

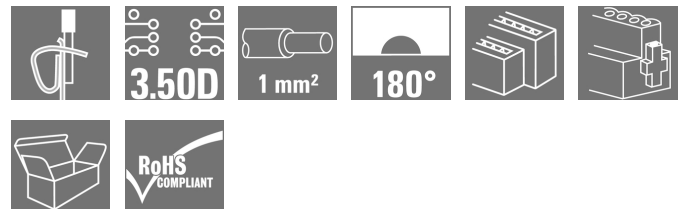
B2L 3.50/16/180FQV8 SN BK BX PRT**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

Version	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 16, 180°, Tension-clamp connection, Clamping range, max.: 1 mm², Box
Order No.	1290790000
Type	B2L 3.50/16/180FQV8 SN BK BX PRT
GTIN (EAN)	4050118084313
Qty.	54 pc(s).
Product data	IEC: 200 V / 10.6 A / 0.2 - 1 mm² UL: 150 V / 7 A / AWG 28 - AWG 18
Packaging	Box

Creation date April 15, 2021 1:19:33 PM CEST

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Technical data**Dimensions and weights**

Depth	20.6 mm	Depth (inches)	0.811 inch
Height	15.7 mm	Height (inches)	0.618 inch
Net weight	7.888 g	Width	34.8 mm
Width (inches)	1.37 inch		

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	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		
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		
Tightening torque	Torque type	Screw flange	
	Usage information	Tightening torque	min. 0.15 Nm max. 0.2 Nm

Material data

Insulating material	PBT	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	Insulation strength	≥ 10 ⁸ Ω
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Storage temperature, min.	-40 °C
Storage temperature, max.	70 °C	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

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Technical data

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, 0.14 mm ² min.			
w. plastic collar ferrule, DIN 46228 pt 4, 0.34 mm ² max.			
w. wire end ferrule, DIN 46228 pt 1, 0.14 mm ² min.			
w. wire end ferrule, DIN 46228 pt 1, 0.34 mm ² max.			
Clampable conductor	Cross-section for conductor connection	Type	fine-wired
		nominal	0.14 mm ²
	wire end ferrule	Stripping length	nominal 10 mm
		Recommended wire-end ferrule	H0,14/12 GR SV
	Cross-section for conductor connection	Type	fine-wired
		nominal	0.25 mm ²
	wire end ferrule	Stripping length	nominal 10 mm
		Recommended wire-end ferrule	H0,25/12 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.		

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	10.6 A
Rated current, max. number of poles (Tu=20°C)	8.2 A	Rated current, min. number of poles (Tu=40°C)	9.1 A
Rated current, max. number 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

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

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.		

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Technical data**Packing**

Packaging	Box	VPE length	338 mm
VPE width	130 mm	VPE height	27 mm

Type tests

Test: Durability of markings	Standard	DIN EN 61984 section 7.3.2 / 09.02 taking pattern from DIN EN 60068-2-70 / 07.96	
	Test	mark of origin, type identification, rated cross-section, type of material	
	Evaluation	available	
	Test	durability	
	Evaluation	passed	
Test: Misengagement (Non-interchangeability)	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN IEC 60512-7 section 5 / 05.94	
	Test	180° turned without coding elements	
	Evaluation	passed	
	Test	visual examination	
	Evaluation	passed	
Test: Clampable cross section	Standard	DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-1 section 8.2.4.5.1 / 12.02	
	Conductor type	Type of conductor and conductor cross-section	solid 0.2 mm ²
		Type of conductor and conductor cross-section	stranded 0.2 mm ²
		Type of conductor and conductor cross-section	solid 1.0 mm ²
		Type of conductor and conductor cross-section	stranded 1.0 mm ²
		Type of conductor and conductor cross-section	AWG 28/1
		Type of conductor and conductor cross-section	AWG 28/19
		Type of conductor and conductor cross-section	AWG 18/1
		Type of conductor and conductor cross-section	AWG 18/19
	Evaluation	passed	

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Technical data

Test for damage to and accidental loosening of conductors	Standard	DIN EN 60999-1 section 9.4 / 12.00	
	Requirement	0.2 kg	
	Conductor type	Type of conductor and conductor cross-section	AWG 28/1
		Type of conductor and conductor cross-section	AWG 28/19
	Evaluation	passed	
	Requirement	0.3 kg	
	Conductor type	Type of conductor and conductor cross-section	solid 0.5 mm ²
		Type of conductor and conductor cross-section	stranded 0.5 mm ²
	Evaluation	passed	
	Requirement	0.4 kg	
	Conductor type	Type of conductor and conductor cross-section	solid 1.0 mm ²
		Type of conductor and conductor cross-section	stranded 1.0 mm ²
		Type of conductor and conductor cross-section	AWG 18/1
		Type of conductor and conductor cross-section	AWG 18/19
	Evaluation	passed	
Pull-out test	Standard	DIN EN 60999-1 section 9.4 / 12.00	
	Requirement	≥5 N	
	Conductor type	Type of conductor and conductor cross-section	AWG 28/1
		Type of conductor and conductor cross-section	AWG 28/19
	Requirement	≥20 N	
	Conductor type	Type of conductor and conductor cross-section	H05V-U0.5
		Type of conductor and conductor cross-section	H05V-K0.5
	Requirement	≥35 N	
	Conductor type	Type of conductor and conductor cross-section	H05V-U1
		Type of conductor and conductor cross-section	H05V-K1
		Type of conductor and conductor cross-section	AWG 18/1
		Type of conductor and conductor cross-section	AWG 18/19

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www.weidmueller.com**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	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	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

Brochure/Catalogue	Catalogues in PDF-format
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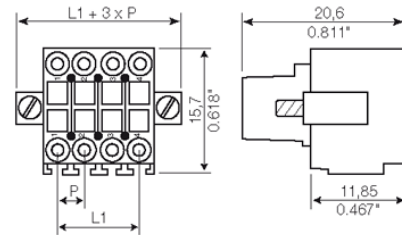
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Drawings

Dimensional drawing



Graph

