

#### Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold

Germany

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### Similar to illustration

High-temperature-resistant pin header, packed in box or tape. On tape, with 1.5 mm solder pin, optimised for automatic assembly. 3.2 mm solder pin suitable for reflow and wave soldering. The pin headers provide space for labelling and can be coded. HC = High Current.

## General ordering data

Туре	SL-SMT 5.08HC/03/180G 1.5SN BK RL
Order No.	<u>1775934001</u>
Version	PCB plug-in connector, male header, closed side, THT/THR solder connection, 5.08 mm, Number of poles: 3, 180°, Solder pin length (I): 1.5 mm, tinned, black, Tape
GTIN (EAN)	4032248160112
Qty.	250 pc(s).
Product data	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A
Packaging	Tape

Creation date May 3, 2020 12:50:42 PM CEST



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## **Technical data**

## **Dimensions and weights**

Width	18.44 mm	Width (inches)	0.726 inch
Height	13.5 mm	Height (inches)	0.531 inch
Height of lowest version	12 mm	Depth	8.5 mm
Depth (inches)	0.335 inch	Net weight	3.24 g

## **System specifications**

Product family	OMNIMATE Signal - series BL/SL 5.08	Type of connection	Board connection
Mounting onto the PCB	THT/THR solder connection	Pitch in mm (P)	5.08 mm
Pitch in inches (P)	0.2 inch	Outgoing elbow	180°
Number of poles	3	Number of solder pins per pole	1
Solder pin length (I)	1.5 mm	Solder pin length tolerance	0 / -0.3 mm
Tolerance of solder pin position	± 0.1 mm	Solder pin dimensions	d = 1.2 mm, Octagonal
Solder eyelet hole diameter (D)	1.4 mm	Solder eyelet hole diameter tolerand	ce (D)+ 0,1 mm
L1 in mm	10.16 mm	L1 in inches	0.4 inch
Number of rows	1	Pin series quantity	1
Volume resistance	≤ 5mΩ	Can be coded	Yes
Plugging cycles	25	Plugging force/pole, max.	9 N
Pulling force/pole, max.	7 N		

### **Material data**

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	Illa
Comparative Tracking Index (CTI)	≥ 175	Insulation strength	≥ 10 <sup>8</sup> Ω
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
GWIT	930 °C	GWFI	960 °C
Contact material	CuMg	Contact surface	tinned
Layer structure of solder connection	1-3 μm Ni / 2-4 μm Sn	Layer structure of plug contact	1-3 μm Ni / 2-4 μm Sn
	matt		matt
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		

## Rated data acc. to IEC

tested acc. to standard	IFC 60664 1 IFC 61094	Rated current, min. number of poles	27.5 A
-	IEC 60664-1, IEC 61984	(Tu=20°C)	27.5 A
Rated current, max. number of poles		Rated current, min. number of poles	
(Tu=20°C)	19 A	(Tu=40°C)	24 A
Rated current, max. number of poles		Rated voltage for surge voltage class /	
(Tu=40°C)	16.5 A	pollution degree II/2	400 V
Rated voltage for surge voltage class /		Rated voltage for surge voltage class /	
pollution degree III/2	320 V	pollution degree III/3	250 V
Rated impulse voltage for surge voltage		Rated impulse voltage for surge voltage	
class/ pollution degree II/2	4 kV	class/ pollution degree III/2	4 kV
Rated impulse voltage for surge voltage			
class/ contamination degree III/3	4 kV		



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## **Technical data**

## Rated data acc. to CSA

Institute (CSA)	<b>€P</b>	Certificate No. (CSA)	
Poted voltage (Lies group P. / CCA)	300 V	Poted voltage // lee group D / CCA	200039-1176845 300 V
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group D / CSA)		Reference to approval values	Specifications are maximum values, details -
	18.5 A		see approval certificate.

### Rated data acc. to UL 1059

Reference to approval values

Institute (UR)	Certificate No. (UR)
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) 18.5 A	Rated current (Use group D / UL 1059) 10 A

Specifications are maximum values, details - see approval certificate.

## **Packing**

D 1 .		VDE I d	00
Packaging	Tape	VPE length	20 mm
VPE width	330 mm	VPE height	330 mm
Tape depth (T2)	17.45 mm	Tape width (W)	32 mm
Tape pocket depth (K0)	16.95 mm	Tape pocket height (A0)	8 mm
Tape pocket width (B0)	18.74 mm	Tape pocket separation (P1)	16 mm
Tape hole separation (E)	1.75 mm	Tape pocket separation (F)	14.2 mm
Tape reel diameter Ø (A)	330 mm	Surface resistance	$Rs = 10^9 - 10^{12} \Omega$
Width Pick & Place Pad (W <sub>PPP</sub> )	9.6 mm	Length Pick & Place Pad (L <sub>PPP</sub> )	12.36 mm
Diameter of the withdrawal surface	(ø	Protrusion 1 Pick & Place Pad (L <sub>01 (PP</sub>	PP))
D <sub>max</sub> )	8.5 mm	<u> </u>	2.3 mm
Protrusion 2 Pick & Place Pad (P <sub>02 (P</sub>	<sub>PP)</sub> ) 2 mm		

## Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
eClass 9.0	27-44-04-02	eClass 9.1	27-44-04-02
eClass 10.0	27-44-04-02	UNSPSC	30-21-18-10



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## **Technical data**

#### Notes

Notes	Gold-plated contact surfaces on request
	Rated current related to rated cross-section & min. No. of poles.
	• Diameter of solder eyelet D = 1.4+0.1mm
	• Solder eyelet diameter D = 1.5 + 0.1 mm, from 9 poles
	• P on drawing = pitch
	<ul> <li>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.</li> </ul>
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.

#### **Approvals**

Approvals



ROHS Conform

### **Downloads**

Downloads	
Approval/Certificate/Document of	CB Certificate
Conformity	CB Testreport
,	Declaration of the Manufacturer
Brochure/Catalogue	<u>FL DRIVES EN</u>
	MB SMT EN
	FL DRIVES DE
	MB DEVICE MANUF. EN
	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	WSCAD
Engineering Data	<u>STEP</u>
White paper surface mount technology	<u>Download Whitepaper</u>



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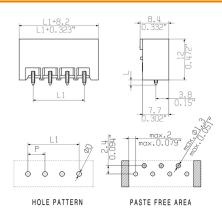
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## **Drawings**

## **Dimensional drawing**



## Example of use



Safe power transmission **Product benefits** Proven properties





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## Mating connector (conditionally pluggable)

## **BLT 5.08HC/180B**



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.

Туре	BLT 5.08HC/03/180B SN O	Version	Product data	Packaging
Order No.	<u>1501960000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190186586	180°, TOP connection, Clamping range, max. : 2.5 mm², Box	UL: 300 V / 17 A / AWG 26 - AWG 1	4
Qty.	102 pc(s).			
т				
Type	BLT 5.08HC/03/180B SN B	Version	Product data	Packaging
Order No.	1501910000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	Product data IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
• •	, ,			Box



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## Mating connector (fully pluggable)

## **BLDF 5.08/180 SN**



The powerful daisy-chain solution for high-performance signal bus applications is also suitable for 400V auxiliary power chains with 18.5A current-carrying capacity. The large clamping capacity (up to 2.5mm² wire cross-sections) is particularly beneficial for long bus cables or high currents because of the low voltage drop. Four flange variations, including the patented release latch, allow for user-friendly unplugging designs.

### **General ordering data**

Туре	BLDF 5.08/03/180 SN BK	Version	Product data	Packaging
Order No.	1000870000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248817276	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup>	, UL: 300 V / 18.5 A / AWG 12 - AWG	
Qty.	80 pc(s).	Box	26	
Туре	DI DE E 00 (00 (400 CN OD			
Type	BLDF 5.08/03/180 SN OR	Version	Product data	Packaging
Order No.	1001160000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	Product data IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
			IEC: 400 V / 20.8 A / 0.2 - 2.5 mm <sup>2</sup>	Box

## **BLC 5.08R**



Female plugs with crimp wire connection system. The female plugs provide space for labelling and can be coded.

Туре	BLC 5.08/03/180R OR BX	Version	Product data	Packaging
Order No.	<u>1610500000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 21 A	Box
GTIN (EAN)	4008190004293	180°, Crimp connection, Clamping range, max. : 2.5 mm², Box	UL: 300 V / 10 A / AWG 26 - AWG 1	4
Qty.	100 pc(s).			
Туре	BLC 5.08/03/180R BK BX	Version	Product data	Packaging
Order No.	<u>1711970000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 21 A	Box
Order No. GTIN (EAN)	<u>1711970000</u> 4008190934989	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3, 180°, Crimp connection, Clamping range, max. : 2.5 mm², Box	IEC: 400 V / 21 A UL: 300 V / 10 A / AWG 26 - AWG 1	



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## Mating connector (fully pluggable)

## **BLL 5.08/180**



Female header for PCB mounting. The solder pin length is optimised for wave flow soldering.

## **General ordering data**

Туре	BLL 5.08/03/180 4.5SN O	Version	Product data	Packaging
Order No.	<u>1646150000</u>	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285494	connection, 5.08 mm, Number of poles: 3, 180°, Solder pin length (I)	: UL: 300 V / 15 A	
Qty.	100 pc(s).	4.5 mm, tinned, orange, Box		
Туре	BLL 5.08/03/180 3.2 SN	Version	Product data	Packaging
Order No.	<u>1630720000</u>	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190204143	connection, 5.08 mm, Number of poles: 3, 180°, Solder pin length (I)	: UL: 300 V / 15 A	
Qty.	120 pc(s).	3.2 mm, tinned, orange, Box		
Туре	BLL 5.08/03/180 4.5 SN	Version	Product data	Packaging
Order No.	1646260000	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285609	connection, 5.08 mm, Number of poles: 3, 180°, Solder pin length (I)	: UL: 300 V / 15 A	
Qty.	120 pc(s).	4.5 mm, tinned, black, Box		

## **BLZ 5.08/180**



Female plugs with clamping-yoke screw for wire connection with straight (180°) outlet direction. The female plugs provide space for labelling and can be coded

Туре	BLZ 5.08/03/180 SN OR B	Version	Product data	Packaging
Order No.	1594250000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 19 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190011918	$180^{\circ}\text{, Clamping yoke connection, Clamping range, max.}: 3.31 \text{mm}^{2}\text{,}$	UL: 300 V / 15 A / AWG 26 - AWG 1:	2
Qty.	120 pc(s).	Box		
Туре	BLZ 5.08/03/180 SN GY BX	Version	Product data	Packaging
Order No.	<u>1526500000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 19 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190267124	$180^{\circ}\text{, Clamping yoke connection, Clamping range, max.}: 3.31~\text{mm}^2\text{,}$	UL: 300 V / 15 A / AWG 26 - AWG 1	2
Qty.	100 pc(s).	Box		
Туре	BLZ 5.08/03/180 SN DKGN	Version	Product data	Packaging
Order No.	<u>1526550000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 19 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190143442	$180^{\circ}\text{, Clamping yoke connection, Clamping range, max.}: 3.31~\text{mm}^2\text{,}$	UL: 300 V / 15 A / AWG 26 - AWG 1	2
Qty.	100 pc(s).	Вох		



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## Mating connector (fully pluggable)

Туре	BLZ 5.08/03/180 SN BL BX	Version	Product data	Packaging
Order No.	<u>1526580000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 19 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190286422	$180^{\circ}\text{, Clamping yoke connection, Clamping range, max.}: 3.31 \text{mm}^{2}\text{,}$	UL: 300 V / 15 A / AWG 26 - AWG 1	2
Qty.	100 pc(s).	Вох		

## **BLF 5.08HC/270 SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

### **General ordering data**

Туре	BLF 5.08HC/03/270 SN BK	Version	Product data	Packaging
Order No.	<u>1981940000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248684632	270°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup>	, UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	120 pc(s).	Box	12	
Туре	BLF 5.08HC/03/270 SN OR	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/03/270 SN OR 1982710000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	Product data IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
	, ,		IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	0 0

## **BLL 5.08/180B**



Female header for PCB mounting. The solder pin length is optimised for wave flow soldering.

Typ	е	BLL 5.08/03/180B 3.2SN	Version	Product data	Packaging
Orc	ler No.	<u>1682740000</u>	PCB plug-in connector, female header, Dovetails for fixing blocks, THT	IEC: 400 V / 23 A	Box
GTI	N (EAN)	4008190474508	solder connection, 5.08 mm, Number of poles: 3, 180°, Solder pin	UL: 300 V / 15 A	
Qty	<b>'</b> .	108 pc(s).	length (I): 3.2 mm, tinned, orange, Box		



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## Mating connector (fully pluggable)

## **BLZF 5.08/180**



Female plugs with tension-clamp wire connection system, straight 180° outlet direction. The female plugs provide space for labelling and can be coded.

## **General ordering data**

Туре	BLZF 5.08/03/180 SN GY	Version	Product data	Packaging
Order No.	<u>1708080000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 17 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190317515	$180^{\circ}\text{, Tension-clamp connection, Clamping range, max.}: 3.31~\text{mm}^{2}\text{,}$	UL: 300 V / 15 A / AWG 26 - AWG 1	2
Qty.	120 pc(s).	Вох		

### **BLZP 5.08HC/225B SN**



Clamping-yoke connection with right-angled (90° or 270°) or angled (225°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

Туре	BLZP 5.08HC/03/225B SN	Version	Product data	Packaging
Order No.	1945990000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 17.5 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248621514	225°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 15 A / AWG 26 - AWG 12	!
Qty.	108 pc(s).			
Туре	BLZP 5.08HC/03/225B SN	Version	Product data	Packaging
Order No.	<u>1945760000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 17.5 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248621231	225°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 15 A / AWG 26 - AWG 12	!



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## Mating connector (fully pluggable)

## **BLZP 5.08HC/90 SN**



Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

### **General ordering data**

Туре	BLZP 5.08HC/03/90 SN OR	Version	Product data	Packaging
Order No.	<u>1948010000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248624232	$90^{\circ}\text{, Clamping yoke connection, Clamping range, max.}:4~\text{mm}^2\text{, Box}$	UL: 300 V / 20 A / AWG 26 - AWG 1:	2
Qty.	120 pc(s).			
Туре	BLZP 5.08HC/03/90 SN BK	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/03/90 SN BK 1948250000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	Product data IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Packaging Box
				Вох

## **BLDT 5.08B**



Female plugs with two clamping-yoke screw connections per pole for wire connections with 90° and 270° outlet directions. The female plugs provide space for labelling and can be coded.

Туре	BLDT 5.08/03/-B SN BK BX	Version	Product data	Packaging
Order No.	<u>1673790000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 14 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190435516	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm²,	UL: 300 V / 10 A / AWG 26 - AWG 1:	2
Qty.	100 pc(s).	Box		
T				
Type	BLDT 5.08/03/-B SN OR BX	Version	Product data	Packaging
Order No.	1651750000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	Product data IEC: 400 V / 14 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
	, ,		IEC: 400 V / 14 A / 0.2 - 2.5 mm <sup>2</sup>	Вох



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## Mating connector (fully pluggable)

## **BLF 5.08HC/90 SN**



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In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

## **General ordering data**

Туре	BLF 5.08HC/03/90 SN BK	Version	Product data	Packaging
Order No.	1000040001	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248689972	$90^{\circ}\text{, PUSH IN, Spring connection, Clamping range, max.} : 3.31 \text{ mm}^2\text{,}$	UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	120 pc(s).	Box	12	
Туре	BLF 5.08HC/03/90 SN OR	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/03/90 SN OR 1001540000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	Product data IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
	, ,		IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box

## **BLDT 5.08**



Female plugs with two clamping-yoke screw connections per pole for wire connections with 90° and 270° outlet directions. The female plugs provide space for labelling and can be coded.

Туре	BLDT 5.08/03/- SN BK BX	Version	Product data	Packaging
Order No.	<u>1660720000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 14 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4008190417178	180°, Clamping yoke connection, Clamping range, max. : 3.31 mm²,	UL: 300 V / 10 A / AWG 26 - AWG 1:	2
Qty.	100 pc(s).	Box		
Туре	BLDT 5.08/03/- SN OR BX	Version	Product data	Packaging
Order No.	1644740000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 14 A / 0.2 - 2.5 mm <sup>2</sup>	Box
Order No. GTIN (EAN)	1644740000 4008190283957	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3, 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm²,	, ,	



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## Mating connector (fully pluggable)

## **BLZP 5.08HC/225 SN**



Clamping-yoke connection with right-angled (90° or 270°) or angled (225°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

### **General ordering data**

Туре	BLZP 5.08HC/03/225 SN O	Version	Product data	Packaging
Order No.	<u>1946260000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 17.5 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248621835	$225^{\circ}\text{, Clamping yoke connection, Clamping range, max.}:4~\text{mm}^2\text{, Box}$	UL: 300 V / 15 A / AWG 26 - AWG 12	2
Qty.	120 pc(s).			
Туре	BLZP 5.08HC/03/225 SN B	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/03/225 SN B 1946570000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	Product data IEC: 400 V / 17.5 A / 0.2 - 4 mm <sup>2</sup>	Packaging Box
			IEC: 400 V / 17.5 A / 0.2 - 4 mm <sup>2</sup>	Box

## **BLC 5.08BR**



Female plugs with crimp wire connection system. The female plugs provide space for labelling and can be coded.

Туре	BLC 5.08/03/180BR BK BX	Version	Product data	Packaging
Order No.	<u>1712120000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 21 A	Box
GTIN (EAN)	4008190935139	180°, Crimp connection, Clamping range, max. : 2.5 mm², Box	UL: 300 V / 10 A / AWG 26 - AWG 1	4
Qty.	100 pc(s).			
Туре	BLC 5.08/03/180BR OR BX	Version	Product data	Packaging
Order No.	<u>1649380000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 21 A	Box
GTIN (EAN)	4008190294489	180°, Crimp connection, Clamping range, max. : 2.5 mm², Box	UL: 300 V / 10 A / AWG 26 - AWG 1	4



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## Mating connector (fully pluggable)

## **BLF 5.08HC/180 SN**



Just as reliable as the millionfold proven original and featuring innovative details:

The BLF 5.08HC PUSH IN version of the BLZP 5.08HC female connector is not only different in terms of connection system; it also has a more compact design. Weidmüller's innovative PUSH IN spring connection system stands for the future of easy and tool-free wire connection. HC = High Current.

In terms of versatility, the BLF 5.08HC offers just as much as the version which served as a model:

- 3 tested-and-proven wire outlet directions provide the usual flexibility for application-specific design
- 4 flange variations and the patented release latch allow the locking concept to be based on the requirements of the user
- Use the BLF 5.08HC and SL 5.08HC plug combination to reach the max. rated specifications

## **General ordering data**

Туре	BLF 5.08HC/03/180 SN BK	Version	Product data	Packaging
Order No.	1013440000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248721597	180°, PUSH IN, Spring connection, Clamping range, max.: 3.31 mm <sup>2</sup>	, UL: 300 V / 18.5 A / AWG 26 - AWG	
Qty.	120 pc(s).	Box	12	
Туре	BLF 5.08HC/03/180 SN OR	Version	Product data	Packaging
Type Order No.	BLF 5.08HC/03/180 SN OR 1013690000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	Product data IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Packaging Box
	, ,		IEC: 400 V / 24 A / 0.2 - 2.5 mm <sup>2</sup>	Вох

## **BLZP 5.08HC/180 SN**



Female plug with clamping-yoke screw system for connecting wires with straight (180°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

Туре	BLZP 5.08HC/03/180 SN 0	Version	Product data	Packaging
Order No.	<u>1943590000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248617579	180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Qty.	120 pc(s).			
Type	BLZP 5.08HC/03/180 SN B	Version	Product data	Packaging
Type Order No.	BLZP 5.08HC/03/180 SN B 1943820000	Version PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	Product data IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Packaging Box
	, ,		IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Вох



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## Mating connector (fully pluggable)

## **BLL 5.08/90**



Female header for PCB mounting. The solder pin length is optimised for wave flow soldering.

### **General ordering data**

Туре	BLL 5.08/03/90 4.5 SN O	Version	Product data	Packaging
Order No.	<u>1645930000</u>	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
GTIN (EAN)	4008190285272	connection, 5.08 mm, Number of poles: 3, 90°, Solder pin length (I):	UL: 300 V / 15 A	
Qty.	120 pc(s).	4.5 mm, tinned, orange, Box		
Туре	BLL 5.08/03/90 3.2 SN O	Version	Product data	Packaging
Order No.	<u>1622950000</u>	PCB plug-in connector, female header, closed side, THT solder	IEC: 400 V / 23 A	Box
Order No. GTIN (EAN)	1622950000 4008190194031	PCB plug-in connector, female header, closed side, THT solder connection, 5.08 mm, Number of poles: 3, 90°, Solder pin length (I):	IEC: 400 V / 23 A UL: 300 V / 15 A	Вох

## **BLT 5.08HC**



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.

Туре	BLT 5.08HC/03/180 SN BL	Version	Product data	Packaging
Order No.	<u>1499680000</u>	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 27 A / 0.2 - 2.5 mm <sup>2</sup>	Box
GTIN (EAN)	4032248015450	180°, TOP connection, Clamping range, max. : 2.5 mm², Box	UL: 300 V / 17 A / AWG 26 - AWG 14	4
Qty.	120 pc(s).			



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## Mating connector (fully pluggable)

## **BLZP 5.08HC/270 SN**



Female plugs with clamping-yoke connection for connecting wires with a right-angle (90° or 270°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. They also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

Туре	BLZP 5.08HC/03/270 SN B	Version	Product data	Packaging
Order No.	1949030000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
GTIN (EAN)	4032248626489	$270^{\circ}\text{, Clamping yoke connection, Clamping range, max.}: 4~\text{mm}^2\text{, Box}$	UL: 300 V / 20 A / AWG 26 - AWG 12	2
Qty.	120 pc(s).			
Туре	DI 7D E 00110 (00 (070 CN 0	· ·		<b>n</b>
1,00	BLZP 5.08HC/03/270 SN 0	Version	Product data	Packaging
Order No.	1948800000	PCB plug-in connector, female plug, 5.08 mm, Number of poles: 3,	Product data IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box
• •			IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup>	Box



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## **Accessories**

## Coding elements



## Only connects what is supposed to be connected: the right connection at the right place.

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery. Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

## **General ordering data**

Туре	BLZ/SL KO OR BX	Version	Product data	Packaging
Order No.	<u>1573010000</u>	PCB plug-in connector, Accessories, Coding element, orange, Number	r	Box
GTIN (EAN)	4008190048396	of poles: 1		
Qty.	100 pc(s).			
Туре	BLZ/SL KO BK BX	Version	Product data	Packaging
Order No.	<u>1545710000</u>	PCB plug-in connector, Accessories, Coding element, black, Number		Box
GTIN (EAN)	4008190087142	of poles: 1		
Qty.	50 pc(s).			

#### **Additional accessories**



## No task is too small when creating the perfect solution. br />

Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated

A system is not a system without small but useful details:

- Test plugs ensure reliable pick-up from diagnostic sockets
- Cross-connectors ensure a stable electrical distribution contact directly at the connection
- Compartment partition elements divide a large number of male connectors into several separate socket connector channels
- Locks and clips optional vibration-resistant clipon connection or mounting for male and female connectors

In tandem with the manufacturing process and application - more accessories = smaller workload

Туре	SL AT SW	Version	Product data	Packaging
Order No.	<u>1770240000</u>	PCB plug-in connector, Accessories, Spacer, black, Number of poles:	1	Вох
GTIN (EAN)	4032248117710			
Qty.	100 pc(s).			



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## **Accessories**

Туре	SL AT OR	Version	Product data	Packaging
Order No.	<u>1598300000</u>	PCB plug-in connector, Accessories, Spacer, orange, Number of poles	:	Box
GTIN (EAN)	4008190189266	1		
Qty.	100 pc(s).			



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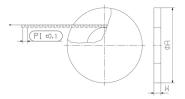
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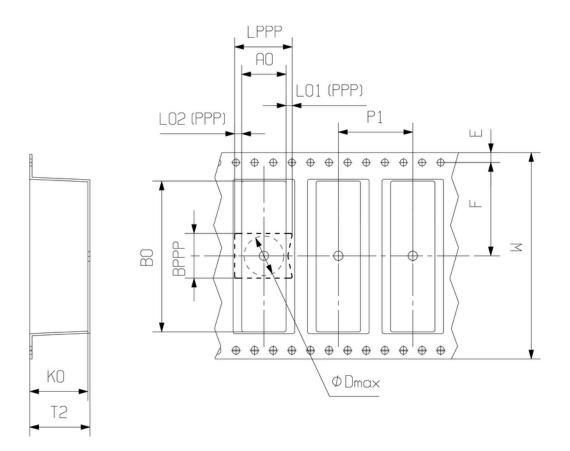
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## **Drawings**

## **Dimensional drawing**



## **Dimensional drawing**



DIRECTION OF UNREELING



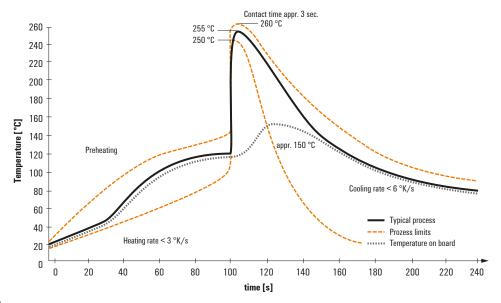
## **Recommended wave solderding profiles**

#### Weidmüller Interface GmbH & Co. KG

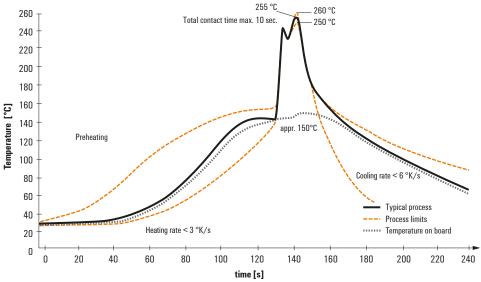
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## Single Wave:



## **Double Wave:**



## Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

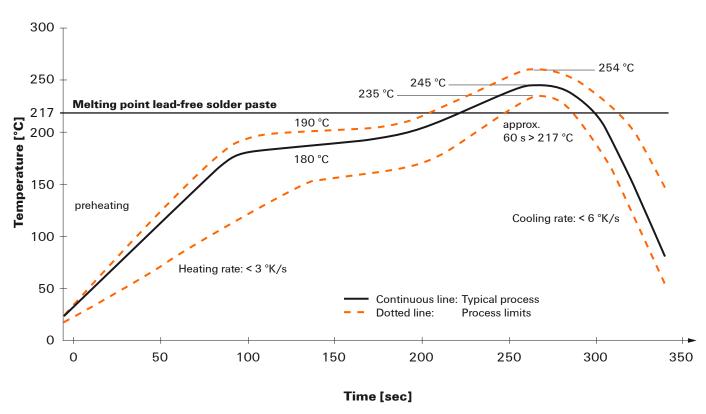


## Recommended reflow soldering profile

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## Reflow soldering profile

The perfect soldering profile for SMT Surface Mount Technology is one the most exiting question in SMT production. But there are more than one correct answer: The diagram of temperature-on-time is related to processing features of solder paste and to maximum load of components.

We have to consider the following parameters:

- · Time for pre heating
- Maximum temperature
- Time above melting point
- Time for cooling
- · Maximum heating rate
- · Maximum cooling rate

We recommend a typical solder profile with associated process limits. With preheating components and board are prepared smoothly for the solder phase. Heating rate is typically  $\leq +3$ K/s. In parallel the solder paste is ,activated'. The time above melting point of 217°C the paste gets liquid and components and boards begin to connect. The maximum temperature of 245°C to 254°C should stay between 10 and 40 seconds. In the cooling phase at  $\geq$  -6K/s solder is cured. Board and components cool down while avoiding cold cracks.