

**CPS 3.50/20/180 SN GN BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**General ordering data**

|              |                                                                                   |
|--------------|-----------------------------------------------------------------------------------|
|              |                                                                                   |
| Order No.    | <a href="#">2640370000</a>                                                        |
| Type         | CPS 3.50/20/180 SN GN BX                                                          |
| GTIN (EAN)   | 4050118646603                                                                     |
| Qty.         | 66 pc(s).                                                                         |
| Product data | IEC: 320 V / 8 A / 0.2 - 1.5 mm <sup>2</sup><br>UL: 300 V / 8 A / AWG 30 - AWG 16 |
| Packaging    | Box                                                                               |

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## Technical data

## Dimensions and weights

|            |        |
|------------|--------|
| Net weight | 14.4 g |
|------------|--------|

## System Parameters

|                          |                             |                            |                  |
|--------------------------|-----------------------------|----------------------------|------------------|
| Product family           | OMNIMATE basic – Series CPS | Type of connection         | Field connection |
| Wire connection method   | Clamping yoke connection    | Pitch in mm (P)            | 3.5 mm           |
| Pitch in inches (P)      | 0.138 "                     | Conductor outlet direction | 180°             |
| Number of poles          | 20                          | L1 in mm                   | 66.5 mm          |
| L1 in inches             | 2.622 "                     | Number of rows             | 1                |
| Pin series quantity      | 1                           | Stripping length           | 6.5 mm           |
| Tightening torque, min.  | 0.22 Nm                     | Tightening torque, max.    | 0.25 Nm          |
| Clamping screw           | M 2                         | Screwdriver blade          | 0.4 x 2.5        |
| Plugging cycles          | 25                          | Plugging force/pole, max.  | 10 N             |
| Pulling force/pole, max. | 1 N                         |                            |                  |

## Material data

|                             |          |                             |            |
|-----------------------------|----------|-----------------------------|------------|
| Insulating material         | PA       | Colour                      | Pale green |
| Colour chart (similar)      | RAL 6021 | Insulating material group   | I          |
| UL 94 flammability rating   | V-0      | Contact base material       | Cu-alloy   |
| Contact material            | Cu-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.                            | 1.5 mm <sup>2</sup>  |
| Wire connection cross section AWG, min.         | AWG 30               | Wire connection cross section AWG, max.         | AWG 16               |
| Solid, min. H05(07) V-U                         | 0.2 mm <sup>2</sup>  | Solid, max. H05(07) V-U                         | 1.5 mm <sup>2</sup>  |
| Stranded, min. H07V-R                           | 0.05 mm <sup>2</sup> | Stranded, max. H07V-R                           | 1.5 mm <sup>2</sup>  |
| Flexible, min. H05(07) V-K                      | 0.2 mm <sup>2</sup>  | Flexible, max. H05(07) V-K                      | 1 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. | 0.75 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.       | 0.75 mm <sup>2</sup> |

## Rated data acc. to IEC

|                                                                           |        |                                                                       |        |
|---------------------------------------------------------------------------|--------|-----------------------------------------------------------------------|--------|
| Rated current, min. number of poles (T <sub>u</sub> =20°C)                | 8 A    | Rated voltage for surge voltage class / pollution degree II/2         | 320 V  |
| Rated voltage for surge voltage class / pollution degree III/2            | 160 V  | Rated voltage for surge voltage class / pollution degree III/3        | 160 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 |                                                                       |        |

## Rated data acc. to CSA

|                                   |        |                                   |        |
|-----------------------------------|--------|-----------------------------------|--------|
| Rated voltage (Use group B / CSA) | 300 V  | Rated current (Use group B / CSA) | 8 A    |
| Wire cross-section, AWG, min.     | AWG 30 | Wire cross-section, AWG, max.     | AWG 16 |

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## Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

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

Rated current (Use group B / UL 1059) 8 A

Wire cross-section, AWG, min. AWG 30

Wire cross-section, AWG, max. AWG 16

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

## Packing

|           |       |            |        |
|-----------|-------|------------|--------|
| Packaging | Box   | VPE length | 155 mm |
| VPE width | 64 mm | VPE height | 38 mm  |

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002638    | ETIM 7.0    | EC002638    |
| ETIM 8.0    | EC002638    | ETIM 9.0    | EC002638    |
| ETIM 10.0   | EC002638    | ECLASS 9.0  | 27-44-03-09 |
| ECLASS 9.1  | 27-44-03-09 | ECLASS 10.0 | 27-44-03-09 |
| ECLASS 11.0 | 27-46-02-02 | ECLASS 12.0 | 27-46-02-02 |
| ECLASS 13.0 | 27-46-02-02 | ECLASS 14.0 | 27-46-02-02 |
| ECLASS 15.0 | 27-46-02-02 |             |             |

## Environmental Product Compliance

|                                      |                                      |
|--------------------------------------|--------------------------------------|
| RoHS Compliance Status               | Compliant with exemption             |
| RoHS Exemption (if applicable/known) | 6c                                   |
| REACH SVHC                           | Lead 7439-92-1                       |
| SCIP                                 | d5655e4a-7bb0-47c8-bd67-25d5021f9ded |

## Important note

|       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Notes | <ul style="list-style-type: none"> <li>Only compatible with OMNIMATE basic products</li> <li>P on drawing = pitch</li> <li>Rated current related to rated cross-section &amp; min. No. of poles.</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>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> |
|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

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### Approvals

Approvals



|                         |                                                                                                                                                                             |
|-------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approvals MAMID         | <a href="https://mdcop.weidmueller.com/mediadelivery/rendition/900_319230/-T1z1mm-S800/">https://mdcop.weidmueller.com/mediadelivery/rendition/900_319230/-T1z1mm-S800/</a> |
| ROHS                    | Conform                                                                                                                                                                     |
| UL File Number Search   | UL Website                                                                                                                                                                  |
| Certificate No. (cURus) | E60693                                                                                                                                                                      |

### Downloads

Catalogues [Catalogues in PDF-format](#)

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## Drawings

