

**LP 7.62/03/180 4.5SN BK BX****Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

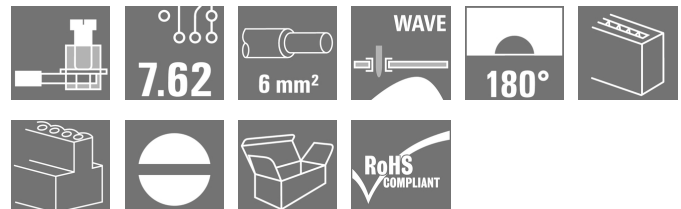
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**Product image**

Similar to illustration

This PCB terminal provides connections for 1000 V, 6 mm<sup>2</sup> conductor cross-section and 32 A with proven clamping yoke connection at 7.50 mm and 7.62 mm pitch, conductor outlet direction in 90° and 180° design.

**General ordering data**

|              |                                                                                                                                                                                            |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Version      | Printed circuit board terminals, 7.62 mm, Number of poles: 3, 180°, Solder pin length (l): 4.5 mm, tinned, black, Clamping yoke connection, Clamping range, max. : 6 mm <sup>2</sup> , Box |
| Order No.    | <a href="#">1753920000</a>                                                                                                                                                                 |
| Type         | LP 7.62/03/180 4.5SN BK BX                                                                                                                                                                 |
| GTIN (EAN)   | 4032248065394                                                                                                                                                                              |
| Qty.         | 100 pc(s).                                                                                                                                                                                 |
| Product data | IEC: 1000 V / 32 A / 0.5 - 6 mm <sup>2</sup><br>UL: 300 V / 20 A / AWG 26 - AWG 12                                                                                                         |
| Packaging    | Box                                                                                                                                                                                        |

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## Technical data

## Dimensions and weights

|                          |            |                 |            |
|--------------------------|------------|-----------------|------------|
| Depth                    | 19 mm      | Depth (inches)  | 0.748 inch |
| Height                   | 15.5 mm    | Height (inches) | 0.61 inch  |
| Height of lowest version | 11 mm      | Width           | 23.46 mm   |
| Width (inches)           | 0.924 inch | Net weight      | 5.31 g     |

## System parameters

|                                              |                             |                                            |                          |
|----------------------------------------------|-----------------------------|--------------------------------------------|--------------------------|
| Product family                               | OMNIMATE Signal - series LP | Wire connection method                     | Clamping yoke connection |
| Mounting onto the PCB                        | THT solder connection       | Conductor outlet direction                 | 180°                     |
| Pitch in mm (P)                              | 7.62 mm                     | Pitch in inches (P)                        | 0.3 inch                 |
| Number of poles                              | 3                           | Pin series quantity                        | 1                        |
| Fitted by customer                           | Yes                         | Max. adjacent poles per row                | 16                       |
| Solder pin length (l)                        | 4.5 mm                      | Solder pin dimensions                      | 0.75 x 0.9 mm            |
| Solder eyelet hole diameter (D)              | 1.3 mm                      | Solder eyelet hole diameter tolerance (D)  | + 0,1 mm                 |
| Number of solder pins per pole               | 1                           | Screwdriver blade                          | 0.6 x 3.5                |
| Screwdriver blade standard                   | DIN 5264                    | Tightening torque, min.                    | 0.5 Nm                   |
| Tightening torque, max.                      | 0.6 Nm                      | Clamping screw                             | M 3                      |
| Stripping length                             | 6 mm                        | L1 in mm                                   | 15.24 mm                 |
| L1 in inches                                 | 0.6 inch                    | Touch-safe protection acc. to DIN VDE 0470 | IP 20                    |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch      | Protection degree                          | IP20                     |
| Volume resistance                            | 1.20 mΩ                     |                                            |                          |

## Material data

|                                       |                           |                                       |        |
|---------------------------------------|---------------------------|---------------------------------------|--------|
| Insulating material                   | PA                        | Colour                                | black  |
| Colour chart (similar)                | RAL 9011                  | Insulating material group             | I      |
| Comparative Tracking Index (CTI)      | ≥ 600                     | UL 94 flammability rating             | V-2    |
| Contact material                      | Copper alloy              | Contact surface                       | tinned |
| Coating                               | 1-3 µm Ni, 4-6 µm SN      | Tinning type                          | matt   |
| Layer structure of solder connection  | 4...6 µm Ni / 4...6 µm Sn | Storage temperature, min.             | -40 °C |
| Storage temperature, max.             | 70 °C                     | Operating temperature, min.           | -50 °C |
| Operating temperature, max.           | 100 °C                    | Temperature range, installation, min. | -25 °C |
| Temperature range, installation, max. | 100 °C                    |                                       |        |

## Conductors suitable for connection

|                                                                     |                      |
|---------------------------------------------------------------------|----------------------|
| Clamping range, min.                                                | 0.13 mm <sup>2</sup> |
| Clamping range, max.                                                | 6 mm <sup>2</sup>    |
| Wire connection cross section AWG, min.                             | AWG 26               |
| Wire connection cross section AWG, max.                             | AWG 12               |
| Solid, min. H05(07) V-U                                             | 0.5 mm <sup>2</sup>  |
| Solid, max. H05(07) V-U                                             | 6 mm <sup>2</sup>    |
| Stranded, max. H07V-R                                               | 6 mm <sup>2</sup>    |
| Flexible, min. H05(07) V-K                                          | 0.5 mm <sup>2</sup>  |
| Flexible, max. H05(07) V-K                                          | 4 mm <sup>2</sup>    |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm <sup>2</sup> min. |                      |
| w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm <sup>2</sup> max. |                      |
| w. wire end ferrule, DIN 46228 pt 1, 0.5 mm <sup>2</sup> min.       |                      |

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## Technical data

w. wire end ferrule, DIN 46228 pt 1, max. 2.5 mm<sup>2</sup>

Plug gauge in accordance with EN 60999 a x b; ø 2.8 mm x 2.4 mm; 3.0 mm

Clampable conductor

Cross-section for conductor connection

Type fine-wired

nominal 0.5 mm<sup>2</sup>

wire end ferrule

Stripping length nominal 8 mm

Recommended wire-end ferrule [H0.5/12 OR](#)

Stripping length nominal 6 mm

Recommended wire-end ferrule [H0.5/6](#)

Cross-section for conductor connection

Type fine-wired

nominal 0.75 mm<sup>2</sup>

wire end ferrule

Stripping length nominal 8 mm

Recommended wire-end ferrule [H0.75/12 W](#)

Stripping length nominal 6 mm

Recommended wire-end ferrule [H0.75/6](#)

Cross-section for conductor connection

Type fine-wired

nominal 1 mm<sup>2</sup>

wire end ferrule

Stripping length nominal 8 mm

Recommended wire-end ferrule [H1.0/12 GE](#)

Stripping length nominal 6 mm

Recommended wire-end ferrule [H1.0/6](#)

Reference text

Length of ferrules is to be chosen depending on the product and the rated voltage. The outside diameter of the plastic collar should not be larger than the pitch (P)

## Rated data acc. to IEC

tested acc. to standard

IEC 60664-1, IEC 61984

Rated current, max. number of poles (Tu=20°C)

32 A

Rated current, max. number of poles (Tu=40°C)

30.5 A

Rated voltage for surge voltage class / pollution degree III/2

500 V

Rated impulse voltage for surge voltage class/ pollution degree II/2

6 kV

Rated impulse voltage for surge voltage class/ contamination degree III/3

6 kV

Rated current, min. number of poles (Tu=20°C)

32 A

Rated current, min. number of poles (Tu=40°C)

32 A

Rated voltage for surge voltage class / pollution degree II/2

1,000 V

Rated voltage for surge voltage class / pollution degree III/3

500 V

Rated impulse voltage for surge voltage class/ pollution degree III/2

6 kV

Short-time withstand current resistance

3 x 1s with 120 A

## Rated data acc. to CSA

Institute (CSA)



Certificate No. (CSA)

200039-1202191

Rated voltage (Use group B / CSA)

300 V

Rated current (Use group B / CSA)

20 A

Wire cross-section, AWG, min.

AWG 26

Reference to approval values

Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group D / CSA)

300 V

Rated current (Use group D / CSA)

10 A

Wire cross-section, AWG, max.

AWG 12

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## Technical data

## Rated data acc. to UL 1059

Institute (UR)



Certificate No. (UR)

www.weidmueller.com

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) 20 A

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

Wire cross-section, AWG, min. AWG 26

Wire cross-section, AWG, max. AWG 12

Reference to approval values  
Specifications are maximum values, details - see approval certificate.

## Packing

|           |        |            |        |
|-----------|--------|------------|--------|
| Packaging | Box    | VPE length | 64 mm  |
| VPE width | 114 mm | VPE height | 148 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

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.

Notes

- Additional variants on request
- Rated current related to rated cross-section & min. No. of poles.
- Wire end ferrule without plastic collar to DIN 46228/1
- Wire end ferrule with plastic collar to DIN 46228/4
- 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.
- Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

## Approvals

Approvals



|                       |            |
|-----------------------|------------|
| ROHS                  | Conform    |
| UL File Number Search | UL Website |
| Certificate No. (UR)  | E60693     |

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[info@weidmueller.com](mailto:info@weidmueller.com)

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

### Downloads

Product Change Notification

[PCN 2016 273 PL32 Loss of nickle LL LP Family EN](#)

[PCN 2016 273 PL32 Wegfall Unternickelung LL LP Familie DE](#)

Catalogues

[Catalogues in PDF-format](#)

Brochures

[FL DRIVES EN](#)

[FL DRIVES DE](#)

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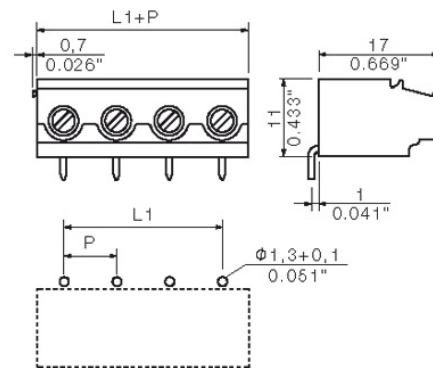
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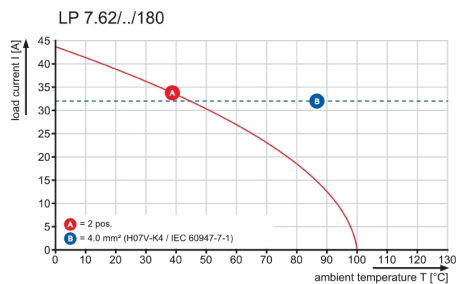
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# Drawings

## Dimensional drawing [info@weidmueller.com](mailto:info@weidmueller.com)



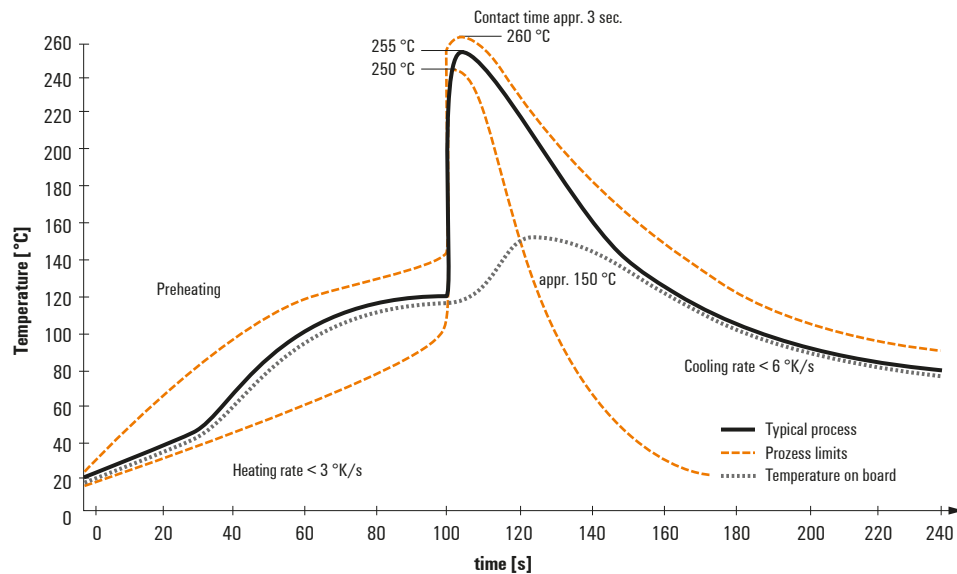
## Graph



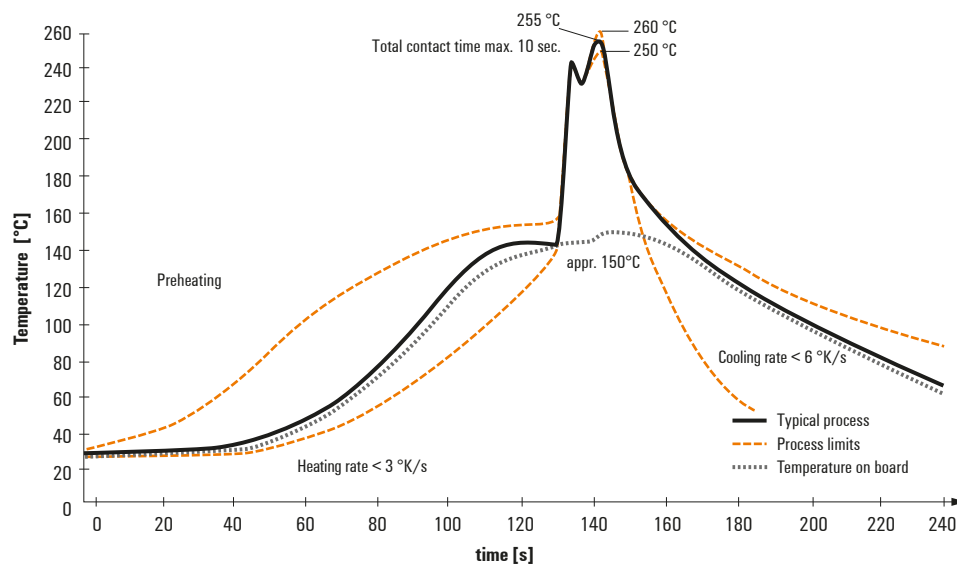
## Recommended wave soldering profiles

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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.

We reserve the right to make technical changes.