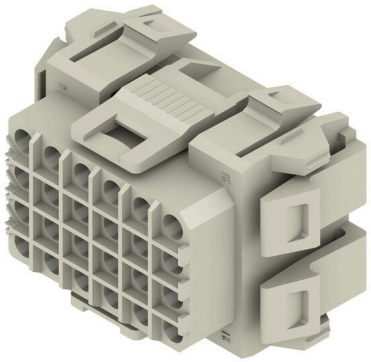
Data sheet

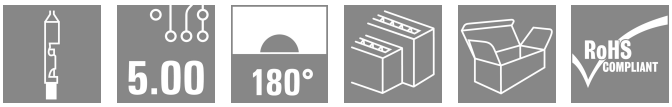
RSV1,6 B24 GR

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Product image





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

Version	PCB plug-in connector, female plug, 5.00 mm, Number of poles: 24, 180°, Crimp connection, Clamping range, max. : 3.31 mm², Box
Order No.	1418000000
Type	RSV1,6 B24 GR
GTIN (EAN)	4008190076078
Qty.	20 items
Product data	IEC: 630 V / 17 A UL: 600 V / 10 A / AWG 26 - AWG 12
Packaging	Box

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Technical data

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UR)	E92202

Dimensions and weights

Depth	33 mm	Depth (inches)	1.2992 inch
Height	33 mm	Height (inches)	1.2992 inch
Width	46 mm	Width (inches)	1.811 inch
Net weight	15.79 g		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

System Parameters

Product family	OMNIMATE Signal - series RSV	Type of connection	Field connection
Wire connection method	Crimp connection	Pitch in mm (P)	5.00 mm
Pitch in inches (P)	0.197 "	Conductor outlet direction	180°
Number of poles	24	L1 in mm	25.00 mm
L1 in inches	0.984 "	Number of rows	4
Pin series quantity	6	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	Plugging cycles	25
Plugging force/pole, max.	2 N	Pulling force/pole, max.	2 N

Material data

Insulating material	PA 66/6	Colour	Pebble grey
Colour chart (similar)	RAL 7032	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	Moisture Level (MSL)	
UL 94 flammability rating	V-0	Contact material	Cu-alloy
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
Temperature range, installation, min.	-25 °C	Temperature range, installation, max.	100 °C

Conductors suitable for connection

Clamping range, min.	0.13 mm²	Clamping range, max.	3.31 mm²
Flexible, min. H05(07) V-K	0.2 mm²	Flexible, max. H05(07) V-K	2.5 mm²

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Technical data

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	17 A
Rated current, max. number of poles (Tu=20°C)	13 A	Rated current, min. number of poles (Tu=40°C)	15 A
Rated current, max. number of poles (Tu=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

Rated data acc. to CSA

Institute (CSA)	CSA	Certificate No. (CSA)	53975-13
Rated voltage (Use group C / CSA)	600 V	Rated current (Use group C / CSA)	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)	UR	Certificate No. (UR)	E92202
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	240.00 mm
VPE width	150.00 mm	VPE height	39.00 mm

Important note

IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.
Notes	• Additional variants 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 • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Classifications

ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	EC002638	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		

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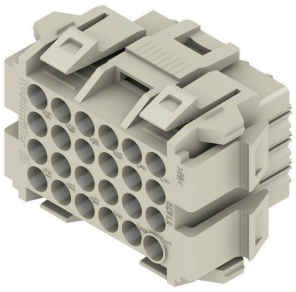
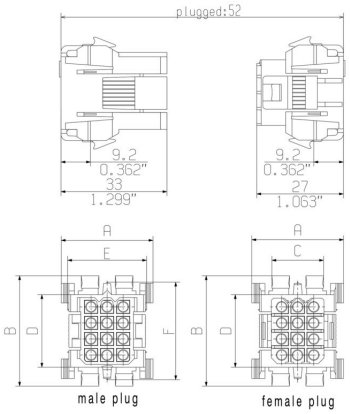
Drawings

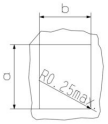
Product image



Dimensional drawing



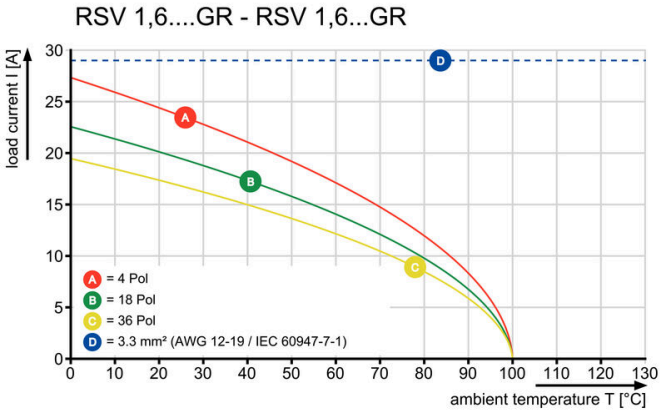
Dimensional drawing



mounting cut-out
wall thickness : 1,3 - 2,3mm
recommended : 1,5 - 2,0mm

	dimension male plug / female plug					mounting cut-out	
poles	A	B	C	D	E	a +0,3	b +0,3
4	23,0	25,0	10,8	12,8	17,8	20,3	18,1
6	23,0	30,0	10,8	17,6	17,8	25,1	18,1
9	29,0	30,0	16,1	17,6	23,8	25,1	24,0
12	29,0	35,0	16,1	22,6	23,8	30,0	24,0
18	29,0	46,0	16,1	33,0	23,8	40,5	24,0
24	33,0	46,0	20,6	33,0	27,8	40,5	28,3
36	33,0	61,0	20,6	48,0	27,8	55,5	28,3

Graph



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Accessories

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	RSV1,6 RF24/35X15 SW	Version
Order No.	1690160000	PCB plug-in connector, Accessories, Clip-in foot, black, Number of
GTIN (EAN)	4008190863029	poles: 24
Qty.	10 ST	

Females socket contact

For a reliable contact - CB/CS crimp contact.The combination of RSV housings and Weidmüllers' 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	CB1,6E26-24 AU,75 I1,4	Version
Order No.	1420900000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190041779	connector, Gold-plated, Max. clamping range : 0.25 mm²
Qty.	250 ST	
Type	CB1,6E26-24 SN I1,4	Version
Order No.	1421900000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190051600	connector, tinned, Max. clamping range : 0.25 mm²
Qty.	250 ST	
Type	CB1,6E22-20 AU,75 I1,8	Version
Order No.	1422900000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190179243	connector, Gold-plated, Max. clamping range : 0.5 mm²
Qty.	250 ST	

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Accessories

Type	CB1,6E22-20 SN I1,8	Version
Order No.	1423900000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190008659	connector, tinned, Max. clamping range : 0.5 mm²
Qty.	250 ST	
Type	CB1,6E22-20 AU,75 I2,5	Version
Order No.	1424900000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190180751	connector, Gold-plated, Max. clamping range : 0.5 mm²
Qty.	250 ST	
Type	CB1,6E22-20 SN I2,5	Version
Order No.	1425900000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190054731	connector, tinned, Max. clamping range : 0.5 mm²
Qty.	250 ST	
Type	CB1,6E18-16 AU,75 I2,5	Version
Order No.	1426900000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190081799	connector, Gold-plated, Max. clamping range : 1.5 mm²
Qty.	250 ST	
Type	CB1,6E18-16 SN I2,5	Version
Order No.	1427900000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190035808	connector, tinned, Max. clamping range : 1.5 mm²
Qty.	250 ST	
Type	CB1,6R14-12 AU,75 I3,5	Version
Order No.	1428800000	PCB plug-in connector, Crimp contact, Reel packaged, Socket
GTIN (EAN)	4008190044169	connector, Gold-plated, Max. clamping range : 2.5 mm²
Qty.	3000 ST	
Type	CB1,6E14-12 AU,75 I3,5	Version
Order No.	1428900000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190072148	connector, Gold-plated, Max. clamping range : 2.5 mm²
Qty.	250 ST	
Type	CB1,6R14-12 SN I3,5	Version
Order No.	1429800000	PCB plug-in connector, Crimp contact, Reel packaged, Socket
GTIN (EAN)	4008190181710	connector, tinned, Max. clamping range : 2.5 mm²
Qty.	4000 ST	
Type	CB1,6E14-12 SN I3,5	Version
Order No.	1429900000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190071356	connector, tinned, Max. clamping range : 2.5 mm²
Qty.	250 ST	

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.

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Accessories

General ordering data

Type	RSV1,6 ZE24 BK BX	Version
Order No.	1563100000	PCB plug-in connector, Accessories, Strain relief, black, Number of
GTIN (EAN)	4008190051167	poles: 24
Qty.	20 ST	

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	RSV1,6 KO	Version
Order No.	1567430000	PCB plug-in connector, Accessories, Coding element, black, Number
GTIN (EAN)	4008190169756	of poles: 1
Qty.	50 ST	

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General ordering data

Type	CB1,6E18-16 AU,75 I3,5	Version
Order No.	1582410000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190176228	connector, Gold-plated, Max. clamping range : 1.5 mm²
Qty.	250 ST	

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Accessories

Type	CB1,6E18-16 SN I3,5	Version
Order No.	1582430000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190050450	connector, tinned, Max. clamping range : 1.5 mm²
Qty.	250 ST	
Type	CB1,6E14-12 AU,75 I4,2	Version
Order No.	1582450000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190014643	connector, Gold-plated, Max. clamping range : 2.5 mm²
Qty.	250 ST	
Type	CB1,6R14-12 AU,75 I4,2	Version
Order No.	1582460000	PCB plug-in connector, Crimp contact, Reel packaged, Socket
GTIN (EAN)	4008190095895	connector, Gold-plated, Max. clamping range : 2.5 mm²
Qty.	3000 ST	
Type	CB1,6E14-12 SN I4,2	Version
Order No.	1582470000	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190067939	connector, tinned, Max. clamping range : 2.5 mm²
Qty.	250 ST	
Type	CB1,6R14-12 SN I4,2	Version
Order No.	1582480000	PCB plug-in connector, Crimp contact, Reel packaged, Socket
GTIN (EAN)	4008190003289	connector, tinned, Max. clamping range : 2.5 mm²
Qty.	3000 ST	

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General ordering data

Type	RSV1,6 RF24/35X7.5 SW	Version
Order No.	1582960000	PCB plug-in connector, Accessories, Clip-in foot, black, Number of
GTIN (EAN)	4008190044725	poles: 24
Qty.	10 ST	