

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image



















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: 8, 90°/270°, IDC terminal, Clamping range, max.: 0.5 mm², Box
Order No.	<u>1751440000</u>
Туре	BLIDCB 3.50/08/- SN OR BX
GTIN (EAN)	4032248174379
Qty.	10 pc(s).
Product data	IEC: 250 V / 6 A / 0.35 - 0.5 mm ² UL: 300 V / 7 A / AWG 22 - AWG 20
Packaging	Box

Creation date March 25, 2021 2:35:06 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	8.6 a		

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	8	L1 in mm	24.5 mm
L1 in inches	0.965 inch	Number of rows	1
Pin series quantity	1	Rated cross-section	0.5 mm ²
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		

Material data

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 200	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 ℃	Temperature range, installation, max.	80 °C

Conductors suitable for connection

Clamping range, min.	0.32 mm ²	Clamping range, max.	0.5 mm ²
Wire connection cross section AV	VG,	Wire connection cross section AW	VG,
min.	AWG 22	max.	AWG 20
Solid, min. H05(07) V-U	0.35 mm ²	Solid, max. H05(07) V-U	0.5 mm ²
Flexible, min. H05(07) V-K	0.35 mm ²	Flexible, max. H05(07) V-K	0.5 mm ²
Outer diameter of insulation, max		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
	2.1 mm		voltage.



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Rated data acc. to IEC

tested acc. to standard		Rated current, min. number of poles	
tested dec. to standard	IEC 60664-1, IEC 61984	(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)	€ P:	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 -		

Rated data acc. to UL 1059

Institute (UR)	<i>511.</i>	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	see approval certificate.		

Packaging	Box	VPE length	42 mm	
VPE width	80 mm	VPE height	85 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



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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

Notes

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.

- 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

Downloads

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



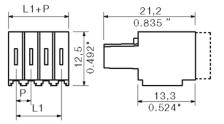
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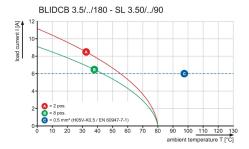
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Drawings

Dimensional drawing



Graph



Technical Data

Rev.

Material data					
Material data Insulation material type		PBT			_
Insulation material colours		orang	10		_
Insulation material flammability class	UL94	V-0	je		_
Insulation resistance	MOhm	>10 ⁵			_
Contact base material	WOTHIT	Cu-al	lov		
Contact plating		tin pla			
System sharastaristis values					
System characteristic values Pitch P	with counterpart	2.5/0	100		_
Number of rows	mm/inch	3.5/0. 1	130		_
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			— ' <i>'</i> 1)
Through resistance (typical)	mOhm	<5,0			— ' <i>'</i>
Operating temperature range	°C	-20	+80		2)
Degree of protection acc. to VDE 0106 (plugge				ck of har	_ ′
Degree of protection acc. to DIN EN 60529 (plu		IP20/I			
Conductor connection method	ggou, ampiaggou,		onnection	on	_
Screw size		n.a.			_
Screw torque max. acc. to EN 60999	Nm	n.a.			_
Screw driver type		0.4 x	2.5		
Auglication notes					
Application notes Coding possibility	voe/no	VOC (2	accesso	nv)	_
Joinable without loss of pitch	yes/no yes/no	yes	1000330	· y)	_
Manual assembly of modules	yes/no	no			_
Max. number of poles	<u>yes/ilo</u> n	12			_
	<u> </u>				
Clamping range	mm ²	0.05	0.5		
Clamping range "e" solid H05(07) V-U	mm ²	0.35 . 0.5	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	mm ²	0.5			_
Rated cross section acc. to EN 60999 Rated current @ 20°C ambient (together with)	A	6 (SL	3.5)		— ₃₎
Rated current @ 40°C ambient (together with)	A	6 (SL			$-\frac{3}{3}$
Overvoltage category / Pollution degree	A	III/3	3.3) III/2	II/2	_ 3
Rated voltage	V	160	250	320	
Rated impulse voltage	kV	2.5	2.5	2.5	_
EAL		_	_		
UL 1059 rated data File No Rated voltage	o.: E60693	B 300	С	D	
Rated current	A	7			_
AWG wire range (field wiring / factory wiring)		22	20		
CSA C22 2 voted data	o.: LR12400	В	_	n	
CSA C22.2 rated data File No Rated voltage	V V	B 300	С	D	_
Rated current	v	7			_
AWG wire range (field wiring / factory wiring)		22	20		_
Packaging		card I	xoc		_

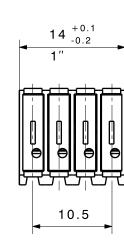
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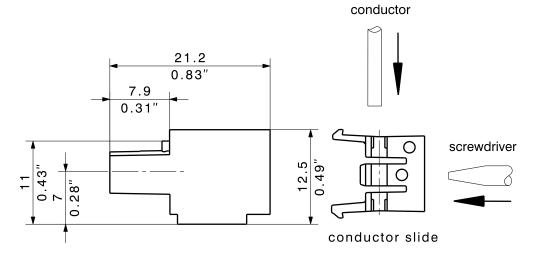
- 2) Sum of ambient temperature and temperature rise
- 3) Referred to rated cross section and minimum pole number

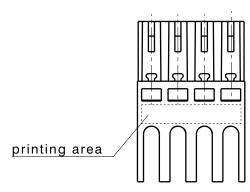
n.a. = not applicable

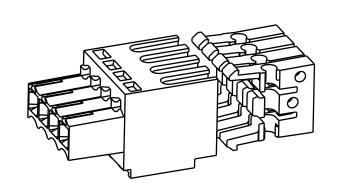
Downloads

Subject to technical changes









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

(0)

ISSUE NO

For the mounting of PCBs, it should be noted that the rated data stated here relates only to the PCB components

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.

shown:	BLIDCB 3.5/4

METRIC TOLERANCES: $X. = \pm 0.3$ $X.X = \pm 0.1$ $X.XX = \pm 0.05$	③ ; ② ; ① ; MODIF	ICATION	We	eidmüll
METRIC/INCH		DATE	NAME	
DIMENSIONS TO	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	PRODUCT FILE

C 27649

SHEET: 1 OF 2 SHEETS

BLIDCB 3.5/2...12

Socket Block

E: BLIDCB 3.5 Customer Drawing

1)	Without locking latches	

V5 1002