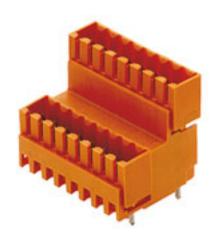


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## **Product image**



















#### Similar to illustration

Double-level, staggered pin header for wave soldering at 3.50 mm pitch. They are available in closed and flanged versions. The male connectors provide space for labelling and can be coded.

### **General ordering data**

Version	PCB plug-in connector, male header, closed side, THT solder connection, 3.50 mm, Number of poles: 40, 180°, Solder pin length (I): 3.2 mm, tinned, orange, Box
Order No.	<u>1641200000</u>
Туре	SLD 3.50V/40/180G 3.2SN OR BX
GTIN (EAN)	4008190279608
Qty.	10 pc(s).
Product data	IEC: 200 V / 10.5 A UL: 300 V / 8 A
Packaging	Box

Creation date March 24, 2021 4:59:41 PM CET



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# **Technical data**

## **Dimensions and weights**

Depth	22 mm	Depth (inches)	0.866 inch
Height	27.4 mm	Height (inches)	1.079 inch
Height of lowest version	24.2 mm	Net weight	24.7 g
Width	71.4 mm	Width (inches)	2.811 inch

## **System specifications**

Product family	OMNIMATE Signal - series	Type of connection	5 1
	BL/SL 3.50		Board connection
Mounting onto the PCB	THT solder connection	Pitch in mm (P)	3.5 mm
Pitch in inches (P)	0.138 inch	Outgoing elbow	180°
Number of poles	40	Number of solder pins per pole	1
Solder pin length (I)	3.2 mm	Solder pin length tolerance	0 / -0.3 mm
Solder pin dimensions	d = 1.2 mm, Octagonal	Solder pin dimensions = d tolerance	0 / -0,03 mm
Solder eyelet hole diameter (D)	1.4 mm	Solder eyelet hole diameter tolerance (I	D)+ 0,1 mm
L1 in mm	66.5 mm	L1 in inches	2.618 inch
Number of rows	2	Pin series quantity	2
Touch-safe protection acc. to DIN VDE	Safe from back-of-hand	Touch-safe protection acc. to DIN VDE	
57 106	touch	0470	IP 10
Volume resistance	≤5 mΩ	Can be coded	Yes
Plugging force/pole, max.	10 N	Pulling force/pole, max.	8 N

### **Material data**

Insulating material	PBT	Colour	orange
Colour chart (similar)	RAL 2000	Insulating material group	IIIa
Comparative Tracking Index (CTI)	≥ 200	UL 94 flammability rating	V-0
Contact material	CuSn	Contact surface	tinned
Layer structure of solder connection	23 μm Ni / 57 μm Sn glossy	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		Rated current, min. number of poles	
	IEC 60664-1, IEC 61984	(Tu=20°C)	10.5 A
Rated current, max. number of poles (Tu=20°C)	8 A	Rated current, min. number of poles (Tu=40°C)	9 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	125 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	2.5 kV	Short-time withstand current resistance	3 x 1s with 80 A



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# **Technical data**

#### Rated data acc. to CSA

nstitute (CSA)	Œ.	Certificate No. (CSA)	
	W.		154685-1318353
Rated voltage (Use group B / CSA)	300 V	Rated voltage (Use group D / CSA)	300 V
Rated current (Use group B / CSA)	8 A	Rated current (Use group D / CSA)	8 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

	maximum values, details - see approval certificate.		
Rated data acc. to UL 1059			
Institute (UR)	<i>712</i>	Certificate No. (UR)	F00002
B : 1 1: (II B : (III 1050)	2001/	D : 1	E60693
Rated voltage (Use group B / UL 1059)		Rated voltage (Use group D / UL 1059)	
Rated current (Use group B / UL 1059)	8 A	Rated current (Use group D / UL 1059)	8 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		
Packing			
Packaging	Box	VPE length	70 mm
VPE width	84 mm	VPE height	104 mm
Classifications			
ETIM 6.0	FC002637	ETIM 7.0	FC002637

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	ECLASS 11.0	27-46-02-01

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	ECLASS 11.0	27-46-02-01
Important note			
IPC conformity	standards and norms an	s are developed, manufactured and deliv d comply with the assured properties in A-610 "Class 2". Further claims on the pr	the data sheet resp. fulfill decorative properties
Notes	Additional colours on	request	
	Rated current related	to rated cross-section & min. No. of poles	3.
	Spacing between row	rs: see hole layout	
	• P on drawing = pitch		
	•	to the component itself. Clearance and c lance with the relevant application stand	reepage distances to other components are to ards.
	Long term storage of	the product with average temperature of	50 °C and average humidity 70%, 36 months



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# **Technical data**

### **Approvals**

Approvals



ROHS	Conform
UL File Number Search	E60693

#### **Downloads**

Approval/Certificate/Document of	
Conformity	Declaration of the Manufacturer
Engineering Data	STEP
Engineering Data	EPLAN, WSCAD



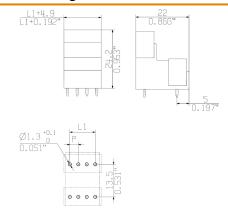
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# **Drawings**

## **Dimensional drawing**





## Recommended wave solderding profiles

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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.