

## CPS 3.81/03/180 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.    | 2642100000  |
| Type         | <a href="#">CPS 3.81/03/180 SN GN BX</a>  |
| GTIN (EAN)   | 4050118644876   |
| Qty.         | 300 items   |
| 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

## Approvals

Approvals



|                         |                            |
|-------------------------|----------------------------|
| ROHS                    | Conform                    |
| UL File Number Search   | <a href="#">UL Website</a> |
| Certificate No. (cURus) | E60693                     |

## Dimensions and weights

|            |        |
|------------|--------|
| Net weight | 2.25 g |
|------------|--------|

## 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 |

## System Parameters

| Product family           | OMNIMATE basic – Series CPS | Type of connection         | Field connection |
|--------------------------|-----------------------------|----------------------------|------------------|
| Wire connection method   | Clamping yoke connection    | Pitch in mm (P)            | 3.81 mm          |
| Pitch in inches (P)      | 0.150 "                     | Conductor outlet direction | 180°             |
| Number of poles          | 3                           | L1 in mm                   | 7.62 mm          |
| L1 in inches             | 0.300 "                     | 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          |
| Moisture Level (MSL)        |          | 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> |

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### Rated data acc. to IEC

|   |        |   |        |
|---|--------|---|--------|
| Rated current, min. number of poles (Tu=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 |

### Rated data acc. to UL 1059

|                                       |  |                                       |        |
|---------------------------------------|--|---------------------------------------|--------|
| Institute (cURus)                     | 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 | 170.00 mm |
| VPE width | 135.00 mm | VPE height | 50.00 mm  |

### 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> |
|-------|---|

### 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 |             |             |

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Drawings

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CPS 3.81/./180 GN - CH 3.81/./90G GN



CPS 3.81/./180 GN - CH 3.81/./90G GN

