

#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

#### **Product image**





Similar to illustration

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: 12, 180°, Crimp connection, Clamping range, max. : 3.31 mm², Box
Order No.	<u>1416000000</u>
Туре	RSV1,6 B12 GR
GTIN (EAN)	4008190021177
Qty.	25 pc(s).
Product data	IEC: 630 V / 17 A UL: 600 V / 10 A / AWG 26 - AWG 12
Packaging	Box

# **Technical data**

**Dimensions and weights** 



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Depth	29 mm	Depth (inches)	1.142 inch
Height	33 mm	Height (inches)	1.299 inch
Width	35 mm	Width (inches)	1.378 inch
Net weight	10.84 g		
System Parameters			
Product family	OMNIMATE Signal - series	Type of connection	
Toduct latting	RSV	Type of connection	Field connection
Wire connection method	Crimp connection	Pitch in mm (P)	5 mm
Pitch in inches (P)	0.197 "	Conductor outlet direction	180°
Number of poles	12	L1 in mm	15 mm
L1 in inches	0.591 "	Number of rows	3
Pin series quantity	4	Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Touch-safe protection acc. to DIN VDE		Can be coded	g
0470	IP 20		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	
Comparative Tracking Index (CTI)	≥ 600	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	<b>_</b>	
Conductors suitable for conne	ection		
Clamping range, min.	0.13 mm <sup>2</sup>	Clamping range, 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. 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
<b>-</b>			

# **Technical data**



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Institute (CSA)	<b>(1</b> )	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 maxi- mum values, details - see approval certificate.		
Rated data acc. to UL 1059			
Institute (UR)		Certificate No. (UR)	
	R		E92202
Reference to approval values	Specifications are maxi- mum values, details - see approval certificate.		
Packing			
Packaging	Вох	VPE length	197 mm
VPE width	135 mm	VPE height	36 mm
Classifications			
ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	EC002638	ECLASS 9.0	27-44-03-09
ECLASS 9.1	27-44-03-09	ECLASS 9.0 ECLASS 10.0	27-44-03-09
ECLASS 11.0	27-46-02-02	ECLASS 12.0	27-46-02-02
ECLASS 13.0	27-46-02-02	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		
Environmental Product Complia	ance		
RoHS Compliance Status	Compliant without exemption		
REACH SVHC	No SVHC above 0.1 wt%		

# **Technical data**



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Important note	
IPC conformity	Conformity: The products are developed, manufactured and delivered according international recognized stan- dards 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.
	<ul> <li>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.</li> </ul>
	Max. outer diameter of the cable (with insulation): 3.5 mm
	<ul> <li>Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul>
Approvals	
Approvals	
Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319226/-T1z1mm-S800/ https:// mdcop.weidmueller.com/mediadelivery/rendition/900_319262/-T1z1mm-S800/
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UR)	E92202
Downloads	
Approval/Certificate/Docume	ent of Con- Declaration of the Manufacturer
formity Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format
Brochures	MB DEVICE MANUF. EN
Diocitales	<u>FL 72H SAMPLE SER EN</u>
	<u>PO OMNIMATE EN</u>
	PO OMNIMATE EN

# Drawings



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#### **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	В	C	D	E	a :8:8	b :8.8	
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



# Accessories

**Females socket contact** 

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#### 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.

Туре	CB1,6E26-24 AU,75 I1,4	Version	Product data	Packaging
Order No.	1420900000	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190041779	connector, Gold-plated, Max. clamping range : 0.25 mm <sup>2</sup>		
Qty.	250 pc(s).			
Туре	CB1,6E18-16 SN I3,5	Version	Product data	Packaging
Order No.	<u>1582430000</u>	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190050450	connector, tinned, Max. clamping range : 1.5 mm <sup>2</sup>		
Qty.	250 pc(s).			
Туре	CB1,6E26-24 SN I1,4	Version	Product data	Packaging
Order No.	<u>1421900000</u>	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190051600	connector, tinned, Max. clamping range : 0.25 mm <sup>2</sup>		
Qty.	250 pc(s).			
Туре	CB1,6R14-12 SN I3,5	Version	Product data	Packaging
Order No.	<u>1429800000</u>	PCB plug-in connector, Crimp contact, Reel packaged, Socket		Reel
GTIN (EAN)	4008190181710	connector, tinned, Max. clamping range : 2.5 mm <sup>2</sup>		
Qty.	4,000 pc(s).			
Туре	CB1,6E14-12 SN I3,5	Version	Product data	Packaging
Order No.	<u>1429900000</u>	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190071356	connector, tinned, Max. clamping range : 2.5 mm <sup>2</sup>		
Qty.	250 pc(s).			
Туре	CB1,6E22-20 AU,75 I1,8	Version	Product data	Packaging
Order No.	<u>1422900000</u>	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190179243	connector, Gold-plated, Max. clamping range : 0.5 mm <sup>2</sup>		
Qty.	250 pc(s).			
Туре	CB1,6E14-12 AU,75 I3,5	Version	Product data	Packaging
Order No.	<u>1428900000</u>	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190072148	connector, Gold-plated, Max. clamping range : 2.5 mm <sup>2</sup>		
Qty.	250 pc(s).			

Accessories



#### Weidmüller Interface GmbH & Co. KG

Packaging Box

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Product data

Туре	CB1,6E18-16 AU,75 I3,5	Version
Order No.	<u>1582410000</u>	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190176228	connector, Gold-plated, Max. clamping range : 1.5 mm <sup>2</sup>
Qty.	250 pc(s).	
Туре	CB1,6E22-20 SN I2,5	Version
Order No.	<u>1425900000</u>	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190054731	connector, tinned, Max. clamping range : 0.5 mm <sup>2</sup>
Qty.	250 pc(s).	
Туре	CB1,6E18-16 SN I2,5	Version
Order No.	<u>1427900000</u>	PCB plug-in connector, Crimp contact, Individual contact, Socket
GTIN (EAN)	4008190035808	connector, tinned, Max. clamping range : 1.5 mm <sup>2</sup>
Qty.	250 pc(s).	
Qty. Type	250 pc(s). CB1,6R14-12 AU,75 I3,5	Version
-		Version PCB plug-in connector, Crimp contact, Reel packaged, Socket
Туре	CB1,6R14-12 AU,75 I3,5	
Type Order No.	CB1,6R14-12 AU,75 I3,5 1428800000	PCB plug-in connector, Crimp contact, Reel packaged, Socket
Type Order No. GTIN (EAN)	CB1,6R14-12 AU,75 I3,5 1428800000 4008190044169	PCB plug-in connector, Crimp contact, Reel packaged, Socket
Type Order No. GTIN (EAN) Qty.	CB1,6R14-12 AU,75 I3,5 1428800000 4008190044169 3,000 pc(s).	PCB plug-in connector, Crimp contact, Reel packaged, Socket connector, Gold-plated, Max. clamping range : 2.5 mm <sup>2</sup>
Type Order No. GTIN (EAN) Qty. Type	CB 1,6R14-12 AU,75 I3,5 1428800000 4008190044169 3,000 pc(s). CB 1,6R14-12 SN I4,2	PCB plug-in connector, Crimp contact, Reel packaged, Socket connector, Gold-plated, Max. clamping range : 2.5 mm <sup>2</sup> Version
Type Order No. GTIN (EAN) Qty. Type Order No.	CB 1,6R14-12 AU,75 I3,5 <u>1428800000</u> 4008190044169 3,000 pc(s). CB 1,6R14-12 SN I4,2 <u>1582480000</u>	PCB plug-in connector, Crimp contact, Reel packaged, Socket connector, Gold-plated, Max. clamping range : 2.5 mm <sup>2</sup> Version PCB plug-in connector, Crimp contact, Reel packaged, Socket
Type Order No. GTIN (EAN) Qty. Type Order No. GTIN (EAN)	CB1,6R14-12 AU,75 I3,5 <u>1428800000</u> 4008190044169 3,000 pc(s). CB1,6R14-12 SN I4,2 <u>1582480000</u> 4008190003289	PCB plug-in connector, Crimp contact, Reel packaged, Socket connector, Gold-plated, Max. clamping range : 2.5 mm <sup>2</sup> Version PCB plug-in connector, Crimp contact, Reel packaged, Socket
Type Order No. GTIN (EAN) Qty. Type Order No. GTIN (EAN) Qty.	CB1,6R14-12 AU,75 I3,5 1428800000 4008190044169 3,000 pc(s). CB1,6R14-12 SN I4,2 1582480000 4008190003289 3,000 pc(s).	PCB plug-in connector, Crimp contact, Reel packaged, Socket connector, Gold-plated, Max. clamping range : 2.5 mm <sup>2</sup> Version PCB plug-in connector, Crimp contact, Reel packaged, Socket connector, tinned, Max. clamping range : 2.5 mm <sup>2</sup>

GTIN (EAN)	4008190176228	connector, Gold-plated, Max. clamping range : 1.5 mm <sup>2</sup>		
Qty.	250 pc(s).			
Туре	CB1,6E22-20 SN I2,5	Version	Product data	Packaging
Order No.	<u>1425900000</u>	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190054731	connector, tinned, Max. clamping range : 0.5 mm <sup>2</sup>		
Qty.	250 pc(s).			
Туре	CB1,6E18-16 SN I2,5	Version	Product data	Packaging
Order No.	<u>1427900000</u>	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190035808	connector, tinned, Max. clamping range : 1.5 mm <sup>2</sup>		
Qty.	250 pc(s).			
Туре	CB1,6R14-12 AU,75 I3,5	Version	Product data	Packaging
Order No.	1428800000	PCB plug-in connector, Crimp contact, Reel packaged, Socket		Reel
GTIN (EAN)	4008190044169	connector, Gold-plated, Max. clamping range : 2.5 mm <sup>2</sup>		
Qty.	3,000 pc(s).			
Туре	CB1,6R14-12 SN I4,2	Version	Product data	Packaging
Order No.	<u>1582480000</u>	PCB plug-in connector, Crimp contact, Reel packaged, Socket		Reel
GTIN (EAN)	4008190003289	connector, tinned, Max. clamping range : 2.5 mm <sup>2</sup>		
Qty.	3,000 pc(s).			
Туре	CB1,6E22-20 SN I1,8	Version	Product data	Packaging
Order No.	1423900000	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190008659	connector, tinned, Max. clamping range : 0.5 mm <sup>2</sup>		
Qty.	250 pc(s).			
Туре	CB1,6R14-12 AU,75 I4,2	Version	Product data	Packaging
Order No.	<u>1582460000</u>	PCB plug-in connector, Crimp contact, Reel packaged, Socket		Reel
GTIN (EAN)	4008190095895	connector, Gold-plated, Max. clamping range : 2.5 mm <sup>2</sup>		
Qty.	3,000 pc(s).			
Туре	CB1,6E14-12 SN I4,2	Version	Product data	Packaging
Order No.	<u>1582470000</u>	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190067939	connector, tinned, Max. clamping range : 2.5 mm <sup>2</sup>		
Qty.	250 pc(s).			
Туре	CB1,6E22-20 AU,75 I2,5	Version	Product data	Packaging
Order No.	1424900000	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190180751	connector, Gold-plated, Max. clamping range : 0.5 mm <sup>2</sup>		
Qty.	250 pc(s).			
Туре	CB1,6E14-12 AU,75 I4,2	Version	Product data	Packaging
Order No.	<u>1582450000</u>	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190014643	connector, Gold-plated, Max. clamping range : 2.5 mm <sup>2</sup>		
Qty.	250 pc(s).			
Туре	CB1,6E18-16 AU,75 I2,5	Version	Product data	Packaging
Order No.	1426900000	PCB plug-in connector, Crimp contact, Individual contact, Socket		Box
GTIN (EAN)	4008190081799	connector, Gold-plated, Max. clamping range : 1.5 mm <sup>2</sup>		

# Accessories

**Coding elements** 





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# 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**

Туре	RSV1,6 KO	Version	Product data	Packaging
Order No.	<u>1567430000</u>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190169756	of poles: 1		
Qty.	50 pc(s).			

#### 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**

Туре	RSV1,6 RF12/35X7.5 SW	Version	Product data	Packaging
Order No.	<u>1582940000</u>	PCB plug-in connector, Accessories, Clip-in foot, black, Number of		Box
GTIN (EAN)	4008190068486	poles: 12		
Qty.	10 pc(s).			
Туре	RSV1,6 RF12/35X15 SW	Version	Product data	Packaging
Type Order No.	RSV1,6 RF12/35X15 SW <u>1690140000</u>	Version PCB plug-in connector, Accessories, Clip-in foot, black, Number of	Product data	Packaging Box
			Product data	

# Accessories

**Strain reliefs** 





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# 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**

TypeRSV1,6 ZE12 BK BXVersionProduct dataPackagingOrder No.156330000PCB plug-in connector, Accessories, Strain relief, black, Number ofBoxGTIN (EAN)4008 190095871poles: 12The second s

# Assembly instruction: plugged:52 9.2 9.2 33 27 Α ш ш $\square$ ÐÐ odoj female plug male plug b Q RO. 25 Max mounting cut-out wall thickness : 1,3 - 2,3mm recommended : 1,5 - 2,0mm

		dimension	male plug / f	emale plug		mountin	g cut-out
poles	А	В	С	D	E	a +0.3 -0.0	b +0.3 -0.0
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	16,6	17,6	23,8	25,1	24,0
12	29,0	35,0	16,6	22,6	23,8	30,0	24,0
18	29,0	46,0	16,6	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





For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The neccessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine

Weidmueller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

General tolerance:					
DIN ISO 2768-mK	94488/5 29.06.18 HERTEL_S		01	We	
COMPLIANT	Modifi	cation			
$\square $		Date		N a m e	
	Drawn	25.05.2	011	LANG_T	
	Responsible			HERTEL_S	
Scale:10:1	Checked	12.07.2	018	HERTEL_S	
Supersedes: .	Approved			LANG_T	