

**CH 3.81/10/180G 3.5SN GN BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergsstraße 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   |

**CH 3.81/10/180G 3.5SN GN BX**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergsstraße 26  
 D-32758 Detmold  
 Germany

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

**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 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 (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 |
|-----------------------------------|-------|-----------------------------------|-----|

**CH 3.81/10/180G 3.5SN GN BX**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergsstraße 26  
 D-32758 Detmold  
 Germany

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

**Technical data****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 |             |             |

**CH 3.81/10/180G 3.5SN GN BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergsstraße 26  
D-32758 Detmold  
Germany

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

**Drawings**