

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

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### **Product image**

















similar to illustration

### Two-row female plug with PUSH IN spring connection

- Simply insert the prepared wire and you're done
- Intuitive to use because
- the wire-entry area and handling area are clearly separated
- Integrated push-buttons for opening the terminal point
- High component density because of low heights
- Optional: locking and releasing require no tools when using Weidmüller's

release latch (LR) or release lever (LH)

### **General ordering data**

Version	PCB plug-in connector, female plug, 3.50 mm, Number of poles: 6, 180°, PUSH IN, Spring connection, Clamping range, max.: 1.5 mm², Box
Order No.	<u>2578840000</u>
Туре	B2CF 3.50/06/180F SN BK BX PRT
GTIN (EAN)	4050118588231
Qty.	102 pc(s).
Product data	IEC: 320 V / 13.4 A / 0.14 - 1.5 mm <sup>2</sup> UL: 300 V / 9.5 A / AWG 26 - AWG 16
Packaging	Box

Creation date April 16, 2021 3:30:44 AM CEST



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# **Technical data**

### **Dimensions and weights**

Depth	26.25 mm	Depth (inches)	1.033 inch
Height	15.2 mm	Height (inches)	0.598 inch
Net weight	4.46 g	Width	17.5 mm
Width (inches)	0.689 inch		

### **System Parameters**

Product family	OMNIMATE Signal - series B2C/S2C 3.	50 - 2-row			
Type of connection	Field connection				
Wire connection method	PUSH IN, Spring connection				
Pitch in mm (P)	3.5 mm				
Pitch in inches (P)	0.138 inch				
Conductor outlet direction	180°				
Number of poles	6				
L1 in mm	7 mm				
L1 in inches	0.276 inch				
Number of rows	1				
Pin series quantity	2				
Rated cross-section	1.5 mm²				
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch				
Touch-safe protection acc. to DIN VDE 0470	IP 20				
Can be coded	Yes				
Stripping length	10 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.	5 N				
Tightening torque	Torque type	Screw flange			
	Usage information	Tightening t	orque	min.	0.15 Nm
			•	max.	0.2 Nm

#### **Material data**

Insulating material	PA 66 GF 30	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	II
Comparative Tracking Index (CTI)	≥ 600	Insulation strength	≥ 10 <sup>8</sup> Ω
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Layer structure of plug contact	25 µm Au hot-dip tinned
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	120 °C
Temperature range, installation, min.	-40 °C	Temperature range, installation, max.	120 °C

#### **Conductors suitable for connection**

Clamping range, min.	0.14 mm²
Clamping range, max.	1.5 mm <sup>2</sup>
Solid, min. H05(07) V-U	0.14 mm <sup>2</sup>
Solid, max. H05(07) V-U	1.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.14 mm <sup>2</sup>
Flexible, max. H05(07) V-K	1.5 mm <sup>2</sup>

w. plastic collar ferrule, DIN 46228 pt 4, 0.14  $\rm mm^2$  min.



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# **Technical data**

w. plastic collar ferrule, DIN 46228 pt 4 max.	+,		
v. wire end ferrule, DIN 46228 pt 1, min.	0.14 mm <sup>2</sup>		
v. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm <sup>2</sup>		
Clampable conductor	Cross-section for conductor connection	Туре	fine-wired
		nominal	0.5 mm <sup>2</sup>
	wire end ferrule	Stripping length	nominal 12 mm
		Recommended wire- end ferrule	H0.5/16 OR
		Stripping length	nominal 10 mm
		Recommended wire- end ferrule	H0,5/10
	Cross-section for conductor connection	Туре	fine-wired
		nominal	0.75 mm <sup>2</sup>
	wire end ferrule	Stripping length	nominal 14 mm
		Recommended wire- end ferrule	H0,75/18 W
		Stripping length	nominal 10 mm
		Recommended wire- end ferrule	H0,75/10
	Cross-section for conductor connection	Type	fine-wired
		nominal	1 mm <sup>2</sup>
	wire end ferrule	Stripping length	nominal 15 mm
		Recommended wire- end ferrule	H1,0/18D R
		Stripping length	nominal 10 mm
		Recommended wire- end ferrule	H1,0/10
	Cross-section for conductor connection	Type	fine-wired
		nominal	1.5 mm <sup>2</sup>
	wire end ferrule	Stripping length	nominal 10 mm
		Recommended wire- end ferrule	H1,5/10
Reference text	The outside diameter of the plastic collar shou is to be chosen depending on the product and		itch (P), Length of ferrul

### Rated data acc. to IEC

tested acc. to standard		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(Tu=20°C)	13.4 A
Rated current, max. number of poles		Rated current, min. number of poles	
(Tu=20°C)	10 A	(Tu=40°C)	12 A
Rated current, max. number of poles		Rated voltage for surge voltage class /	
(Tu=40°C)	9 A	pollution degree II/2	320 V
Rated voltage for surge voltage class /		Rated voltage for surge voltage class /	
pollution degree III/2	160 V	pollution degree III/3	160 V
Rated impulse voltage for surge voltage		Rated impulse voltage for surge voltage	
class/ pollution degree II/2	2.5 kV	class/ pollution degree III/2	2.5 kV
Rated impulse voltage for surge voltage		Short-time withstand current resistance	
class/ contamination degree III/3	2.5 kV		3 x 1s with 80 A

### Rated data acc. to CSA

Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group C / CSA)	50 V
Rated voltage (Use group D / CSA)	300 V	Rated current (Use group B / CSA)	9.5 A
Rated current (Use group C / CSA)	9.5 A	Rated current (Use group D / CSA)	9.5 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 16



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and conductor cross-

section

passed

# **Technical data**

#### Rated data acc. to UL 1059

Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group C / UL 1059)	50 V	
Rated voltage (Use group D / UL 1059)		Rated current (Use group B / UL 1059)		
Rated current (Use group C / UL 1059)		Rated current (Use group D / UL 1059)		
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 16	
Packing		,		
i doking				
Packaging	Box	VPE length	338 mm	
VPE width	130 mm	VPE height	33 mm	
Type tests				
Test: Durability of markings	Standard	IEC 61984 section 6 pattern from IEC 600	.2 and 7.3.2 / 10.11 takir 168-2-70 / 12.95	
	Test		dentification, pitch, type k, approval marking UL, Lus	
	Evaluation	available		
	Test	durability		
	Evaluation	passed		
Test: Misengagement (Non- interchangeability)	Standard	IEC 61984 section 6 60512-13-5 / 02.06	.3 and 6.9.1 / 10.11, IEC	
	Test	180° turned without	coding elements	
	Evaluation	passed		
	Test	180° turned with co	ling elements	
	Evaluation	passed		
	Test	visual examination	visual examination	
	Evaluation	passed		
Test: Clampable cross section	Standard	IEC 60999-1 section 60947-1 section 8.2	7 and 9.1 / 11.99, IEC .4.5.1 / 03.11	
	Conductor type	Type of conductor and conductor cross section	solid 0.14 mm² s-	
		Type of conductor and conductor cross section	stranded 0.14 mm <sup>2</sup>	
		Type of conductor and conductor cros section	solid 1.5 mm <sup>2</sup>	
		Type of conductor and conductor cros section	stranded 1.5 mm <sup>2</sup>	
		Type of conductor and conductor cros section	AWG 26/1	
		Type of conductor and conductor cross section	AWG 26/19 6-	
		Type of conductor and conductor cross section	AWG 16/1	
		Type of conductor	AWG 16/19	

Evaluation



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Test for damage to and accidental	Standard	IEC 60999-1 section 9.4 / 11.99
oosening of conductors	Requirement	0.2 kg
	Conductor type	Type of conductor AWG 26/1 and conductor cross-section
		Type of conductor AWG 26/19 and conductor cross-section
	Evaluation	passed
	Requirement	0.3 kg
	Conductor type	Type of conductor H05V-U0.75 and conductor cross-section
		Type of conductor H05V-K0.75 and conductor cross-section
	Evaluation	passed
	Requirement	0.4 kg
	Conductor type	Type of conductor H07V-U1.5 and conductor cross-section
		Type of conductor H07V-K1.5 and conductor cross-section
		Type of conductor AWG 16/1 and conductor cross-section
		Type of conductor AWG 16/19 and conductor cross-section
	Evaluation	passed
Pull-out test	Standard	IEC 60999-1 section 9.5 / 11.99
	Requirement	≥10 N
	Conductor type	Type of conductor AWG 26/1 and conductor cross-section
		Type of conductor AWG 26/19 and conductor cross-section
	Evaluation	passed
	Requirement	≥20 N
	Conductor type	Type of conductor H05V-U0.75 and conductor cross-section
		Type of conductor H05V-K0.75 and conductor cross-section
	Evaluation	passed
	Requirement	≥40 N
	Conductor type	Type of conductor H07V-U1.5 and conductor cross-section
		Type of conductor H07V-K1.5 and conductor cross-section
		Type of conductor AWG 16/1 and conductor cross-section
		Type of conductor AWG 16/19 and conductor cross-
		section



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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			
IPC conformity	standards and norms an	s are developed, manufactured and delive d comply with the assured properties in t k-610 "Class 2". Further claims on the pro	he data sheet resp. fulfill decorative properties
IPC conformity  Notes	standards and norms and in accordance with IPC-A	d comply with the assured properties in t x-610 "Class 2". Further claims on the pro	he data sheet resp. fulfill decorative properties

Brochure/Catalogue	Catalogues in PDF-format	



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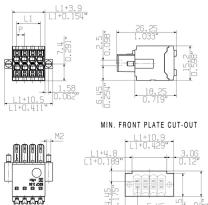
# **Drawings**

### **Product image**



similar to illustration

### **Dimensional drawing**



Graph

B2CF 3.50/../180 - S2C-SMT 3.50/../90 load current I [A] 12 10 6-= 1.5 mm² (H07V-K1.5 / EN 60947-7-1) 40 50 100 110 120 130 ambient temperature T [°C]

**Product benefits** 



Solid PUSH IN contact Safe and durable

### **Product benefits**



Large connection cross-section Up to 1.5 mm possible with ease

### **Product benefits**



Fast PUSH IN connection Tool-free and touch-safe



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# **Drawings**

#### **Product benefits**



Clear marking Unique designation

### **Example of use**

