

## MPS 7S/03 S TN B B

Weidmüller Interface GmbH &amp; Co. KG

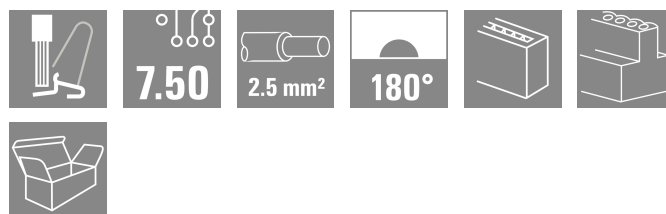
Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Product image

SNAP IN 

OMNIMATE® 4.0 - the next evolution step OMNIMATE® 4.0 follows the trend of One Cable Technology (OCT). The modular concept enables the fast configuration of hybrid interfaces, which transmit data, signals and energy in a single connector. As a result, you can reduce the cabling effort in a wide variety of applications, simplify maintenance and accelerate automation processes. The unique SNAP IN connection is the backbone and speeds up the wiring process. The fastest connection yet

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- Flexible configuration and ordering via the Weidmüller Configurator (WMC)
  - Dispatch within three days – even for individually configured products
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Simply configuration of modular hybrid connectors

- Flexible combination options for power, signal and data transmission
- Future-proof Single-Pair Ethernet technology

## General ordering data

|              |                                                                                        |
|--------------|----------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, female plug, Pitch in mm (P): 7.50 mm, Number of poles: 3, Box  |
| Order No.    | <a href="#">8000078329</a>                                                             |
| Type         | MPS 7S/03 S TN B B                                                                     |
| GTIN (EAN)   | 4064675622321                                                                          |
| Qty.         | 84 items                                                                               |
| Product data | IEC: 1000 V / 34.6 A / 0.5 - 4 mm <sup>2</sup><br>UL: 600 V / 18.5 A / AWG 20 - AWG 12 |
| Packaging    | Box                                                                                    |

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## Technical data

## Approvals

Approvals



ROHS Conform

UL File Number Search [UL Website](#)

Certificate No. (cURus) E60693

## Dimensions and weights

|            |          |                 |             |
|------------|----------|-----------------|-------------|
| Depth      | 34.95 mm | Depth (inches)  | 1.376 inch  |
| Height     | 15.5 mm  | Height (inches) | 0.6102 inch |
| Width      | 20.8 mm  | Width (inches)  | 0.8189 inch |
| Net weight | 9.65 g   |                 |             |

## Temperatures

Ambient temperature -50 °C...125 °C

## Environmental Product Compliance

RoHS Compliance Status Compliant without exemption

REACH SVHC No SVHC above 0.1 wt%

## System Parameters

|                                              |                        |
|----------------------------------------------|------------------------|
| Product family                               | OMNIMATE 4.0           |
| Type of connection                           | Field connection       |
| Wire connection method                       | SNAP IN with lever     |
| Pitch in mm (P)                              | 7.50 mm                |
| Pitch in inches (P)                          | 0.295 "                |
| Conductor outlet direction                   | 180°                   |
| Number of poles                              | 3                      |
| L1 in mm                                     | 15.00 mm               |
| L1 in inches                                 | 0.591 "                |
| Number of rows                               | 1                      |
| Pin series quantity                          | 1                      |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch |
| Touch-safe protection acc. to DIN VDE 0470   | IP 20                  |
| Protection degree                            | IP20                   |
| Stripping length                             | 9 mm                   |
| Stripping length tolerance                   | min.                   |
|                                              | max.                   |
| Plugging cycles                              | 25                     |
| Plugging force/pole, max.                    | 9 N                    |
| Pulling force/pole, max.                     | 8 N                    |

## Material data

|                                  |          |                           |          |
|----------------------------------|----------|---------------------------|----------|
| Insulating material              | PBT GF   | Colour                    | black    |
| Colour chart (similar)           | RAL 9011 | Insulating material group | I        |
| Comparative Tracking Index (CTI) | ≥ 600    | Moisture Level (MSL)      |          |
| UL 94 flammability rating        | V-0      | Contact material          | Cu-alloy |

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|-----------------------------|--------|-----------------------------|--------|
| Contact surface             | tinned | Storage temperature, min.   | -25 °C |
| Storage temperature, max.   | 55 °C  | Operating temperature, min. | -50 °C |
| Operating temperature, max. | 125 °C |                             |        |

### Conductors suitable for connection

|                                                                      |                                        |                              |                             |
|----------------------------------------------------------------------|----------------------------------------|------------------------------|-----------------------------|
| Clamping range, min.                                                 | 0.34 mm <sup>2</sup>                   |                              |                             |
| Clamping range, max.                                                 | 4 mm <sup>2</sup>                      |                              |                             |
| Wire connection cross section AWG, min.                              | AWG 20                                 |                              |                             |
| 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                                              | 2.5 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, 0.34 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, 0.34 mm <sup>2</sup> min.       | 0.34 mm <sup>2</sup>                   |                              |                             |
| w. wire end ferrule, DIN 46228 pt 1, 2.5 mm <sup>2</sup> max.        | 2.5 mm <sup>2</sup>                    |                              |                             |
| Outer diameter of insulation, max.                                   | 4.00 mm                                |                              |                             |
| Clampable conductor                                                  | Cross-section for conductor connection | nominal                      | 0.34 mm <sup>2</sup>        |
|                                                                      | wire end ferrule                       | Stripping length             | nominal 10 mm               |
|                                                                      |                                        | Recommended wire-end ferrule | <a href="#">H0,34/12 TK</a> |
|                                                                      | Cross-section for conductor connection | nominal                      | 0.5 mm <sup>2</sup>         |
|                                                                      | wire end ferrule                       | Stripping length             | nominal 12 mm               |
|                                                                      |                                        | Recommended wire-end ferrule | <a href="#">H0,5/16 OR</a>  |
|                                                                      |                                        | Stripping length             | nominal 10 mm               |
|                                                                      |                                        | Recommended wire-end ferrule | <a href="#">H0,5/10</a>     |
|                                                                      | Cross-section for conductor connection | nominal                      | 0.75 mm <sup>2</sup>        |
|                                                                      | wire end ferrule                       | Stripping length             | nominal 12 mm               |
|                                                                      |                                        | Recommended wire-end ferrule | <a href="#">H0,75/16 W</a>  |
|                                                                      |                                        | Stripping length             | nominal 10 mm               |
|                                                                      |                                        | Recommended wire-end ferrule | <a href="#">H0,75/10</a>    |
|                                                                      | Cross-section for conductor connection | nominal                      | 1 mm <sup>2</sup>           |
|                                                                      | wire end ferrule                       | Stripping length             | nominal 12 mm               |
|                                                                      |                                        | Recommended wire-end ferrule | <a href="#">H1,0/16 GE</a>  |
|                                                                      |                                        | Stripping length             | nominal 10 mm               |
|                                                                      |                                        | Recommended wire-end ferrule | <a href="#">H1,0/10</a>     |
|                                                                      | Cross-section for conductor connection | nominal                      | 1.5 mm <sup>2</sup>         |
|                                                                      | wire end ferrule                       | Stripping length             | nominal 12 mm               |
|                                                                      |                                        | Recommended wire-end ferrule | <a href="#">H1,5/16 R</a>   |
|                                                                      |                                        | Stripping length             | nominal 10 mm               |
|                                                                      |                                        | Recommended wire-end ferrule | <a href="#">H1,5/10</a>     |
|                                                                      | Cross-section for conductor connection | nominal                      | 2.5 mm <sup>2</sup>         |
|                                                                      | wire end ferrule                       | Stripping length             | nominal 10 mm               |

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## Technical data

|  |  |                              |                             |
|--|--|------------------------------|-----------------------------|
|  |  | Recommended wire-end ferrule | <a href="#">H2,5/15D BL</a> |
|  |  | Stripping length             | nominal 10 mm               |
|  |  | Recommended wire-end ferrule | <a href="#">H2,5/10</a>     |

Reference text 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, min. number of poles (Tu=20°C)                         | 34.6 A |
| Rated current, max. number of poles (Tu=20°C)                        | 29.1 A                 | Rated current, min. number of poles (Tu=40°C)                         | 30.7 A |
| Rated current, max. number of poles (Tu=40°C)                        | 25.9 A                 | Rated voltage for surge voltage class / pollution degree II/2         | 1000 V |
| Rated voltage for surge voltage class / pollution degree III/2       | 1000 V                 | Rated voltage for surge voltage class / pollution degree III/3        | 630 V  |
| Rated impulse voltage for surge voltage class/ pollution degree II/2 | 6 kV                   | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 8 kV   |

## Rated data acc. to UL 1059

|                                       |                                                                        |                                       |        |
|---------------------------------------|------------------------------------------------------------------------|---------------------------------------|--------|
| Institute (cURus)                     | CURUS                                                                  | Certificate No. (cURus)               | E60693 |
| Rated voltage (Use group B / UL 1059) | 600 V                                                                  | Rated voltage (Use group C / UL 1059) | 600 V  |
| Rated voltage (Use group D / UL 1059) | 600 V                                                                  | Rated voltage (Use group F / UL 1059) | 1000 V |
| Rated current (Use group B / UL 1059) | 18.5 A                                                                 | Rated current (Use group C / UL 1059) | 18.5 A |
| Rated current (Use group D / UL 1059) | 10 A                                                                   | Rated current (Use group F / UL 1059) | 18.5 A |
| Wire cross-section, AWG, min.         | AWG 20                                                                 | Wire cross-section, AWG, max.         | AWG 12 |
| Reference to approval values          | Specifications are maximum values, details - see approval certificate. |                                       |        |

## Important note

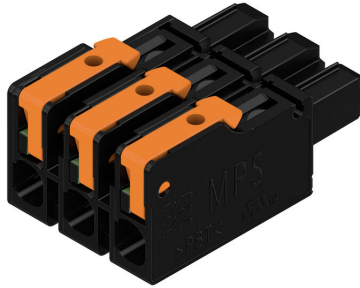
|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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          | <ul style="list-style-type: none"> <li>Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>P on drawing = pitch</li> <li>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.</li> <li>Wire end ferrule without plastic collar to DIN 46228/1</li> <li>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</li> <li>Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months</li> </ul> |

## Classifications

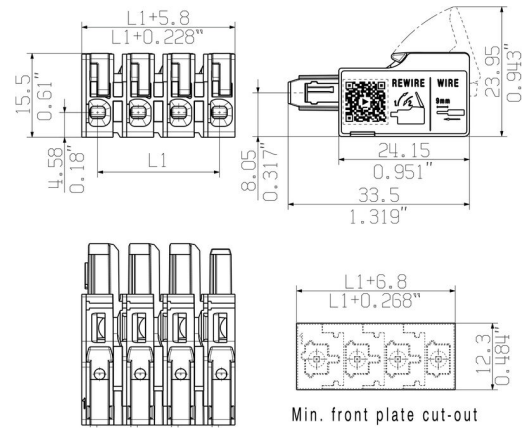
|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 8.0    | EC002638    | ETIM 9.0    | EC002638    |
| ETIM 10.0   | EC002638    | ECLASS 14.0 | 27-46-02-02 |
| ECLASS 15.0 | 27-46-02-02 |             |             |

## Drawings

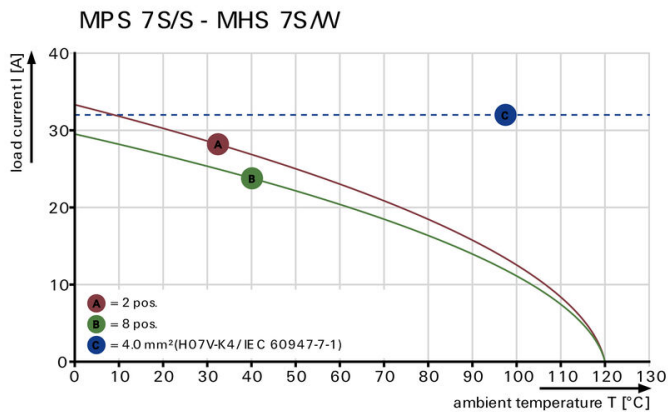
### Product image



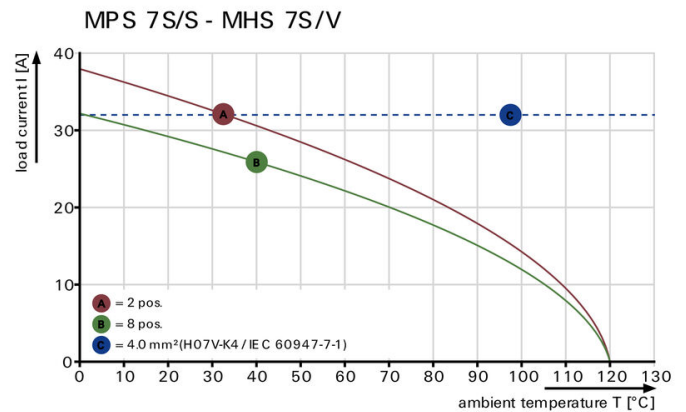
### Dimensional drawing



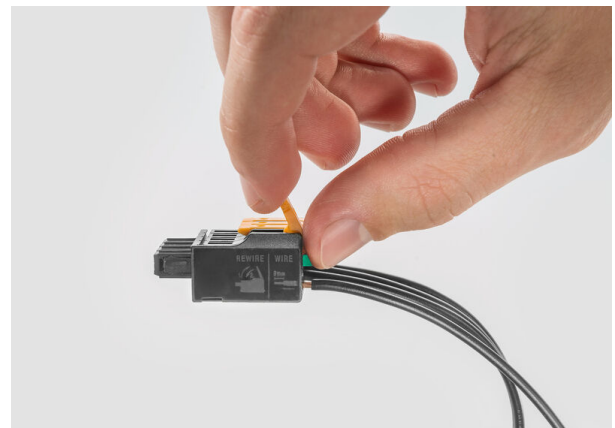
### Derating curve



### Derating curve



### Product benefits



### Product benefits

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Fastest connection technology SNAP IN

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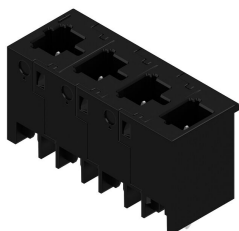
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## Counterpart

## 180° / Vertical



OMNIMATE® 4.0 - the next evolution step OMNIMATE® 4.0 follows the trend of One Cable Technology (OCT).

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## General ordering data

|            |                            |                                                                |
|------------|----------------------------|----------------------------------------------------------------|
| Type       | MHS 7S/03 V T3 B T         | Version                                                        |
| Order No.  | <a href="#">8000078315</a> | PCB plug-in connector, male header, THT/THR solder connection, |
| GTIN (EAN) | 4064675621966              | Pitch in mm (P): 7.50 mm, Number of poles: 3, 180°, Tube       |
| Qty.       | 25 ST                      |                                                                |

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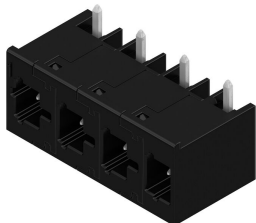
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## Counterpart

## 270° / Horizontal



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|            |                            |                                                                |
|------------|----------------------------|----------------------------------------------------------------|
| Type       | MHS 7S/03 W T3 B T         | Version                                                        |
| Order No.  | <a href="#">8000078322</a> | PCB plug-in connector, male header, THT/THR solder connection, |
| GTIN (EAN) | 4064675622789              | Pitch in mm (P): 7.50 mm, Number of poles: 3, 270°, Tube       |
| Qty.       | 25 ST                      |                                                                |

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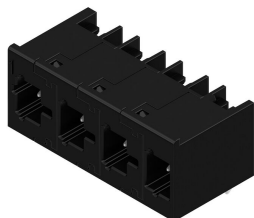
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## Counterpart

## 90° / Horizontal



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## General ordering data

|            |                            |                                                                |
|------------|----------------------------|----------------------------------------------------------------|
| Type       | MHS 7S/03 H T3 B T         | Version                                                        |
| Order No.  | <a href="#">8000078308</a> | PCB plug-in connector, male header, THT/THR solder connection, |
| GTIN (EAN) | 4064675622147              | Pitch in mm (P): 7.50 mm, Number of poles: 3, 90°, Tube        |
| Qty.       | 25 ST                      |                                                                |