| CTI                         | ≥ 600        | UL 94 flammability rating             | V-0         |
| Contact material            | Copper alloy | Storage temperature, min.             | -25 °C      |
| Storage temperature, max.   | 55 °C        | Max. relative humidity during storage | 80 %        |
| Operating temperature, max. | 100 °C       | Temperature range, installation, max. | 100 °C      |

### Conductors suitable for connection

|                                        |                      |                                        |                      |
|----------------------------------------|----------------------|----------------------------------------|----------------------|
| Clamping range, rated connection, min. | 0.13 mm <sup>2</sup> | Clamping range, rated connection, max. | 3.31 mm <sup>2</sup> |
| Flexible, min. H05(07) V-K             | 0.2 mm <sup>2</sup>  | Flexible, max. H05(07) V-K             | 2.5 mm <sup>2</sup>  |

### Rated data acc. to IEC

|                                                                           |                        |                                                                       |                   |
|---------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------|-------------------|
| tested acc. to standard                                                   | IEC 60664-1, IEC 61984 | Rated current, min. no. of poles (Ta = 20°C)                          | 17 A              |
| Rated current, max. no. of poles (Ta = 20°C)                              | 13 A                   | Rated current, min. no. of poles (Ta = 40°C)                          | 15 A              |
| Rated current, max. no. of poles (Ta = 40°C)                              | 11.5 A                 | Rated voltage for surge voltage class / pollution degree II/2         | 630 V             |
| Rated voltage for surge voltage class / pollution degree III/2            | 400 V                  | Rated voltage for surge voltage class / pollution degree III/3        | 250 V             |
| Rated impulse voltage for surge voltage class/ pollution degree II/2      | 4 kV                   | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 4 kV              |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 4 kV                   | Short-time withstand current resistance                               | 3 x 1s with 120 A |

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### Technical data

#### Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

53975-13

Rated voltage (Use group C)

600 V

Rated current (use group C)

13 A

Wire cross-section, AWG, min.

AWG 26

Wire cross-section, AWG, max.

AWG 12

Reference to approval values

Specifications are maximum values, details - see approval certificate.

#### Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

E92202

Reference to approval values

Specifications are maximum values, details - see approval certificate.

#### Classifications

ETIM 3.0

EC001284

ETIM 4.0

EC002636

ETIM 5.0

EC002636

ETIM 6.0

EC002637

UNSPSC

30-21-18-10

eClass 5.1

27-26-07-01

eClass 6.2

27-26-07-03

eClass 7.1

27-44-01-01

eClass 8.1

27-44-01-01

eClass 9.0

27-44-01-01

eClass 9.1

27-44-04-02

#### Notes

Notes

- Additional colours on request
- Rated current related to rated cross-section & min. No. of poles.
- Spacing between rows: see hole layout
- Rated cross-section depends on crimp contact used.
- Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.
- Max. outer diameter of the cable (with insulation): 3.5 mm

IPC conformity

The products are developed, manufactured and delivered according to the internationally recognised IPC-A-610 standard, category "permissible". More extensive demands on the products can be evaluated on request.

#### Approvals

Approvals



ROHS

Conform

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## Technical data

### Downloads

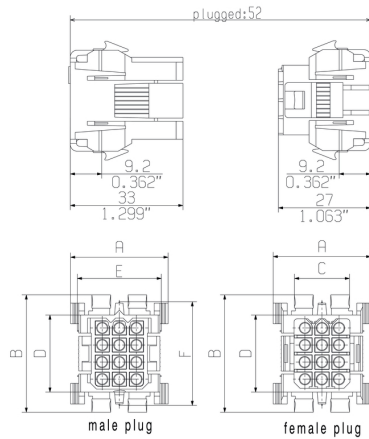
|                                             |                                                                                                                                                          |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of the Manufacturer</a>                                                                                                          |
| Brochure/Catalogue                          | <a href="#">MB DEVICE MANUF. EN</a><br><a href="#">CAT 2 PORTFOLIOGUIDE EN</a><br><a href="#">FL 72H SAMPLE SER EN</a><br><a href="#">PO OMNIMATE EN</a> |
| Engineering Data                            | <a href="#">RSV1.6.zip</a>                                                                                                                               |

## OMNIMATE Signal - series RSV RSV1,6 B4 GR

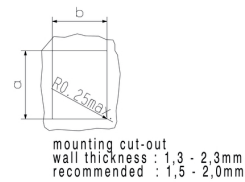
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## Drawings

### Dimensional drawing

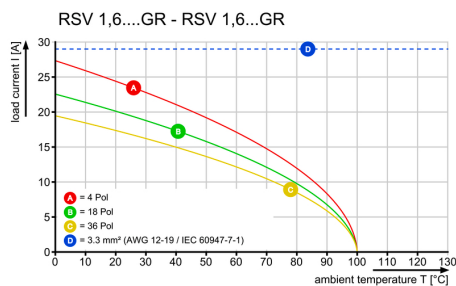


### Dimensional drawing



| poles | dimension male plug / female plug |      |      |      |      | mounting cut-out |        |
|-------|-----------------------------------|------|------|------|------|------------------|--------|
|       | A                                 | B    | C    | D    | E    | a ±0.2           | b ±0.2 |
| 4     | 23.0                              | 25.0 | 10.0 | 12.8 | 17.8 | 20.3             | 18.1   |
| 6     | 23.0                              | 30.0 | 10.0 | 17.6 | 17.8 | 25.1             | 18.1   |
| 9     | 29.0                              | 30.0 | 16.0 | 17.6 | 23.8 | 25.1             | 24.0   |
| 12    | 29.0                              | 35.0 | 16.0 | 22.6 | 23.8 | 30.0             | 24.0   |
| 18    | 29.0                              | 46.0 | 16.0 | 33.0 | 23.8 | 40.5             | 24.0   |
| 24    | 33.0                              | 46.0 | 20.0 | 33.0 | 27.8 | 40.5             | 28.3   |
| 36    | 33.0                              | 61.0 | 20.0 | 48.0 | 27.8 | 55.5             | 28.3   |

### Graph



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## Accessories

### Strain reliefs



#### For frequent load changes: the "trailer coupling" for plug-in connectors.

The strain relief can do more than just relieve the strain on conductors:

Simply clip onto the plug and

- bundle conductors
- guide cables
- use as a connection and disconnection aid

No damage to the connecting points, clear, tidy wiring and easy to handle.

User advantages: permanent heavy-duty connections for harsh industrial environments and convenient operation ensure improved system availability.

### General ordering data

| Type                 | Order No.                  | Version                                                                         | GTIN (EAN)    | Qty.      | Product data | Packaging |
|----------------------|----------------------------|---------------------------------------------------------------------------------|---------------|-----------|--------------|-----------|
| RSV1,6 ZE04<br>BK BX | <a href="#">1563600000</a> | PCB plug-in connector,<br>Accessories, Strain relief,<br>Black, No. of poles: 4 | 4008190109769 | 25 pc(s). | UL:          | Box       |

### Coding elements



#### Only connects what is supposed to be connected: the right connection at the right place.

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase.

The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible.

The advantage: no troubleshooting during manufacture and no operational errors by the user.

### General ordering data

| Type      | Order No.                  | Version                                                                             | GTIN (EAN)    | Qty.      | Product data | Packaging |
|-----------|----------------------------|-------------------------------------------------------------------------------------|---------------|-----------|--------------|-----------|
| RSV1,6 KO | <a href="#">1567430000</a> | PCB plug-in connector,<br>Accessories, Coding<br>element, Black, No. of<br>poles: 1 | 4008190169756 | 50 pc(s). | UL:          | Box       |

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## Accessories

### Females socket contact



#### For a reliable contact - CB/CS crimp contact.

The combination of RSV housings and Weidmüller's crimp contacts enable custom adaptations to the specific requirements of your applications.

The following product options are available depending on the system:

- Safe centring of the contacts using the three-segment pin tips
- High contact reliability using four defined contact points
- Locking clasp in the cantilever spring for a secure mount of the contacts in the housing
- Pin contacts with two lengths to implement leading-pin contacts
- Up to 100 plugging cycles (tin version)
- Up to 500 plugging cycles (gold version)

The appropriate high-quality tools from Weidmüller guarantee professional processing.

### General ordering data

| Type                      | Order No.                  | Version                                                                                                                                | GTIN (EAN)    | Qty.         | Product data | Packaging |
|---------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------|--------------|-----------|
| CB1,6E18-16<br>SN I2,5    | <a href="#">1427900000</a> | PCB plug-in connector,<br>Crimp contact, Individual<br>contact, Socket, tinned,<br>Max. clamping range : 1.5<br>mm <sup>2</sup>        | 4008190035808 | 250 pc(s).   | UL:          | Box       |
| CB1,6R14-12<br>AU,75 I3,5 | <a href="#">1428800000</a> | PCB plug-in connector,<br>Crimp contact, Reel<br>packaged, Socket, Gold-<br>plated, Max. clamping<br>range : 2.5 mm <sup>2</sup>       | 4008190044169 | 3,000 pc(s). | UL:          | Reel      |
| CB1,6E18-16<br>AU,75 I2,5 | <a href="#">1426900000</a> | PCB plug-in connector,<br>Crimp contact, Individual<br>contact, Socket, Gold-<br>plated, Max. clamping<br>range : 1.5 mm <sup>2</sup>  | 4008190081799 | 250 pc(s).   | UL:          | Box       |
| CB1,6E26-24<br>AU,75 I1,4 | <a href="#">1420900000</a> | PCB plug-in connector,<br>Crimp contact, Individual<br>contact, Socket, Gold-<br>plated, Max. clamping<br>range : 0.25 mm <sup>2</sup> | 4008190041779 | 250 pc(s).   | UL:          | Box       |
| CB1,6R14-12<br>SN I3,5    | <a href="#">1429800000</a> | PCB plug-in connector,<br>Crimp contact, Reel<br>packaged, Socket, tinned,<br>Max. clamping range : 2.5<br>mm <sup>2</sup>             | 4008190181710 | 4,000 pc(s). | UL:          | Reel      |
| CB1,6E26-24<br>SN I1,4    | <a href="#">1421900000</a> | PCB plug-in connector,<br>Crimp contact, Individual<br>contact, Socket, tinned,                                                        | 4008190051600 | 250 pc(s).   | UL:          | Box       |

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## Accessories

|                                                      |                                                                                                                          |                                            |     |      |
|------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|--------------------------------------------|-----|------|
|                                                      |                                                                                                                          | Max. clamping range : 0.25 mm <sup>2</sup> |     |      |
| CB1,6E22-20 <a href="#">1422900000</a><br>AU,75 I1,8 | PCB plug-in connector, Crimp contact, Individual contact, Socket, Gold-plated, Max. clamping range : 0.5 mm <sup>2</sup> | 4008190179243 250 pc(s).                   | UL: | Box  |
| CB1,6E14-12 <a href="#">1582450000</a><br>AU,75 I4,2 | PCB plug-in connector, Crimp contact, Individual contact, Socket, Gold-plated, Max. clamping range : 2.5 mm <sup>2</sup> | 4008190014643 250 pc(s).                   | UL: | Box  |
| CB1,6R14-12 <a href="#">1582460000</a><br>AU,75 I4,2 | PCB plug-in connector, Crimp contact, Reel packaged, Socket, Gold-plated, Max. clamping range : 2.5 mm <sup>2</sup>      | 4008190095895 3,000 pc(s).                 | UL: | Reel |
| CB1,6E14-12 <a href="#">1429900000</a><br>SN I3,5    | PCB plug-in connector, Crimp contact, Individual contact, Socket, tinned, Max. clamping range : 2.5 mm <sup>2</sup>      | 4008190071356 250 pc(s).                   | UL: | Box  |
| CB1,6E22-20 <a href="#">1423900000</a><br>SN I1,8    | PCB plug-in connector, Crimp contact, Individual contact, Socket, tinned, Max. clamping range : 0.5 mm <sup>2</sup>      | 4008190008659 250 pc(s).                   | UL: | Box  |
| CB1,6E18-16 <a href="#">1582430000</a><br>SN I3,5    | PCB plug-in connector, Crimp contact, Individual contact, Socket, tinned, Max. clamping range : 1.5 mm <sup>2</sup>      | 4008190050450 250 pc(s).                   | UL: | Box  |
| CB1,6E14-12 <a href="#">1582470000</a><br>SN I4,2    | PCB plug-in connector, Crimp contact, Individual contact, Socket, tinned, Max. clamping range : 2.5 mm <sup>2</sup>      | 4008190067939 250 pc(s).                   | UL: | Box  |
| CB1,6R14-12 <a href="#">1582480000</a><br>SN I4,2    | PCB plug-in connector, Crimp contact, Reel packaged, Socket, tinned, Max. clamping range : 2.5 mm <sup>2</sup>           | 4008190003289 3,000 pc(s).                 | UL: | Reel |
| CB1,6E14-12 <a href="#">1428900000</a><br>AU,75 I3,5 | PCB plug-in connector, Crimp contact, Individual contact, Socket, Gold-plated, Max. clamping range : 2.5 mm <sup>2</sup> | 4008190072148 250 pc(s).                   | UL: | Box  |
| CB1,6E22-20 <a href="#">1424900000</a><br>AU,75 I2,5 | PCB plug-in connector, Crimp contact, Individual contact, Socket, Gold-plated, Max. clamping range : 0.5 mm <sup>2</sup> | 4008190180751 250 pc(s).                   | UL: | Box  |
| CB1,6E22-20 <a href="#">1425900000</a><br>SN I2,5    | PCB plug-in connector, Crimp contact, Individual                                                                         | 4008190054731 250 pc(s).                   | UL: | Box  |

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## Accessories

|                                                      |                                                                                                                                       |                          |     |     |
|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|--------------------------|-----|-----|
|                                                      | contact, Socket, tinned,<br>Max. clamping range : 0.5<br>mm <sup>2</sup>                                                              |                          |     |     |
| CB1,6E18-16 <a href="#">1582410000</a><br>AU,75 I3,5 | PCB plug-in connector,<br>Crimp contact, Individual<br>contact, Socket, Gold-<br>plated, Max. clamping<br>range : 1.5 mm <sup>2</sup> | 4008190176228 250 pc(s). | UL: | Box |

## Adapters for rail mounting



### Clip on and use!

From the circuit board in the control cabinet: snap-on or mounting feet form the link between plug-in connectors and terminal rails.

Compatible with all standard sizes: TS 15 or TS 35.

Combination foot or variations available.

The quick alternative to screw connections: unbeatable ease of installation and service.

The mounting foot for the terminal rails allows the universal use of pluggable connection systems on the module, the enclosure and the control cabinet and avoids patchwork solutions.

## General ordering data

| Type                       | Order No.                  | Version                                                                        | GTIN (EAN)    | Qty.      | Product data | Packaging |
|----------------------------|----------------------------|--------------------------------------------------------------------------------|---------------|-----------|--------------|-----------|
| RSV1,6<br>RF4/35x15<br>SW  | <a href="#">1690110000</a> | PCB plug-in connector,<br>Accessories, Clip-in foot,<br>Black, No. of poles: 4 | 4008190862978 | 10 pc(s). | UL:          | Box       |
| RSV1,6<br>RF4/35x7.5<br>SW | <a href="#">1582910000</a> | PCB plug-in connector,<br>Accessories, Clip-in foot,<br>Black, No. of poles: 4 | 4008190111908 | 10 pc(s). | UL:          | Box       |