

**TPS 5.08/02/90 5.0SN GN BX****Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

32760 Detmold

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Fax. +49 5231 14-2083

info@weidmueller.com

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**General ordering data**

Order No.	<a href="#">2651900000</a>
Type	TPS 5.08/02/90 5.0SN GN BX
GTIN (EAN)	4050118635072
Qty.	200 pc(s).
Product data	IEC: 630 V / 20 A / 0.05 - 4 mm <sup>2</sup> UL: 300 V / 15 A / AWG 30 - AWG 12
Packaging	Box

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## Technical data

## Dimensions and weights

Net weight 3.9 g

## Environmental Product Compliance

REACH SVHC Lead 7439-92-1 SCIP e8ca8b50-189f-4e0d-bdaa-5c8b34abe5bd

## System parameters

Product family	OMNIMATE basic – Series TPS	Wire connection method	Clamping yoke connection
Mounting onto the PCB	THT solder connection	Conductor outlet direction	90°
Pitch in mm (P)	5.08 mm	Pitch in inches (P)	0.2 inch
Number of poles	2	Pin series quantity	1
Solder pin length (l)	5 mm	Solder pin dimensions	0.8 x 1.0 mm
Solder eyelet hole diameter (D)	1.5 mm	Number of solder pins per pole	1
Screwdriver blade	0.6 x 3.5	Tightening torque, min.	0.5 Nm
Tightening torque, max.	0.55 Nm	Clamping screw	M 3
Stripping length	8.5 mm	L1 in mm	5.08 mm
L1 in inches	0.2 inch	Protection degree	IP20

## Material data

Insulating material	PA	Colour	Pale green
Colour chart (similar)	RAL 6021	Insulating material group	I
UL 94 flammability rating	V-0	Contact material	Copper alloy
Contact surface	tinned	Tinning type	matt
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-40 °C	Operating temperature, max.	105 °C

## Conductors suitable for connection

Clamping range, min.	0.2 mm <sup>2</sup>	Clamping range, max.	4 mm <sup>2</sup>
Wire connection cross section AWG, min.	AWG 30	Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.05 mm <sup>2</sup>	Solid, max. H05(07) V-U	2.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K	0.2 mm <sup>2</sup>	Flexible, max. H05(07) V-K	4 mm <sup>2</sup>
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.2 mm <sup>2</sup>	w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 pt 1, min.	0.2 mm <sup>2</sup>	w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm <sup>2</sup>

## Rated data acc. to IEC

Rated current, min. number of poles (Tu=20°C)	20 A	Rated voltage for surge voltage class / pollution degree II/2	630 V
Rated voltage for surge voltage class / pollution degree III/2	400 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		

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## Technical data

### Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

www.weidmueller.com

E60693

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059) 300 V

Rated current (Use group B / UL 1059) 15 A

Wire cross-section, AWG, min. AWG 30

Reference to approval values

Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group D / UL 1059) 300 V

Rated current (Use group D / UL 1059) 10 A

Wire cross-section, AWG, max. AWG 12

### Packing

Packaging

Box

VPE length

169 mm

VPE width

134 mm

VPE height

50 mm

### Classifications

ETIM 6.0

EC002643

ETIM 7.0

EC002643

ETIM 8.0

EC002643

ECLASS 9.0

27-44-04-01

ECLASS 9.1

27-44-04-01

ECLASS 10.0

27-44-04-01

ECLASS 11.0

27-46-01-01

ECLASS 12.0

27-46-01-01

### Important note

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.
- In the case of a two-pole terminal, the insulating body must be held against the terminal when tightening the screw.
- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

### Approvals

Approvals



ROHS

Conform

Certificate No. (UR)

E60693

Certificate No. (cURus)

E60693

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**Technical data**

[www.weidmueller.com](http://www.weidmueller.com)

**Downloads**

Catalogues

[Catalogues in PDF-format](#)

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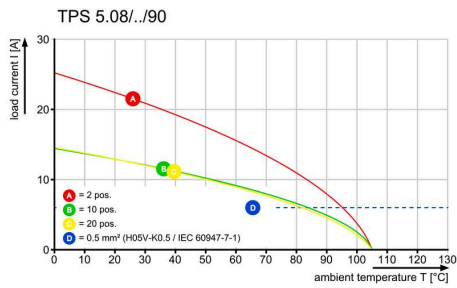
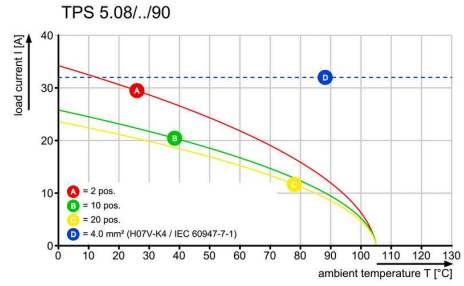
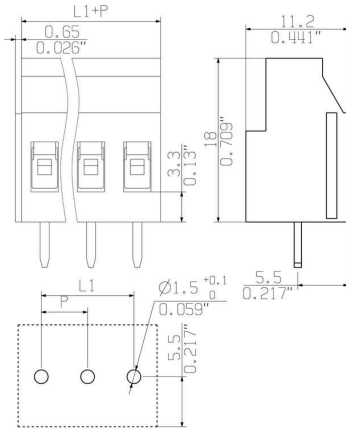
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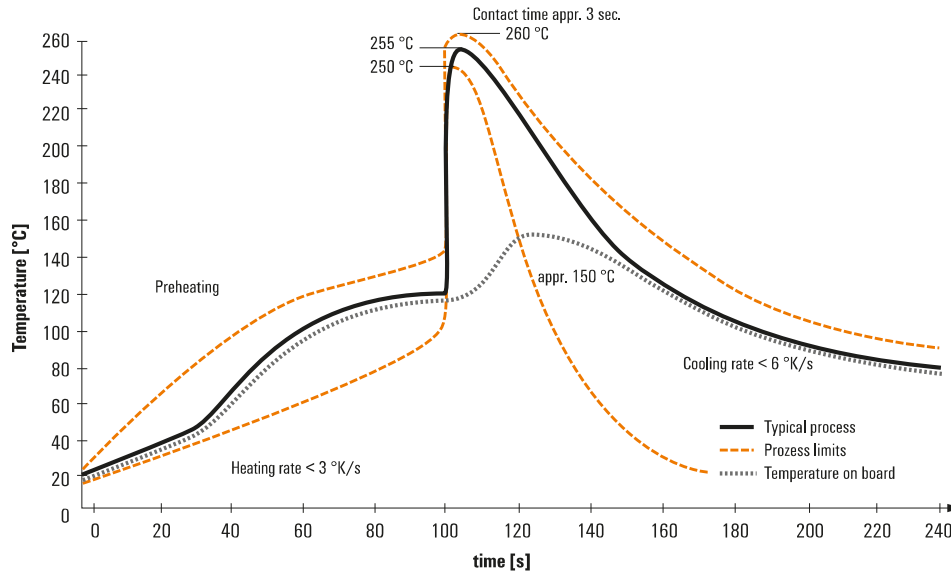
Drawings



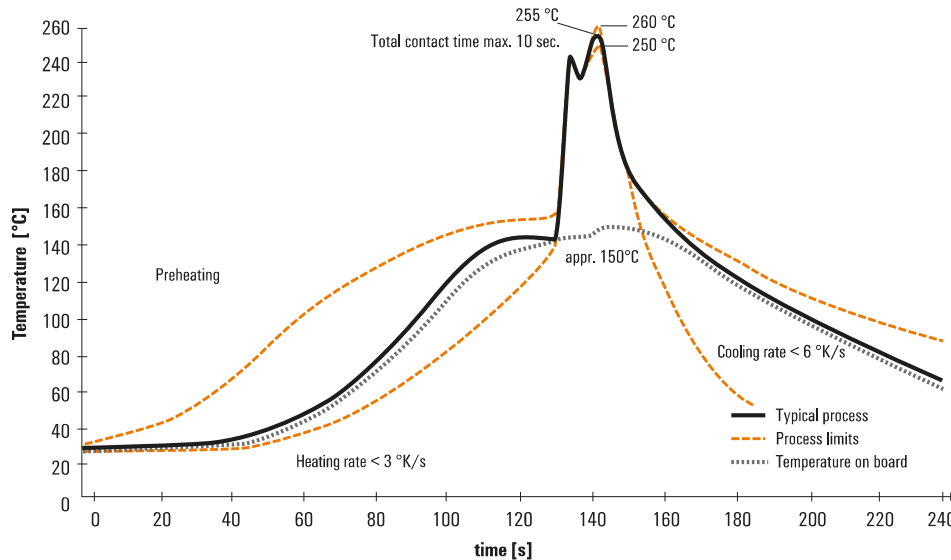
## Recommended wave soldering profiles

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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.