



Klingenbergstraße 26 D-32758 Detmold Germany

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Product image















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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

Version	PCB plug-in connector, male header, Flange, THT/THR solder connection, 5.08 mm, Number of poles: 3, 180°, Solder pin length (I): 1.5 mm, tinned, black, Box
Order No.	<u>1847810000</u>
Туре	SL-SMT 5.08/03/180F 1.5SN BK BX
GTIN (EAN)	4032248367450
Qty.	72 items
Product data	IEC: 400 V / 27.5 A UL: 300 V / 18.5 A
Packaging	Вох







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Technical data

Approvals

Approvals



ROHS	Conform
UL File Number Search	<u>UL Website</u>
Certificate No. (UR)	E60693

Dimensions and weights

Depth	8.5 mm	Depth (inches)	0.3346 inch
Height	15.2 mm	Height (inches)	0.5984 inch
Height of lowest version	12 mm	Width	25.24 mm
Width (inches)	0.9937 inch	Net weight	2.11 g

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption	
REACH SVHC	No SVHC above 0.1 wt%	
Product Carbon Footprint	Cradle to gate	0,110 kg CO2 eq.

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) 0.200 " Outgoing elbow 180° Number of solder pins per pole 1 Solder pin length (I) 1.5 mm Solder pin length tolerance 0 / -0.3 mm Solder yelet hole diameter (D) 1.4 mm Solder eyelet hole diameter tolerance (D)+ 0.1 mm 1.1 in mm L1 in inches 0.400 " Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 67 106 IP20 plugged/ back-of-hand-safe plugged O470 IP20 Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 7 N Tightening torque Mounting screw, PCB Uses information Tightening torque Wounting screw, PCB					
Mounting onto the PCB THT/THR solder connection Pitch in mm (P) 5.08 mm Pitch in inches (P) 0.200 " 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 Solder pin lidmensions d = 1.2 mm, Octagonal Solder eyelet hole diameter (D) 1.4 mm Solder eyelet hole diameter tolerance (D)+ 0,1 mm L1 in mm 10.16 mm L1 in inches 0.400 " Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 57 106 Touch-safe protection acc. to DIN VDE 0470 Trouch-safe protection acc. to DIN VDE 0470 Touch-safe protection acc. to DIN VDE 047	Product family	OMNIMATE Signal - series BL/SL 5.08			
Pitch in mm (P) 5.08 mm Pitch in inches (P) 0.200 " 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 Solder pin length tolerance 0 / -0.3 mm Solder eyelet hole diameter (D) 1.4 mm Solder eyelet hole diameter (D) + 0.1 mm 1.1 mm L1 in inches 0.400 " Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 57 106 Inger-safe unplugged/ back-of-hand-safe plugged Touch-safe protection acc. to DIN VDE 67 106 IP20 plugged/ IP10 unplugged Varyour Protection degree IP20 Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Mounting screw, PCB	Type of connection	Board connection			
Pitch in inches (P) 0.200 " 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 Solder pin dimensions d = 1.2 mm, Octagonal Solder eyelet hole diameter (D) 1.4 mm Solder eyelet hole diameter tolerance (D)+ 0.1 mm L1 in mm 10.16 mm L1 in inches 0.400 " Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 67 106 finger-safe unplugged/ back-of-hand-safe plugged For 106 IP20 plugged/ IP10 unplugged Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Mounting screw, PCB	Mounting onto the PCB	THT/THR solder connection			
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 Solder pin dimensions d = 1.2 mm, Octagonal Solder eyelet hole diameter (D) 1.4 mm Solder eyelet hole diameter tolerance (D)+ 0.1 mm L1 in mm 10.16 mm L1 in inches 0.400 " Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 57 106 finger-safe unplugged/ back-of-hand-safe plugged Touch-safe protection acc. to DIN VDE 67470 IP20 plugged/ IP10 unplugged V470 Protection degree IP20 Volume resistance 55 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Mounting screw, PCB	Pitch in mm (P)	5.08 mm			
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 Solder pin dimensions d = 1.2 mm, Octagonal Solder eyelet hole diameter (D) 1.4 mm Solder eyelet hole diameter tolerance (D)+ 0,1 mm L1 in mm 10.16 mm L1 in inches 0.400 " Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 57 106 finger-safe unplugged/ back-of-hand-safe plugged Touch-safe protection acc. to DIN VDE 67470 IP20 plugged/ IP10 unplugged Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Pitch in inches (P)	0.200 "			
Number of solder pins per pole 1 Solder pin length (I) 1.5 mm Solder pin length tolerance 0 / -0.3 mm Solder pin dimensions d = 1.2 mm, Octagonal Solder eyelet hole diameter (D) 1.4 mm Solder eyelet hole diameter tolerance (D)+ 0,1 mm L1 in mm 10.16 mm L1 in inches 0.400 " Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 57 106 finger-safe unplugged/ back-of-hand-safe plugged 57 106 IP20 plugged/ IP10 unplugged Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Outgoing elbow	180°			
Solder pin length (I) Solder pin length tolerance O / -0.3 mm Solder pin dimensions d = 1.2 mm, Octagonal Solder eyelet hole diameter (D) 1.4 mm Solder eyelet hole diameter tolerance (D)+ 0,1 mm L1 in mm 10.16 mm L1 in inches 0.400 " Number of rows 1 Touch-safe protection acc. to DIN VDE 57 106 Touch-safe protection acc. to DIN VDE O470 Protection degree IP20 Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Number of poles	3			
Solder pin length tolerance $0 / -0.3 \text{ mm}$ Solder pin dimensions $d = 1.2 \text{ mm}$, Octagonal Solder eyelet hole diameter (D) 1.4 mm Solder eyelet hole diameter tolerance (D)+ 0.1 mm L1 in mm 10.16 mm L1 in inches 0.400 " Number of rows 1 Fin series quantity 1 Touch-safe protection acc. to DIN VDE 57.106 Touch-safe protection acc. to DIN VDE 0.4706 Touch-safe protection acc. to DIN VDE 0.4706 Touch-safe protection acc. to DIN VDE 0.4706 Protection degree IP20 Volume resistance 0.4706 Plugging cycles 0.4706 Plugging cycles 0.4706 Plugging force/pole, max. 0.4706 Pulling force/pole, max. 0.4706 Pulling force/pole, max. 0.4706 Torque type Mounting screw, PCB	Number of solder pins per pole	1			
Solder pin dimensions d = 1.2 mm, Octagonal Solder eyelet hole diameter (D) 1.4 mm Solder eyelet hole diameter tolerance (D)+ 0.1 mm L1 in mm 10.16 mm L1 in inches 0.400 " Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 57 106 finger-safe unplugged/ back-of-hand-safe plugged Touch-safe protection acc. to DIN VDE 0470 IP20 plugged/ IP10 unplugged Protection degree IP20 Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Solder pin length (I)	1.5 mm			
Solder eyelet hole diameter (D) 1.4 mm Solder eyelet hole diameter tolerance (D)+ 0,1 mm L1 in mm 10.16 mm L1 in inches 0.400 " Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 57 106 finger-safe unplugged/ back-of-hand-safe plugged Touch-safe protection acc. to DIN VDE 0470 IP20 plugged/ IP10 unplugged Protection degree IP20 Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Solder pin length tolerance	0 / -0.3 mm			
Solder eyelet hole diameter tolerance (D)+ 0,1 mm L1 in mm 10.16 mm L1 in inches 0.400 " Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 57 106 finger-safe unplugged/ back-of-hand-safe plugged Touch-safe protection acc. to DIN VDE 0470 IP20 plugged/ IP10 unplugged Protection degree IP20 Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Solder pin dimensions	d = 1.2 mm, Octagonal			
L1 in mm 10.16 mm L1 in inches 0.400 " Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 57 106 finger-safe unplugged/ back-of-hand-safe plugged Touch-safe protection acc. to DIN VDE 0470 IP20 plugged/ IP10 unplugged Protection degree IP20 Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Solder eyelet hole diameter (D)	1.4 mm			
L1 in inches 0.400 " Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 57 106 finger-safe unplugged/ back-of-hand-safe plugged Touch-safe protection acc. to DIN VDE 0470 IP20 plugged/ IP10 unplugged Protection degree IP20 Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Solder eyelet hole diameter tolerance (D	0)+ 0,1 mm			
Number of rows 1 Pin series quantity 1 Touch-safe protection acc. to DIN VDE 57 106 finger-safe unplugged/ back-of-hand-safe plugged Touch-safe protection acc. to DIN VDE 0470 IP20 plugged/ IP10 unplugged Protection degree IP20 Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	L1 in mm	10.16 mm			
Pin series quantity 1 Touch-safe protection acc. to DIN VDE 57 106 finger-safe unplugged/ back-of-hand-safe plugged Touch-safe protection acc. to DIN VDE 0470 IP20 plugged/ IP10 unplugged Protection degree IP20 Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	L1 in inches	0.400 "			
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57 106 Touch-safe protection acc. to DIN VDE 0470 IP20 plugged/ IP10 unplugged Protection degree IP20 Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Pin series quantity	1			
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Volume resistance ≤5 mΩ Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB		IP20 plugged/ IP10 unplugged			
Can be coded Yes Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Protection degree	IP20			
Plugging cycles 25 Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Volume resistance	≤5 mΩ			
Plugging force/pole, max. 9 N Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Can be coded	Yes			
Pulling force/pole, max. 7 N Tightening torque Torque type Mounting screw, PCB	Plugging cycles	25			
Tightening torque Torque type Mounting screw, PCB	Plugging force/pole, max.	9 N			
	Pulling force/pole, max.	7 N			
Usage information Tightening torque min 0.15 No	Tightening torque	Torque type	Mounting screw, PCB		
rightening torque		Usage information	Tightening torque	min.	0.15 Nm
max. 0.2 Nm				max.	0.2 Nm

Catalogue status / Drawings 2







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Technical data

	Recommended screw	Part number	PTSC KA 2.2X4.5 WN1412
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Material data

Insulating material	LCP GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 175	Insulation resistance	≥ 108 Ω
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Layer structure of solder connection	13 μm Ni / 24 μm Sn matt	Layer structure of plug contact	13 μm Ni / 24 μm Sn matt
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

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	27.5 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)	16.5 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		

Rated data acc. to CSA

Institute (CSA)	CSA	Certificate No. (CSA)	200039-1176845
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group D / CSA)	18.5 A	Reference to approval values	Specifications are maximum values, details - see approval certificate.

Rated data acc. to UL 1059

Institute (UR)	UR	Certificate No. (UR)	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)	18.5 A	Rated current (Use group D / UL 1059)	10 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Packing

Packaging	Box	VPE length	342.00 mm
VPE width	135.00 mm	VPE height	23.00 mm

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.

Catalogue status / Drawings







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Technical data

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
- 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.
- In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Classifications

ETIM 6.0	EC002637	ETIM 7.0	EC002637
ETIM 8.0	EC002637	ETIM 9.0	EC002637
ETIM 10.0	EC002637	ECLASS 9.0	27-44-04-02
ECLASS 9.1	27-44-04-02	ECLASS 10.0	27-44-04-02
ECLASS 11.0	27-46-02-01	ECLASS 12.0	27-46-02-01
ECLASS 13.0	27-46-02-01	ECLASS 14.0	27-46-02-01
ECLASS 15.0	27-46-02-01		

Catalogue status / Drawings

Data sheet

SL-SMT 5.08/03/180F 1.5SN BK BX



Weidmüller Interface GmbH & Co. KG

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Drawings

Product image







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