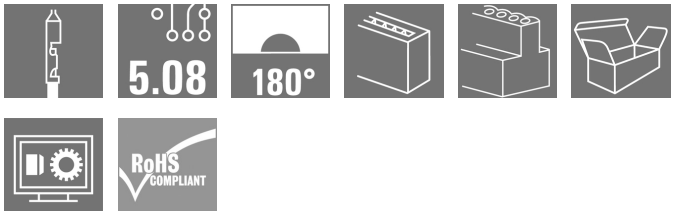
BLC 5.08/16/180R OR BX

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

www.weidmueller.com

Product image





Female plugs with crimp wire connection system.The female plugs provide space for labelling and can be coded.

General ordering data

Version	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 16, 180°, Crimp connection, Clamping range, max. : 2.5 mm², Box
Order No.	1610630000
Type	BLC 5.08/16/180R OR BX
GTIN (EAN)	4008190008253
Qty.	50 pc(s).
Product data	IEC: 400 V / 21 A UL: 300 V / 10 A / AWG 26 - AWG 14
Packaging	Box

Creation date December 5, 2023 8:27:30 AM CET

BLC 5.08/16/180R OR BX

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Technical data

Dimensions and weights

Depth	24.5 mm	Depth (inches)	0.965 inch
Height	10.1 mm	Height (inches)	0.398 inch
Width	81.28 mm	Width (inches)	3.2 inch
Net weight	10.06 g		

System Parameters

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Field connection
Wire connection method	Crimp connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 inch	Conductor outlet direction	180°
Number of poles	16	L1 in mm	76.2 mm
L1 in inches	3 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	2.5 mm²
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP20 plugged/ IP10 unplugged
Protection degree	IP20	Volume resistance	≤5 mΩ
Can be coded	Yes	Stripping length	5 mm
Plugging cycles	25	Plugging force/pole, max.	8.5 N
Pulling force/pole, max.	6.5 N		

Material data

Insulating material	PBT GF	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Layer structure of plug contact	4...8 µm Sn hot-dip tinned
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.	0.22 mm²	Clamping range, max.	2.5 mm²
Wire connection cross section AWG, min.	AWG 24	Wire connection cross section AWG, max.	AWG 14
Flexible, min. H05(07) V-K	0.5 mm²	Flexible, max. H05(07) V-K	2.5 mm²
Reference text	The outside diameter of the plastic collar should not be larger than the pitch (P), Length of ferrules is to be chosen depending on the product and the rated voltage.		

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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)	21 A
Rated current, max. number of poles (Tu=20°C)	14.5 A	Rated current, min. number of poles (Tu=40°C)	18 A
Rated current, max. number of poles (Tu=40°C)	12.5 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 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)		Certificate No. (CSA)	12400-374
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	10 A	Rated current (Use group D / CSA)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Rated data acc. to UL 1059

Institute (UR)		Certificate No. (UR)	E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group D / UL 1059)	300 V
Rated current (Use group B / UL 1059)	10 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	185 mm
VPE width	113 mm	VPE height	90 mm

Type tests

Test: Durability of markings	Standard	draft DIN VDE 0627 section 6.2.2 / 09.91, DIN IEC 512 part 7 section 5 / 05.94
	Test	durability
	Evaluation	passed

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Technical data

Classifications

ETIM 6.0	EC002638	ETIM 7.0	EC002638
ETIM 8.0	EC002638	ETIM 9.0	EC002638
ECLASS 9.0	27-44-03-09	ECLASS 9.1	27-44-03-09
ECLASS 10.0	27-44-03-09	ECLASS 11.0	27-46-02-02
ECLASS 12.0	27-46-02-02	ECLASS 13.0	27460202

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. • Rated cross-section depends on crimp contact used. • P on drawing = pitch • 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. • In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (UR)	E60693

BLC 5.08/16/180R OR BX

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Technical data

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format
Brochures	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE FL BUILDING SAFETY EN FL APPL LED LIGHTING EN FL INDUSTR.CONTROLS EN FL MACHINE SAFETY EN FL HEATING ELECTR EN FL APPL_INVERTER EN FL_BASE_STATION_EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN PO OMNIMATE EN

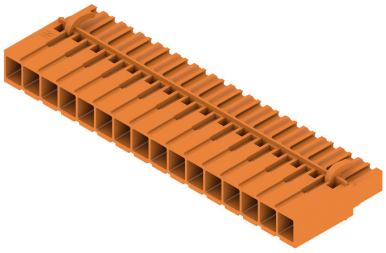
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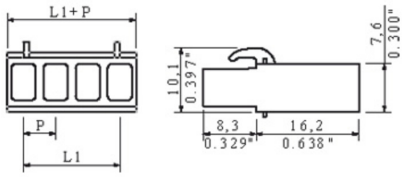
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Drawings

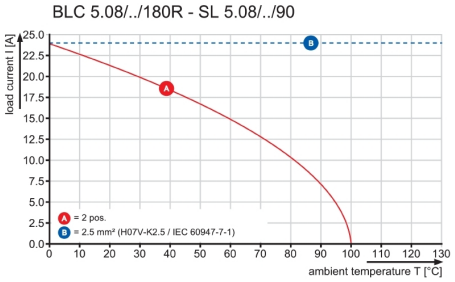
Product image



Dimensional drawing



Graph



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Accessories

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	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	1545710000	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			

Type	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	1573010000	PCB plug-in connector, Accessories, Coding element, orange, Number		Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			

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Accessories

Crimp contacts



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	DFFC 1.5-2.5 SN 2500	Version	Product data	Packaging
Order No.	1480100000	PCB plug-in connector, Crimp contact, Contact, tinned, Max. clamping		Box
GTIN (EAN)	4008190100414	range : 2.5 mm²		
Qty.	2,500 pc(s).			
Type	DFFC 0.22-0.35 SN 3000	Version	Product data	Packaging
Order No.	1604230000	PCB plug-in connector, Crimp contact, Contact, tinned, Max. clamping		Box
GTIN (EAN)	4008190117498	range : 0.35 mm²		
Qty.	3,000 pc(s).			
Type	DFFC 1.5-2.5 SN E	Version	Product data	Packaging
Order No.	1567070000	PCB plug-in connector, Crimp contact, Contact, tinned, Max. clamping		Box
GTIN (EAN)	4008190059071	range : 2.5 mm²		
Qty.	250 pc(s).			
Type	DFFC 0.22-0.35 SN E	Version	Product data	Packaging
Order No.	1604250000	PCB plug-in connector, Crimp contact, Contact, tinned, Max. clamping		Box
GTIN (EAN)	4008190042905	range : 0.35 mm²		
Qty.	250 pc(s).			
Type	DFFC 0.5-1.0 SN 3000	Version	Product data	Packaging
Order No.	1480000000	PCB plug-in connector, Crimp contact, Contact, tinned, Max. clamping		Reel
GTIN (EAN)	4008190179175	range : 1 mm²		
Qty.	3,000 pc(s).			
Type	DFFC 0.5-1.0 SN E	Version	Product data	Packaging
Order No.	1567060000	PCB plug-in connector, Crimp contact, Contact, tinned, Max. clamping		Box
GTIN (EAN)	4008190166991	range : 1 mm²		
Qty.	250 pc(s).			

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Accessories

... for Weidmüller DFF and ZRV contacts



Crimping tools for for turned/stamped contact
- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation
- With stop for exact positioning of the contacts.

General ordering data

Type	HTF DFF	Version
Order No.	9014140000	Pressing tool, Crimping tool for contacts, 0.22mm², 2.5mm², B-Crimp
GTIN (EAN)	4008190297305	
Qty.	1 pc(s).	

Blocks for PCB mounting



Minor component, major effect:
Clip-on attachment elements increase the mechanical resilience of the whole plug connection by
- securing the male connectors to the circuit board
- providing a vibration-proof connection between the sockets and the male connectors

Clip-on or pre-assembled - always the right solution:
- Hard-wearing, precise fitting dovetail joint
- Hard-wearing metal threaded inserts
- Suitable for all outlet directions

Maximum stability, minimum effort:
- Extremely resilient for frequent fastening operations
- Complete set for easy selection

The result: soldering points, contacts and overall module are more resilient against mechanical stress such as vibrations and tensile loads.

General ordering data

Type	SLA BB12R SW	Version	Product data	Packaging
Order No.	1626880000	PCB plug-in connector, Accessories, Mounting block, black, Number of		Box
GTIN (EAN)	4008190198213	poles: 1		
Qty.	100 pc(s).			
Type	SLA BB11R OR	Version	Product data	Packaging
Order No.	1604120000	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190182977	of poles: 1		
Qty.	20 pc(s).			
Type	SLA BB12R OR	Version	Product data	Packaging
Order No.	1593450000	PCB plug-in connector, Accessories, Mounting block, orange, Number		Box
GTIN (EAN)	4008190122164	of poles: 1		
Qty.	100 pc(s).			

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Accessories

Type	SLA BB11R SW	Version	Product data	Packaging
Order No.	1692340000	PCB plug-in connector, Accessories, Mounting block, black, Number of poles: 1		Box
GTIN (EAN)	4008190864965			
Qty.	20 pc(s).			