

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

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### **Product image**



150246 BLT 5.08/8B SN OR





















Female plugs with TOP screw connection system for connecting wires with straight 180° outlet direction. The female connectors provide space for labelling and can be coded. HC = High Current.

### **General ordering data**

Version	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 8, 180°, TOP connection, Clamping range, max. : 2.5 mm², Box
Order No.	<u>1502460000</u>
Туре	BLT 5.08HC/08/180B SN OR BX
GTIN (EAN)	4008190147334
Qty.	42 pc(s).
Product data	IEC: 400 V / 27 A / 0.2 - 2.5 mm² UL: 300 V / 17 A / AWG 26 - AWG 14
Packaging	Box

Creation date March 24, 2021 3:13:12 AM CET



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# **Technical data**

### **Dimensions and weights**

Depth	31.8 mm	Depth (inches)	1.252 inch
Height	12.2 mm	Height (inches)	0.48 inch
Net weight	24.667 g	Width	42.66 mm
Width (inches)	1.68 inch		

### **System Parameters**

Product family	OMNIMATE Signal - series BL/SL 5.08			
Type of connection	Field connection			
Wire connection method	TOP connection			
Pitch in mm (P)	5.08 mm			
Pitch in inches (P)	0.2 inch			
Conductor outlet direction	180°			
Number of poles	8			
L1 in mm	35.56 mm			
L1 in inches	1.4 inch			
Number of rows	1			
Pin series quantity	1			
Rated cross-section	2.5 mm <sup>2</sup>			
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch			
Volume resistance	≤5 mΩ			
Can be coded	Yes			
Stripping length	13 mm			
Clamping screw	M 2.5			
Screwdriver blade	0.6 x 3.5			
Screwdriver blade standard	DIN 5264			
Plugging cycles	25			
Plugging force/pole, max.	8 N			
Pulling force/pole, max.	7 N			
Tightening torque	Torque type	Wire connection		
	Usage information	Tightening torque	min.	0.4 Nm
			max.	0.5 Nm

#### **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
Layer structure of plug contact	48 µm Sn hot-dip 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.	-25 °C
Temperature range, installation, max.	100 °C		

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

Clamping range, min.	0.13 mm <sup>2</sup>
Clamping range, max.	2.5 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 28
Wire connection cross section AWG, max.	AWG 14
Solid, min. H05(07) V-U	0.2 mm <sup>2</sup>
Solid, max. H05(07) V-U	2.5 mm <sup>2</sup>

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Flexible, min. H05(07) V-K	0.2 mm <sup>2</sup>		
Flexible, max. H05(07) V-K	1.5 mm <sup>2</sup>		
w. plastic collar ferrule, DIN 46228 pt 4	ł, 0.2 mm²		
min.			
w. plastic collar ferrule, DIN 46228 pt 4	l, 1.5 mm²		
max.			
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm <sup>2</sup>		
w. wire end ferrule, DIN 46228 pt 1, max.	1.5 mm <sup>2</sup>		
Plug gauge in accordance with EN 60999 a x b; ø	2.4 mm x 1.5 mm ; 2.4 mm		
Clampable conductor	Cross-section for conductor connection	Туре	fine-wired
		nominal	0.5 mm <sup>2</sup>
	wire end ferrule	Stripping length	nominal 14 mm
	1	Recommended wire- end ferrule	H0,5/18 OR
	Cross-section for conductor connection	Туре	fine-wired
		nominal	1 mm <sup>2</sup>
	wire end ferrule	Stripping length	nominal 15 mm
		Recommended wire- end ferrule	H1,0/18 GE
	Cross-section for conductor connection	Туре	fine-wired
		nominal	1.5 mm <sup>2</sup>
	wire end ferrule	Stripping length	nominal 15 mm
		Recommended wire- end ferrule	H1,5/18D SW
		Stripping length	nominal 12 mm
		Recommended wire- end ferrule	H1,5/12
Reference text	The outside diameter of the plastic collar should is to be chosen depending on the product and the		tch (P), Length of ferrules

### Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	27 A
Rated current, max. number of poles (Tu=20°C)	19 A	Rated current, min. number of poles (Tu=40°C)	24 A
Rated current, max. number of poles (Tu=40°C)	16 A	Rated voltage for surge voltage class / pollution degree II/2	400 V
Rated voltage for surge voltage class / pollution degree III/2	320 V	Rated voltage for surge voltage class / pollution degree III/3	250 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	4 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV	Short-time withstand current resistance	3 x 1s with 100 A

### Rated data acc. to CSA

Institute (CSA)	- <del>4</del> 3	Certificate No. (CSA)	
			200039-1121690
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	15 A	Rated current (Use group D / CSA)	15 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details - see approval certificate.		



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# **Technical data**

#### Rated data acc. to UL 1059

Institute (cURus)		Certificate No. (cURus)	
	C = 100		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)	17 A	Rated current (Use group D / UL 1059)	10 A
Wire cross-section, AWG, min.	AWG 26	Wire cross-section, AWG, max.	AWG 14
Reference to approval values	Specifications are maximum values, details -		

### **Packing**

Packaging	Box	VPE length	45 mm
VPE width	131 mm	VPE height	226 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 of material, date clock
	Evaluation	available
	Test	durability
	Evaluation	passed
Test: Misengagement (Non- interchangeability)	Standard	DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN EN 60512-13-5 / 11.06
	Test	180° turned with 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 solid 0.08 mm <sup>2</sup> and conductor cross-section
		Type of conductor and conductor cross-section stranded 0.08 mm <sup>2</sup>
		Type of conductor solid 2.5 mm <sup>2</sup> and conductor cross-section
		Type of conductor and conductor cross-section stranded 2.5 mm <sup>2</sup>
		Type of conductor AWG 26/1 and conductor cross-section
		Type of conductor AWG 26/19 and conductor cross-section
		Type of conductor AWG 14/1 and conductor cross-section
		Type of conductor AWG 14/19 and conductor cross-section
	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 AWG 28/1 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 solid 0.5 mm² and conductor cross-section	
	Type of conductor stranded 0.5 mm <sup>2</sup> and conductor cross-section	
Evaluation	passed	
Requirement	0.7 kg	
Conductor type	Type of conductor solid 2.5 mm <sup>2</sup> and conductor cross-section	
	Type of conductor stranded 2.5 mm <sup>2</sup> and conductor cross-section	
	Type of conductor AWG 14/1 and conductor cross-section	
	Type of conductor AWG 14/19 and conductor cross-section	
Evaluation	passed	



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# **Technical data**

Pull-out test	Standard	DIN EN 60999-1 section 9.5 / 12.00
	Requirement	≥5 N
	Conductor type	Type of conductor AWG 28/1 and conductor cross-section
	Evaluation	passed
	Requirement	≥10 N
	Conductor type	Type of conductor AWG 26/19 and conductor cross-section
	Evaluation	passed
	Requirement	≥20 N
	Conductor type	Type of conductor solid 0.5 mm <sup>2</sup> and conductor cross-section
		Type of conductor stranded 0.5 mm <sup>2</sup> and conductor cross-section
	Evaluation	passed
	Requirement	≥40 N
	Conductor type	Type of conductor AWG 14/1 and conductor cross-section
		Type of conductor AWG 14/19 and conductor cross-section
	Evaluation	passed
	Requirement	≥50 N
	Conductor type	Type of conductor solid 2.5 mm <sup>2</sup> and conductor cross-section
		Type of conductor stranded 2.5 mm <sup>2</sup> and conductor cross-section
	Evaluation	passed

### 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



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## **Technical data**

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	Additional colours on request
	Gold-plated contact surfaces on request

- · Rated current related to rated cross-section & min. No. of poles.
- Wire end ferrule without plastic collar to DIN 46228/1
- Wire end ferrule with plastic collar to DIN 46228/4
- · Crimp form A for wire end ferrules with PZ 6/5 crimping tool are recommended for the largest cable sizes.
- 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 Co	onform
	60693

### **Downloads**

Approval/Certificate/Document of	CB Certificate
Conformity	CB Testreport
Engineering Data	<u>STEP</u>



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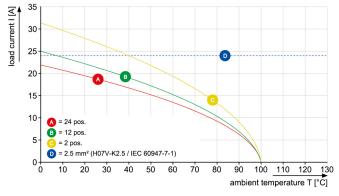
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## **Drawings**

### Graph

## BLT 5.08HC/../180 - SL-SMT 5.08HC/../90



#### **Product benefits**



Lower assembly costs Secure in a matter of seconds

### **Product benefits**



Guaranteed secure fixing For wall thickness from 0.5 to 2 mm