

## CH 3.81/10/180G 3.5SN 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.    | 2643690000                                  |
| Type         | <a href="#">CH 3.81/10/180G 3.5SN GN BX</a> |
| GTIN (EAN)   | 4050118643282                               |
| Qty.         | 288 items                                   |
| Product data | IEC: 320 V / 8 A<br>UL: 300 V / 8 A         |
| 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 | 2.01 g |
|------------|--------|

## Environmental Product Compliance

|                        |                             |
|------------------------|-----------------------------|
| RoHS Compliance Status | Compliant without exemption |
| REACH SVHC             | No SVHC above 0.1 wt%       |

## System specifications

| Product family                  | OMNIMATE Signal - series<br>BL/SL 5.08 | Type of connection             | Board connection |
|---------------------------------|--|--------------------------------|------------------|
| Mounting onto the PCB           | THT solder connection                  | Pitch in mm (P)                | 3.81 mm          |
| Pitch in inches (P)             | 0.150 "                                | Outgoing elbow                 | 180°             |
| Number of poles                 | 10                                     | Number of solder pins per pole | 1                |
| Solder pin length (l)           | 3.5 mm                                 | Solder pin dimensions          | 0.8 x 0.8 mm     |
| Solder eyelet hole diameter (D) | 1.3 mm                                 | L1 in mm                       | 34.29 mm         |
| L1 in inches                    | 1.350 "                                | Number of rows                 | 1                |
| Pin series quantity             | 1                                      |                                |                  |

## Material data

|                             |          |                             |            |
|-----------------------------|----------|-----------------------------|------------|
| Insulating material         | PA GF    | 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     |

## Rated data acc. to IEC

|  |        |  |        |
|--|--------|--|--------|
| Rated current, min. number of poles<br>(Tu=20°C)                             | 8 A    | Rated voltage for surge voltage class /<br>pollution degree II/2         | 320 V  |
| Rated voltage for surge voltage class /<br>pollution degree III/2            | 160 V  | Rated voltage for surge voltage class /<br>pollution degree III/3        | 160 V  |
| Rated impulse voltage for surge voltage<br>class/ pollution degree II/2      | 2.5 kV | Rated impulse voltage for surge voltage<br>class/ pollution degree III/2 | 2.5 kV |
| Rated impulse voltage for surge voltage<br>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 |
|-----------------------------------|-------|-----------------------------------|-----|

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

### Packing

|           |           |            |           |
|-----------|-----------|------------|-----------|
| Packaging | Box       | VPE length | 169.00 mm |
| VPE width | 135.00 mm | VPE height | 53.00 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    | EC002637    | ETIM 9.0    | EC002637    |
| ETIM 10.0   | EC002637    | ECLASS 14.0 | 27-46-02-01 |
| ECLASS 15.0 | 27-46-02-01 |             |             |

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**Drawings**

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