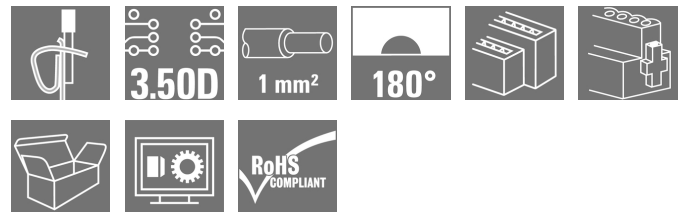


OMNIMATE Signal - series B2L/S2L 3.50 - 2-row B2L 3.50/16/180FQV8 SN BK BX PRT

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
D-32758 Detmold
Germany
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www.weidmueller.com

Product image



Similar to illustration

Female connector with integral cross-connection and clear printing for uninterrupted relaying of potential at full current-carrying capacity with the maximum cable cross-section. The cross-connection is positioned vertically between the poles of rows directly on top of each other. Conductor connection with tension clamp system with straight outlet and 3.5 mm pitch. Flange and release lever available. Packed in cardboard box.

General ordering data

Type	B2L 3.50/16/180FQV8 SN BK BX PRT
Order No.	1944720000
Version	PCB plug-in connector, female plug, 3.50 mm, No. of poles: 16, 180°, Tension-clamp connection, Clamping range, max.: 1 mm ² , Box
GTIN (EAN)	4032248619658
Qty.	54 pc(s).
Product data	IEC: 200 V / 10.6 A / 0.2 - 1 mm ² UL: 150 V / 7 A / AWG 28 - AWG 18
Packaging	Box

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Technical data**Dimensions and weights**

Width	34.8 mm	Width (inches)	1.37 inch
Height	15.7 mm	Height (inches)	0.618 inch
Depth	20.6 mm	Depth (inches)	0.811 inch
Net weight	7.888 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°
No. of poles	16	L1 in mm	24.5 mm
L1 in inches	0.965 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
Tightening torque for screw flange, min.	0.2 Nm	Tightening torque for screw flange, max.	0.25 Nm
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	Insulating material group	IIIa
CTI	≥ 200	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.	55 °C
Max. relative humidity during storage	80 %	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
		nominal	0.14 mm ²
	AEH	Stripping length	nominal 10 mm
	Cross-section for conductor connection	Type	fine-wired
nominal		0.25 mm ²	
AEH	Stripping length	nominal 10 mm	
Reference text	The outside diameter of the plastic collar should not be larger than the pitch (P).		
Max. clamping range	1 mm ²		


Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984		Rated current, min. no. of poles (Tu=20°C)	10.6 A
Rated current, max. no. of poles (Tu=20°C)	8.2 A		Rated current, min. no. of poles (Tu=40°C)	9.1 A
Rated current, max. no. of poles (Tu=40°C)	7 A		Rated voltage for surge voltage class / pollution degree II/2	200 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	1.5 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)	7 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)	150 V	Rated voltage (Use group C / UL 1059)	50 V
Rated current (Use group B / UL 1059)	7 A	Rated current (Use group C / UL 1059)	7 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.		

Packing

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

Data sheet

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Technical data

Classifications

ETIM 4.0	EC002637	ETIM 5.0	EC002637
ETIM 6.0	EC002638	UNSPSC	30-21-18-10
eClass 5.1	27-26-07-04	eClass 6.2	27-26-07-04
eClass 7.1	27-44-04-02	eClass 8.1	27-44-04-02
eClass 9.0	27-44-03-09	eClass 9.1	27-44-03-09

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 • We recommend crimp shape A for wire-end ferrules with crimping tool PZ 6/5 (order no. 9011460000) for the larger wire cross-sections. • 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	
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ROHS	Conform
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Data sheet**OMNIMATE Signal - series B2L/S2L 3.50 - 2-row
B2L 3.50/16/180FQV8 SN BK BX PRT**

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Technical data**Downloads**

Approval/Certificate/Document of Conformity	Declaration of the Manufacturer
Brochure/Catalogue	FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE CAT 2 PORTFOLIOGUIDE EN 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

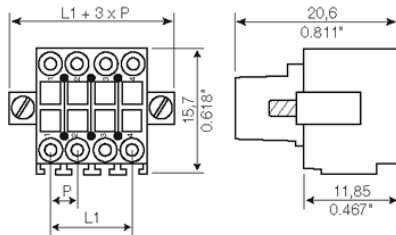
Data sheet

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B2L 3.50/16/180FQV8 SN BK BX PRT**

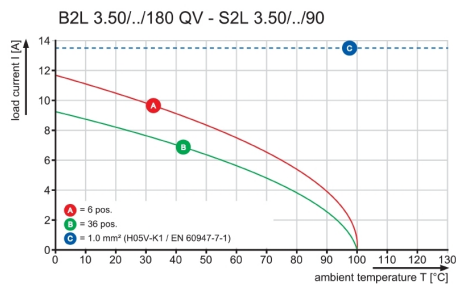
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Drawings

Dimensional drawing

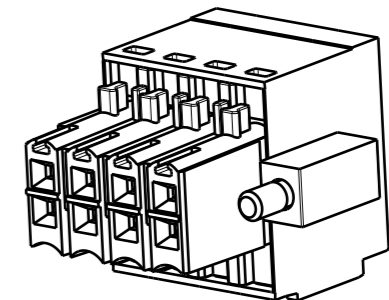
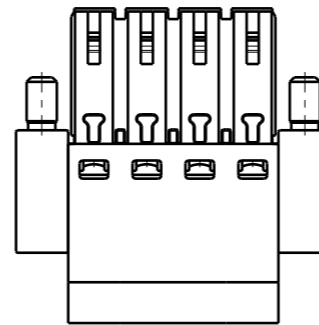
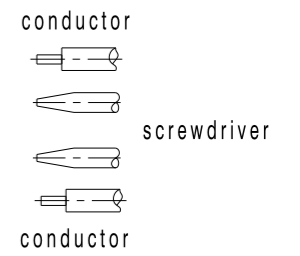
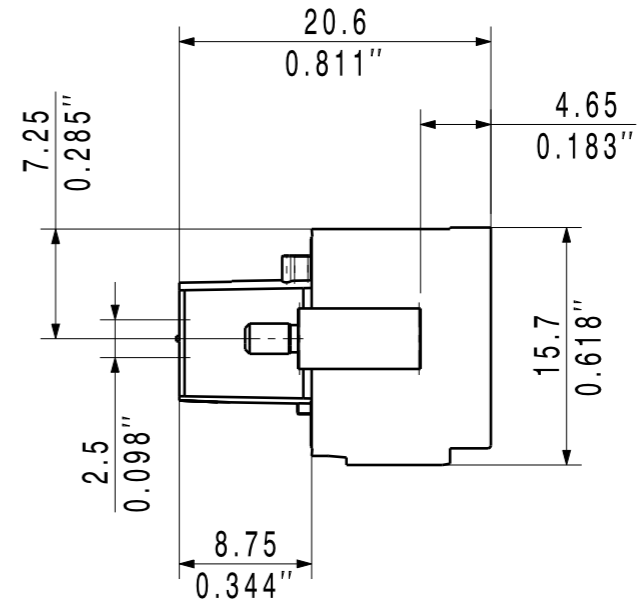
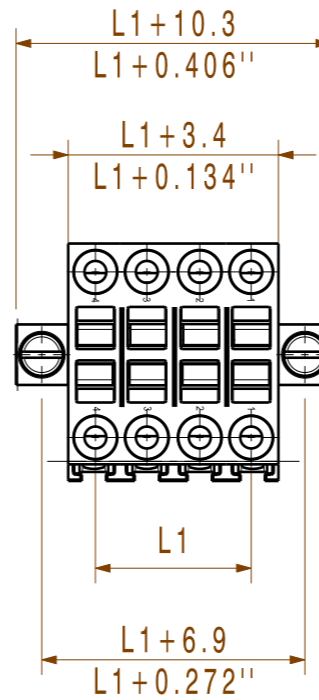


Graph



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36	2,345	59,50
34	2,207	56,00
32	2,069	52,50
30	1,931	49,00
28	1,793	45,50
26	1,655	42,00
24	1,517	38,50
22	1,379	35,00
20	1,241	31,50
18	1,103	28,00
16	0,965	24,50
14	0,827	21,00
12	0,689	17,50
10	0,551	14,00
8	0,413	10,50
6	0,275	7,00
n	L1[inch]	L1 [mm]

shown: B2L 3.5/08F QV4 BED

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 connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

GENERAL TOLERANCE: DIN ISO 2768-mK 	87939/5 03.05.16 HELIS_MA 01			Cat.no.: .	
	Modification			3 39691 02 Drawing no. Issue no.	
	Date	Name	B2L 3.50/.../...PRT BUCHSENLEISTE SOCKET BLOCK		
	Drawn	02.07.2007			
Responsible		AMANN_A			
Scale: 2:1	Checked	13.05.2016	HELIS_MA	Sheet 00 of 00 sheets	
Supersedes: .	Approved		HECKERT_M	Product file: B2L QV 7367	