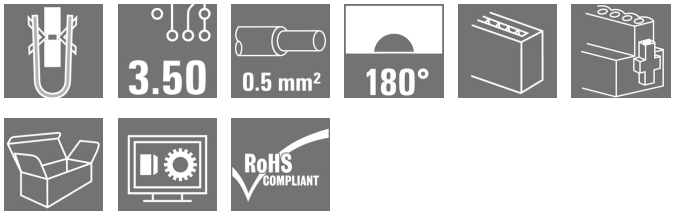
BLIDCB 3.50/02/-F SN OR BX

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

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

Version	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 2, 90°/270°, IDC terminal, Clamping range, max. : 0.5 mm², Box
Order No.	1751450000
Type	BLIDCB 3.50/02/-F SN OR BX
GTIN (EAN)	4032248174386
Qty.	10 pc(s).
Product data	IEC: 250 V / 6 A / 0.35 - 0.5 mm² UL: 300 V / 7 A / AWG 22 - AWG 20
Packaging	Box

Creation date March 25, 2021 2:35:11 AM CET

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Technical data

Dimensions and weights

Depth	21.2 mm	Depth (inches)	0.835 inch
Height	12.5 mm	Height (inches)	0.492 inch
Net weight	3.9 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	2			
L1 in mm	3.5 mm			
L1 in inches	0.138 inch			
Number of rows	1			
Pin series quantity	1			
Rated cross-section	0.5 mm²			
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	≤5 mΩ			
Can be coded	Yes			
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			
Tightening torque	Torque type	Screw flange		
	Usage information	Tightening torque	min.	0.15 Nm
			max.	0.2 Nm

Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10^8 Ω
UL 94 flammability rating	V-0	Contact material	CuSn
Contact surface	tinned	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	Operating temperature, min.	-50 °C
Operating temperature, max.	80 °C	Temperature range, installation, min.	-25 °C
Temperature range, installation, max.	80 °C		

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Technical data

Conductors suitable for connection

Clamping range, min.	0.32 mm²	Clamping range, max.	0.5 mm²
Wire connection cross section AWG, min.	AWG 22	Wire connection cross section AWG, max.	AWG 20
Solid, min. H05(07) V-U	0.35 mm²	Solid, max. H05(07) V-U	0.5 mm²
Flexible, min. H05(07) V-K	0.35 mm²	Flexible, max. H05(07) V-K	0.5 mm²
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.

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.		

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Technical data

Packing

Packaging	Box	VPE length	37 mm
VPE width	68 mm	VPE height	86 mm

Type tests

Test: Durability of markings	Standard	draft DIN VDE 0627 section 6.2.2 / 09.91
	Test	mark of origin, type identification, type of material
	Evaluation	available
	Test	durability
	Evaluation	passed

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	ECLASS 11.0	27-46-02-02

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 colours on request • Rated current related to rated cross-section & min. No. of poles. • For IDC contact 0.5: cable acc. to DIN EN 60352-4 • AWG conductor: solid, 7 or 19 strands only • Temperature range -20 to +80 °C • BLIDC 3.5 and BLIDCB 3.5 conductors "solid"/"flexible" to DIN 47726 • 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. • Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

Approvals

Approvals	
ROHS	Conform
UL File Number Search	E60693

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Technical data

Downloads

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD

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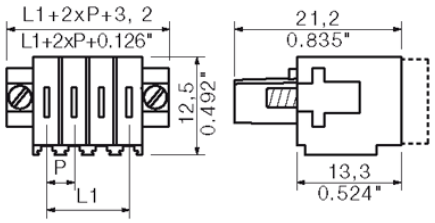
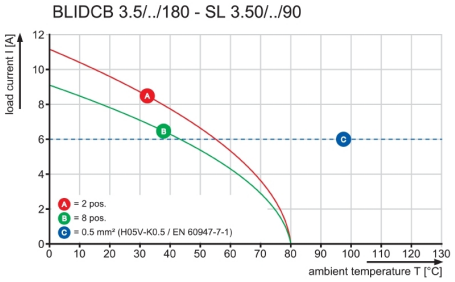
Drawings

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	$>10^5$
Contact base material		Cu-alloy
Contact plating		tin plated

System characteristic values	with counterpart		
Pitch **P**	mm/inch	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	1)
Pull out force (max.)	N/pole	10	1)
Through resistance (typical)	mOhm	<5,0	
Operating temperature range	°C	-20... +80	2)
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

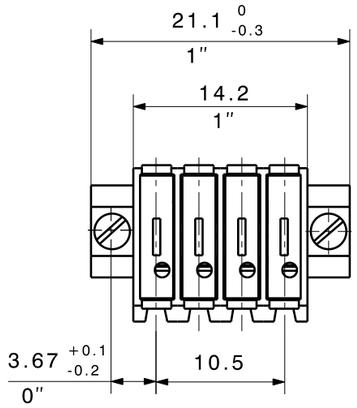
Conductor		
Clamping range	mm^2	0.35 ... 0.5
"e" solid H05(07) V-U	mm^2	0.5
"f" flexible H05(07) V-K	mm^2	0.5
"f" with ferrule acc. to DIN 46228/1	mm^2	n.a.
... with plastic collar acc. to DIN 46228/4	mm^2	n.a.
Conductor insulation stripping length	mm/inch	n.a.
Conductor insulation diameter max.	mm/inch	2.1
Two wire clamping range	mm^2	n.a.
Gauge to EN 60999 (a x b ; Ø)	mm	n.a.

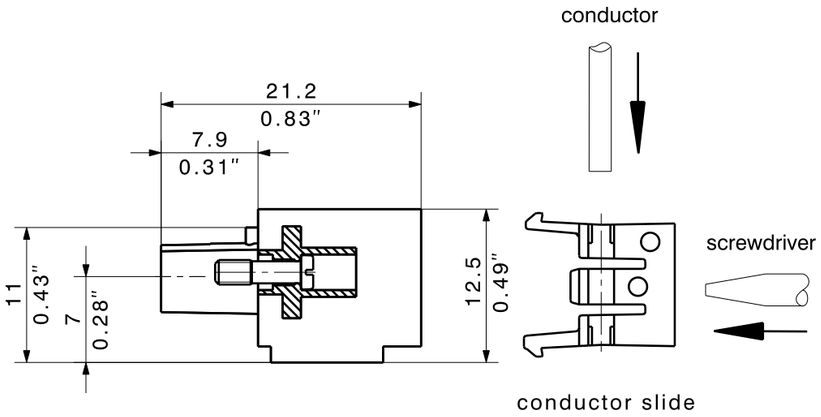
IEC 664-1 / VDE0110 (4.97) rated data					
Rated cross section acc. to EN 60999	mm^2	0.5			
Rated current @ 20°C ambient (together with)	A	6 (SL 3.5)			3)
Rated current @ 40°C ambient (together with)	A	6 (SL 3.5)			3)
Overvoltage category / Pollution degree		**III/3**	**III/2**	**II/2**	
Rated voltage	V	160	250	320	
Rated impulse voltage	kV	2.5	2.5	2.5	

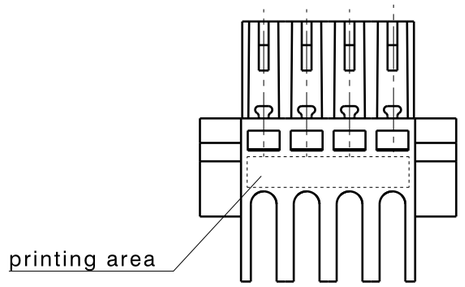
UL 1059 rated data — File No.: E60693		B	C	D
Rated voltage	V	300		
Rated current	A	7		
AWG wire range (field wiring / factory wiring)		22 ... 20		

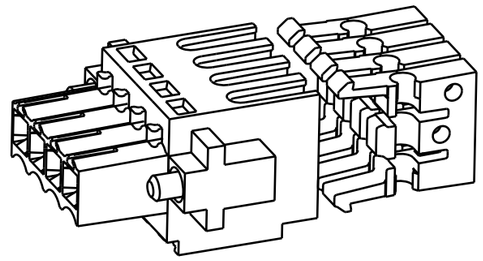
CSA C22.2 rated data — File No.: LR12400		B	C	D
Rated voltage	V	300		
Rated current	A	7		
AWG wire range (field wiring / factory wiring)		22 ... 20		

Packaging	card box
Downloads	www.weidmueller.de









shown: BLIDCB 3.5/4F

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]**

1) Without locking latches
2) Sum of ambient temperature and temperature rise
3) Referred to rated cross section and minimum pole number

n.a. = not applicable

Subject to technical changes

For the mounting of PCBs, it should be noted that the rated data stated here relates only to the PCB components alone.
The neccessary 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 occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

METRIC TOLERANCES:
X. = ±0.3
X.X = ±0.1
X.XX = ±0.05

③ . .
② . .
① . .
MODIFICATION

Weidmüller

C 27649 (0)
DRAWING NO. ISSUE NO.
SHEET: 2 OF 2 SHEETS

METRIC/INCH DIMENSIONS		DATE	NAME
	DRAWN	17.12.02	Lux
SCALE: 2:1	RESPONSIBLE	17.12.02	Lux
SUPERSEDES: .	CHECKED	25.09.03	Phillips
SUPERSEDED BY: .	APPROVED	26.09.03	Endres

BLIDCB 3.5/2...12/F

Socket Block

PRODUCT FILE: BLIDCB 3.5 Customer Drawing