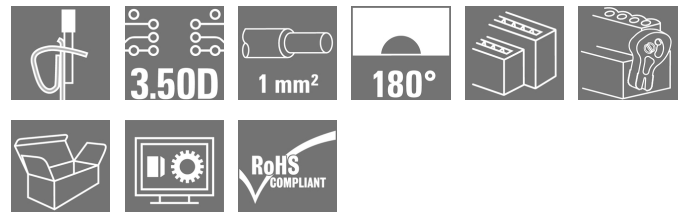


OMNIMATE Signal - series B2L/S2L 3.50 - 2-row B2L 3.50/18/180LH SN BK BX

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 with tension clamp connection system enable quick and simple wiring. These female header can be mounted side by side and therefore have a high connection density. The release lever simplifies the separation of the connection in confined spaces. The socket blocks provide space for labelling and can be coded.

General ordering data

Type	B2L 3.50/18/180LH SN BK BX
Order No.	1748550000
Version	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 18, 180°, Tension-clamp connection, Clamping range, max. : 1 mm², Box
GTIN (EAN)	4032248038268
Qty.	48 pc(s).
Product data	IEC: 250 V / 10.3 A / 0.2 - 1 mm² UL: 300 V / 10 A / AWG 28 - AWG 16
Packaging	Box

Creation date April 27, 2020 3:23:13 PM CEST

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Technical data**Dimensions and weights**

Width	37.8 mm	Width (inches)	1.488 inch
Height	15.7 mm	Height (inches)	0.618 inch
Depth	20.6 mm	Depth (inches)	0.811 inch
Net weight	11.05 g		

System Parameters

Product family	OMNIMATE Signal - series B2L/S2L 3.50 - 2-row	Type of connection	Field connection
Wire connection method	Tension-clamp connection	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	Conductor outlet direction	180°
Number of poles	18	L1 in mm	28 mm
L1 in inches	1.102 inch	Number of rows	1
Pin series quantity	2	Rated cross-section	1 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
Can be coded	Yes	Stripping length	7 mm
Screwdriver blade	0.4 x 2.5	Screwdriver blade standard	DIN 5264
Plugging cycles	25	Plugging force/pole, max.	5 N
Pulling force/pole, max.	4 N		

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	GWFI	960 °C
Contact material	Copper alloy	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.	100 °C	Temperature range, installation, min.	-30 °C
Temperature range, installation, max.	100 °C		

Conductors suitable for connection

Clamping range, min.	0.08 mm ²
Clamping range, max.	1 mm ²
Wire connection cross section AWG, min.	AWG 28
Wire connection cross section AWG, max.	AWG 18
Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	1 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²
Flexible, max. H05(07) V-K	1 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.14 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, max.	0.34 mm ²
w. wire end ferrule, DIN 46228 pt 1, min.	0.14 mm ²
w. wire end ferrule, DIN 46228 pt 1, max.	0.34 mm ²

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Technical data

Clampable conductor	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	0.14 mm ²
		Stripping length	nominal 10 mm
		Recommended wire-end ferrule	HO.14/12 GR SV
	Cross-section for conductor connection	Type	fine-wired
	wire end ferrule	nominal	0.25 mm ²
		Stripping length	nominal 10 mm
		Recommended wire-end ferrule	HO.25/12 HBL
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	1 mm ²		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	10.3 A
Rated current, max. number of poles (Tu=20°C)	8.7 A	Rated current, min. number of poles (Tu=40°C)	8.9 A
Rated current, max. number of poles (Tu=40°C)	7.4 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	80 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 77 A

Rated data acc. to CSA

Institute (CSA)		Certificate No. (CSA)	200039-1488444
Rated voltage (Use group B / CSA)	300 V	Rated current (Use group B / CSA)	5 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 18
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 C / UL 1059)	50 V
Rated current (Use group B / UL 1059)	10 A	Rated current (Use group C / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 28	Wire cross-section, AWG, max.	AWG 16
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	30 mm
VPE width	135 mm	VPE height	350 mm

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Technical data**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

Notes

Notes	<ul style="list-style-type: none"> • Additional colours on request • Gold-plated contact surfaces on request • Rated current related to rated cross-section & min. No. of poles. • Wire end ferrule with plastic collar to DIN 46228/4 • Wire end ferrule without plastic collar to DIN 46228/1 • P on drawing = pitch • Crimp shape A for wire-end ferrules with crimping tools PZ 1,5 (order no. 9005990000) or PZ 6/5 (order no. 9011460000) for larger wire cross-sections recommended. • 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.
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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.
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Approvals

Approvals



ROHS	Conform
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Downloads

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

Creation date April 27, 2020 3:23:13 PM CEST

Catalogue status 17.04.2020 / We reserve the right to make technical changes.

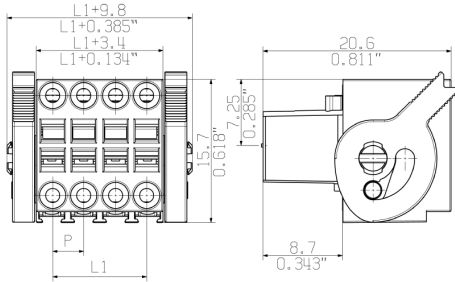
Data sheet

**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
B2L 3.50/18/180LH SN BK BX**

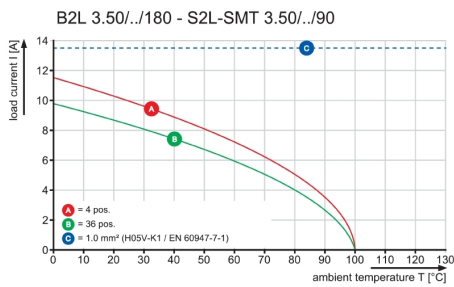
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Drawings

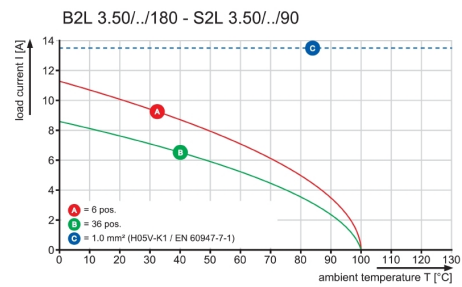
Dimensional drawing



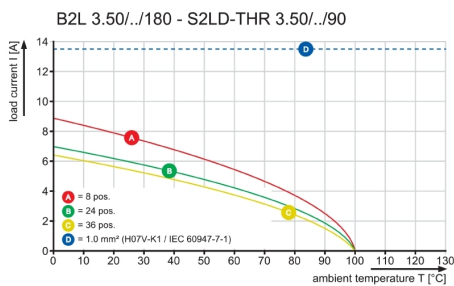
Graph



Graph



Graph



MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
 DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

DIE DEUTSCHE VERSION IST VERBINDLICH
 THE GERMAN VERSION IS BINDING

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36	59,5	2,344	62,9	2,479	66,4	2,617	69,8	2,751
34	56,0	2,206	59,4	2,341	62,9	2,479	66,3	2,613
32	52,5	2,069	55,9	2,203	59,4	2,341	62,8	2,475
30	49,0	1,931	52,4	2,065	55,9	2,203	59,3	2,337
28	45,5	1,793	48,9	1,927	52,4	2,065	55,8	2,199
26	42,0	1,655	45,4	1,789	48,9	1,927	52,3	2,061
24	38,5	1,517	41,9	1,651	45,4	1,789	48,8	1,923
22	35,0	1,379	38,4	1,513	41,9	1,651	45,3	1,785
20	31,5	1,241	34,9	1,375	38,4	1,513	41,8	1,647
18	28,0	1,103	31,4	1,237	34,9	1,375	38,3	1,509
16	24,5	0,965	27,9	1,099	31,4	1,237	34,8	1,371
14	21,0	0,827	24,4	0,961	27,9	1,099	31,3	1,233
12	17,5	0,690	20,9	0,823	24,4	0,961	27,8	1,095
10	14,0	0,552	17,4	0,685	20,9	0,823	24,3	0,957
8	10,5	0,414	13,9	0,547	17,4	0,685	20,8	0,819
6	7,0	0,276	10,4	0,409	13,9	0,547	17,3	0,681
4	3,5	0,138	6,9	0,271	10,4	0,409	13,8	0,543
n	L1	L1[inch]	L2	L2[inch]	L3	L3[inch]	L4	L4[inch]

n = POLZAHL/NO OF POLES

P = RASTER/PITCH

SHOWN: B2L 3.50/08/180F

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary 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.

Weidmüller connectors are tested to the DIN VDE 0627 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.

	DIN ISO 2768-m		CAT.NO.:	
	69611/5 25.04.13 HELIS_MA 00		C 55622 02	
MODIFICATION			DRAWING NO. OF 03 SHEETS	
		DATE	NAME	B2L 3.50/././180... BUCHSENLEISTE SOCKET BLOCK
DRAWN		16.01.2012	HELIS_MA	
RESPONSIBLE			LANG_T	
CHECKED		22.05.2013	HECKERT_M	
SCALE: 2:1		CHECKED	HECKERT_M	PRODUCT FILE: B2L 3.50
SUPERSEDES: 26643/31		APPROVED	HECKERT_M	7110