

**OMNIMATE basic – Series CH
CH 5.00/02/180 3.9SN GN BX**

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

**General ordering data**

| | |
|--------------|---------------------------------------|
| Type | CH 5.00/02/180 3.9SN GN BX |
| Order No. | 2646100000 |
| GTIN (EAN) | 4050118640878 |
| Qty. | 500 pc(s). |
| Product data | IEC: 630 V / 15 A UL: 300 V / 15 A |
| Packaging | Box |

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Technical data
Dimensions and weights

Net weight 0.72 g

System specifications

| Product family | | Type of connection | |
|----------------------------|-----------------------|----------------------------------|------------------|
| OMNIMATE basic – Series CH | | | Board connection |
| Mounting onto the PCB | THT solder connection | Pitch in mm (P) | 5 mm |
| Pitch in inches (P) | 0.197 inch | Outgoing elbow | 180° |
| Number of poles | 2 | Number of solder pins per pole | 1 |
| Solder pin length (l) | 3.9 mm | Tolerance of solder pin position | ± 0.1 mm |
| Solder pin dimensions | 1.0 x 1.0 mm | Solder eyelet hole diameter (D) | 1.6 mm |
| L1 in mm | 5 mm | L1 in inches | 0.197 inch |
| Number of rows | 1 | Pin series quantity | 1 |
| Plugging cycles | 150 | | |

System Parameters

| Product family | | Type of connection | |
|----------------------------|------------|---------------------|------------------|
| OMNIMATE basic – Series CH | | | Board connection |
| Pitch in mm (P) | 5 mm | Pitch in inches (P) | 0.197 inch |
| Number of poles | 2 | L1 in mm | 5 mm |
| L1 in inches | 0.197 inch | Number of rows | 1 |
| Pin series quantity | 1 | Plugging cycles | 150 |

Material data

| Insulating material | | Colour | |
|-----------------------------|--------------|-----------------------------|--------------|
| PA GF | | Pale green | |
| Colour chart (similar) | RAL 6021 | Insulating material group | I |
| Insulation strength | 500 MΩ | UL 94 flammability rating | V-0 |
| Contact base material | Copper alloy | Contact material | Copper alloy |
| Contact surface | tinned | Tinning type | matt |
| Operating temperature, min. | -40 °C | Operating temperature, max. | 105 °C |

Rated data acc. to IEC

| | | | |
|---|-------|---|-------|
| Rated current, min. number of poles (Tu=20°C) | 15 A | Rated voltage for surge voltage class / pollution degree II/2 | 630 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

| | | | |
|-----------------------------------|-------|-----------------------------------|-------|
| 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) | 10 A |

Data sheet

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Technical data

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

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) 15 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 width 130 mm

VPE length 170 mm
VPE height 50 mm

Classifications

ETIM 6.0 EC002637
eClass 9.0 27-44-04-02
eClass 10.0 27-44-04-02

ETIM 7.0 EC002637
eClass 9.1 27-44-04-02

Notes

- Notes
- Only compatible with OMNIMATE basic products
 - P on drawing = pitch
 - Rated current related to rated cross-section & min. No. of poles.
 - 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.

Approvals

Approvals



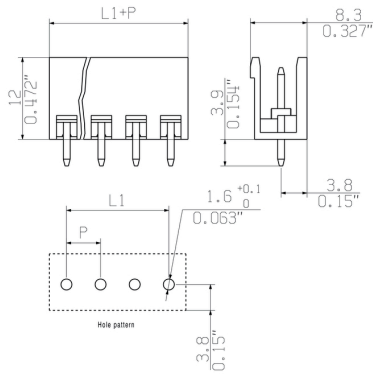
ROHS Conform

Data sheet

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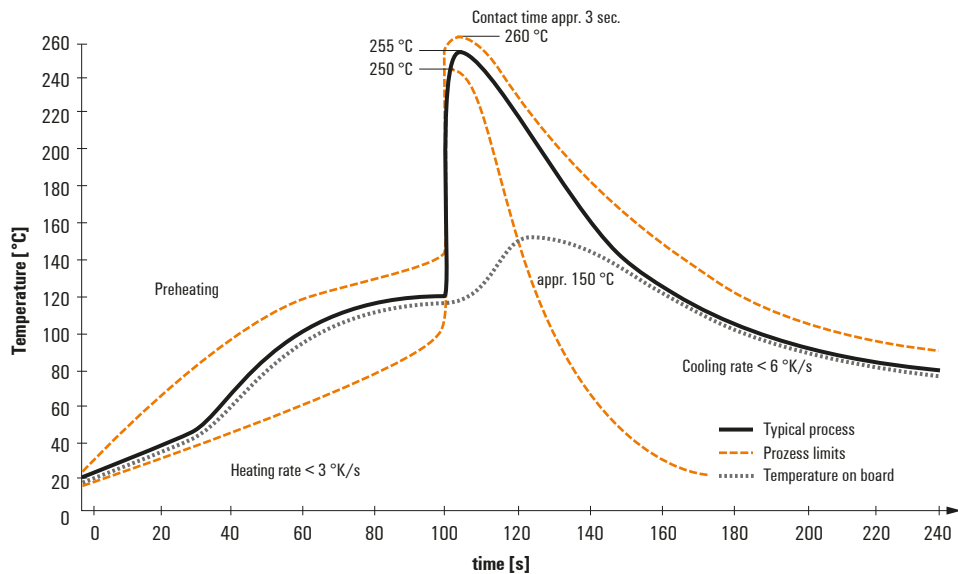
Drawings



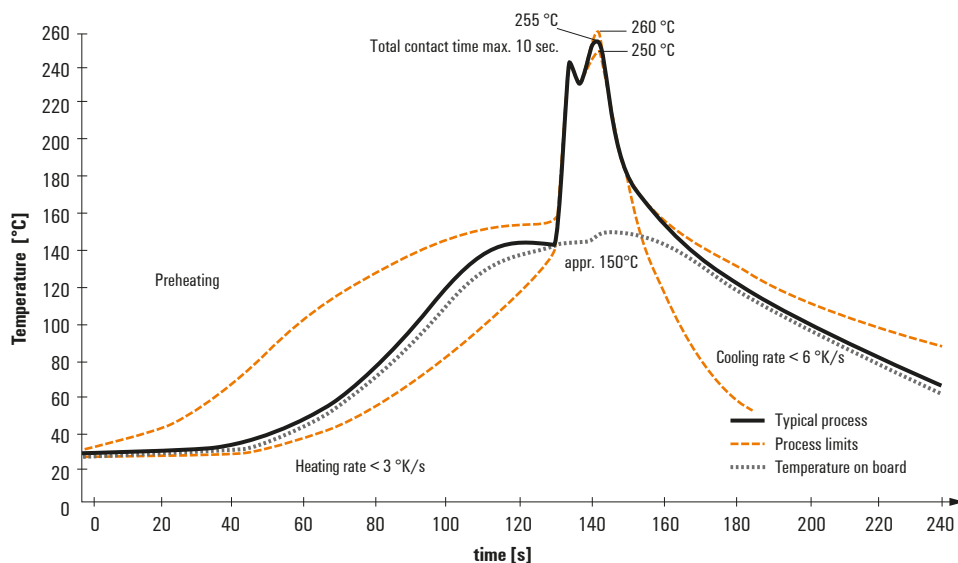
Recommended wave soldering profiles

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.