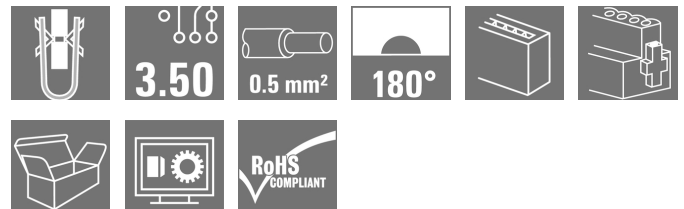


## OMNIMATE Signal - series BL/SL 3.50 BLIDCB 3.50/04/-F SN BK BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 26  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

### Product image



Similar to illustration

Female connectors for fast processing with insulation displacement connectors (IDC) for connecting wires at 3.50 pitch. They provide space for labelling and can be coded.

### General ordering data

Type	BLIDCB 3.50/04/-F SN BK BX
Order No.	<a href="#">1770760000</a>
Version	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 4, 90°/270°, IDC terminal, Clamping range, max. : 0.5 mm <sup>2</sup> , Box
GTIN (EAN)	4032248174546
Qty.	10 pc(s).
Product data	IEC: 250 V / 6 A / 0.35 - 0.5 mm <sup>2</sup> UL: 300 V / 7 A / AWG 22 - AWG 20
Packaging	Box

Creation date April 23, 2020 3:39:50 AM CEST

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

Height	12.5 mm	Height (inches)	0.492 inch
Depth	21.2 mm	Depth (inches)	0.835 inch
Net weight	5.5 g		

**System Parameters**

Product family	OMNIMATE Signal - series BL/SL 3.50	Type of connection	Field connection
Wire connection method	IDC terminal	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	Conductor outlet direction	90°/270°
Number of poles	4	L1 in mm	10.5 mm
L1 in inches	0.413 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	0.5 mm <sup>2</sup>
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch	Touch-safe protection acc. to DIN VDE 0470	IP 20
Volume resistance	≤ 5mΩ	Can be coded	Yes
Tightening torque for screw flange, min.	0.15 Nm	Tightening torque for screw flange, max.	0.2 Nm
Screwdriver blade	0.4 x 2.5	Screwdriver blade standard	DIN 5264-A
Plugging cycles	25	Plugging force/pole, max.	7.5 N
Pulling force/pole, max.	5.5 N		

**Material data**

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	CuSn	Contact surface	tinned
Storage temperature, min.	-25 °C	Storage temperature, max.	50 °C
Max. relative humidity during storage	70 %	Operating temperature, min.	-50 °C
Operating temperature, max.	80 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	80 °C		

**Conductors suitable for connection**

Clamping range, min.	0.32 mm <sup>2</sup>	Clamping range, max.	0.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 22	Wire connection cross section AWG, max.	AWG 20
Solid, min. H05(07) V-U	0.35 mm <sup>2</sup>	Solid, max. H05(07) V-U	0.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.35 mm <sup>2</sup>	Flexible, max. H05(07) V-K	0.5 mm <sup>2</sup>
Outer diameter of insulation, max.	2.1 mm	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.
Max. clamping range	0.5 mm <sup>2</sup>		


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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)	6 A
Rated current, max. number of poles (Tu=20°C)	6 A	Rated current, min. number of poles (Tu=40°C)	6 A
Rated current, max. number of poles (Tu=40°C)	5 A	Rated voltage for surge voltage class / pollution degree II/2	250 V
Rated voltage for surge voltage class / pollution degree III/2	160 V	Rated voltage for surge voltage class / pollution degree III/3	160 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	2.5 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	2.5 kV	Short-time withstand current resistance	3 x 1s with 60 A

**Rated data acc. to CSA**

Institute (CSA)		Certificate No. (CSA)	200039-1068660
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	7 A	Rated current (Use group D / CSA)	7 A
Wire cross-section, AWG, min.	AWG 22	Wire cross-section, AWG, max.	AWG 20
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)	7 A	Rated current (Use group D / UL 1059)	7 A
Wire cross-section, AWG, min.	AWG 22	Wire cross-section, AWG, max.	AWG 20
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

**Packing**

Packaging	Box	VPE length	40 mm
VPE width	70 mm	VPE height	90 mm

**Classifications**

ETIM 6.0	EC002638	ETIM 7.0	EC002638
eClass 9.0	27-44-03-09	eClass 9.1	27-44-03-09
eClass 10.0	27-44-03-09	UNSPSC	30-21-18-10

**Data sheet**

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**Technical data**

**Notes**

Notes	<ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• For IDC contact 0.5: cable acc. to DIN EN 60352-4</li> <li>• AWG conductor: solid, 7 or 19 strands only</li> <li>• Temperature range -20 to +80 °C</li> <li>• BLIDC 3.5 and BLIDCB 3.5 conductors "solid"/"flexible" to DIN 47726</li> <li>• P on drawing = pitch</li> <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>
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.

**Approvals**

Approvals



ROHS

Conform

**Downloads**

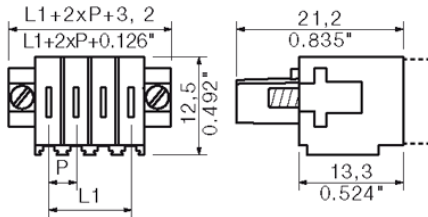
Approval/Certificate/Document of Conformity	<a href="#">Declaration of the Manufacturer</a>
Brochure/Catalogue	<a href="#">FL DRIVES EN</a> <a href="#">MB DEVICE MANUF. EN</a> <a href="#">FL DRIVES DE</a> <a href="#">CAT 2 PORTFOLIOGUIDE EN</a> <a href="#">FL BUILDING SAFETY EN</a> <a href="#">FL APPL LED LIGHTING EN</a> <a href="#">FLIndustr.CONTROLS EN</a> <a href="#">FL MACHINE SAFETY EN</a> <a href="#">FL HEATING ELECTR EN</a> <a href="#">FL APPL INVERTER EN</a> <a href="#">FL_BASE_STATION EN</a> <a href="#">FL ELEVATOR EN</a> <a href="#">FL POWER SUPPLY EN</a> <a href="#">FL 72H SAMPLE SER EN</a> <a href="#">PO OMNIMATE EN</a>
Engineering Data	<a href="#">WSCAD</a>
Engineering Data	<a href="#">STEP</a>

**OMNIMATE Signal - series BL/SL 3.50  
BLIDCB 3.50/04/-F SN BK BX**

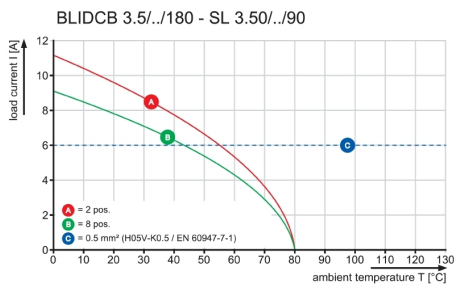
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**Drawings**

**Dimensional drawing**

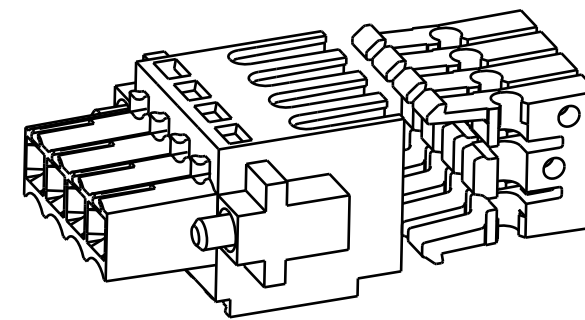
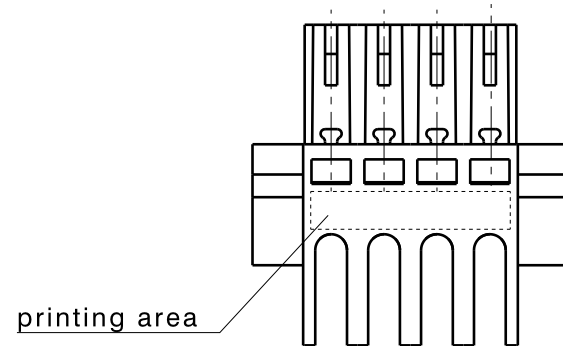
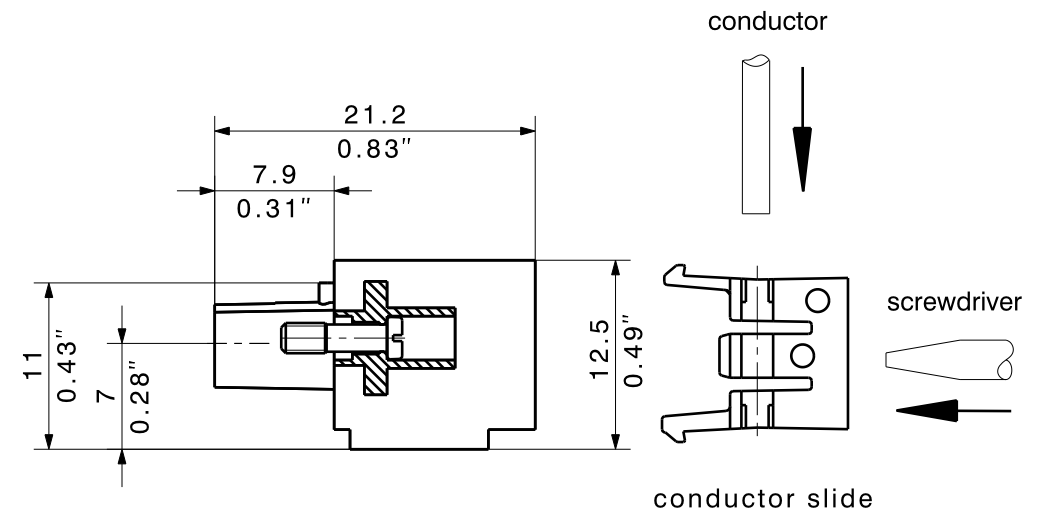
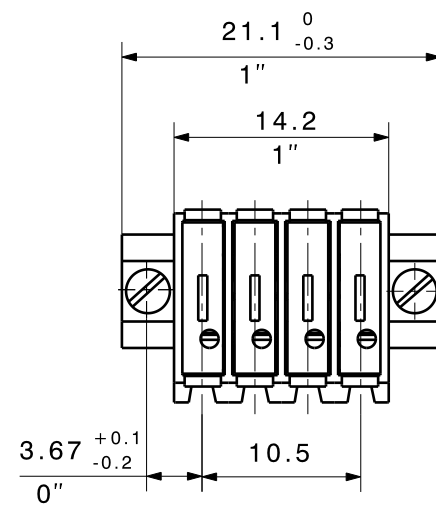


**Graph**



### Technical Data

Rev.	Material data		
	Insulation material type	PBT	
	Insulation material colours	orange	
	Insulation material flammability class	UL94 V-0	
	Insulation resistance	MOhm >10 <sup>5</sup>	
	Contact base material	Cu-alloy	
	Contact plating	tin plated	
	System characteristic values		
	Pitch P	with counterpart 3.5/0.138	
	Number of rows	1	
	Dielectric strength (r.m.s withstand voltage)	kV >1.39	
	Mechanical operating cycles	acc. to IEC 512 >50	
	Plug in force (max.)	N/pole 10	
	Pull out force (max.)	N/pole 10	
	Through resistance (typical)	mOhm <5,0	
	Operating temperature range	°C -20... +80	
	Degree of protection acc. to VDE 0106 (plugged/unplugged)	finger safe/back of hands	
	Degree of protection acc. to DIN EN 60529 (plugged/unplugged)	IP20/IP10	
	Conductor connection method	IDC connection	
	Screw size	n.a.	
	Screw torque max. acc. to EN 60999	Nm n.a.	
	Screw driver type	0.4 x 2.5	
	Application notes		
	Coding possibility	yes/no yes (accessory)	
	Joinable without loss of pitch	yes/no yes	
	Manual assembly of modules	yes/no no	
	Max. number of poles	n 12	
	Conductor		
	Clamping range	mm <sup>2</sup> 0.35 ... 0.5	
	"e" solid H05(07) V-U	mm <sup>2</sup> 0.5	
	"f" flexible H05(07) V-K	mm <sup>2</sup> 0.5	
	"f" with ferrule acc. to DIN 46228/1	mm <sup>2</sup> n.a.	
	... with plastic collar acc. to DIN 46228/4	mm <sup>2</sup> n.a.	
	Conductor insulation stripping length	mm/inch n.a.	
	Conductor insulation diameter max.	mm/inch 2.1	
	Two wire clamping range	mm <sup>2</sup> n.a.	
	Gauge to EN 60999 (a x b ; Ø)	mm n.a.	
	IEC 664-1 / VDE0110 (4.97) rated data		
	Rated cross section acc. to EN 60999	mm <sup>2</sup> 0.5	
	Rated current @ 20°C ambient (together with)	A 6 (SL 3.5)	
	Rated current @ 40°C ambient (together with)	A 6 (SL 3.5)	
	Overvoltage category / Pollution degree		
	Rated voltage	V III/3 III/2 II/2 160 250 320	
	Rated impulse voltage	kV 2.5 2.5 2.5	
	UL 1059 rated data		
	Rated voltage	V 300	
	Rated current	A 7	
	AWG wire range (field wiring / factory wiring)	22 ... 20	
	CSA C22.2 rated data		
	Rated voltage	V 300	
	Rated current	A 7	
	AWG wire range (field wiring / factory wiring)	22 ... 20	
	Packaging	card box	
	Downloads	www.weidmueller.de	



16	52,50	2,067
15	49,00	1,929
14	45,50	1,791
13	42,00	1,654
12	38,50	1,516
11	35,00	1,378
10	31,50	1,240
9	28,00	1,102
8	24,50	0,965
7	21,00	0,827
6	17,50	0,689
5	14,00	0,551
4	10,50	0,413
3	7,00	0,276
2	3,50	0,138
n	L1 [mm]	L1 [inch]

shown: BLIDCB 3.5/4F

For the mounting of PCBs, it should be noted that the rated data stated here relates only to the PCB components alone. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

METRIC TOLERANCES:	③	②	①	DATE	NAME	<b>Weidmüller</b> C 27649 DRAWING NO. ISSUE NO. SHEET: 2 OF 2 SHEETS
X. = ±0.3				17.12.02	Lux	
X.X = ±0.1				17.12.02	Lux	
X.XX = ±0.05				25.09.03	Phillips	
				26.09.03	Endres	
METRIC/INCH DIMENSIONS						<b>BLIDCB 3.5/2...12/F</b> Socket Block
SCALE: 2:1						
SUPERSEDES: .						PRODUCT FILE: BLIDCB 3.5 Customer Drawing
SUPERSEDED BY: .						

- Without locking latches
- Sum of ambient temperature and temperature rise
- Referred to rated cross section and minimum pole number

n.a. = not applicable

Subject to technical changes