

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

### **Product image**























Similar to illustration

Female plug with clamping-yoke screw system for connecting wires with straight (180°) outlet direction. The female connectors provide space for labelling and can be coded. Fastened by means of a flange or release latch. The also provide an integrated plus/minus screw, protection against faulty insertion of the wire, and they are delivered with open clamping yokes. HC = High Current.

#### **General ordering data**

| Version      | PCB plug-in connector, female plug, 5.08 mm,<br>Number of poles: 7, 180°, Clamping yoke<br>connection, Clamping range, max. : 4 mm², Box |
|--------------|--|
| Order No.    | <u>2575800000</u>  |
| Туре         | BLZP 5.08HC/07/180 AU BK BX PRT  |
| GTIN (EAN)   | 4050118585636  |
| Qty.         | 48 pc(s).  |
| Product data | IEC: 400 V / 23 A / 0.2 - 4 mm <sup>2</sup><br>UL: 300 V / 20 A / AWG 26 - AWG 12  |
| Packaging    | Box  |

Creation date April 16, 2021 3:08:39 AM CEST



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# **Technical data**

### **Dimensions and weights**

| Depth          | 20.1 mm  | Depth (inches)  | 0.791 inch |
|----------------|----------|-----------------|------------|
| Height         | 16 mm    | Height (inches) | 0.63 inch  |
| Net weight     | 11.159 g | Width           | 35.56 mm   |
| Width (inches) | 1.4 inch |                 |            |

#### **System Parameters**

| Product family                               | OMNIMATE Signal - series BL/SL 5.08    |                   |      |        |
|--|--|-------------------|------|--------|
| Type of connection                           | Field connection                       |                   |      |        |
| Wire connection method                       | Clamping yoke connection               |                   |      |        |
| Pitch in mm (P)                              | 5.08 mm                                |                   |      |        |
| Pitch in inches (P)                          | 0.2 inch                               |                   |      |        |
| Conductor outlet direction                   | 180°                                   |                   |      |        |
| Number of poles                              | 7                                      |                   |      |        |
| L1 in mm                                     | 30.48 mm                               |                   |      |        |
| L1 in inches                                 | 1.2 inch                               |                   |      |        |
| Number of rows                               | 1                                      |                   |      |        |
| Pin series quantity                          | 1                                      |                   |      |        |
| Rated cross-section                          | 4 mm <sup>2</sup>                      |                   |      |        |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch                 |                   |      |        |
| Volume resistance                            | ≤5 mΩ                                  |                   |      |        |
| Can be coded                                 | Yes                                    |                   |      |        |
| Stripping length                             | 7 mm                                   |                   |      |        |
| Clamping screw                               | M 2.5                                  |                   |      |        |
| Screwdriver blade                            | 0.6 x 3.5, PH 1, PZ 1                  |                   |      |        |
| Screwdriver blade standard                   | DIN 5264, ISO 8764/2-PH, ISO 8764/2-PZ |                   |      |        |
| Plugging cycles                              | 25                                     |                   |      |        |
| Plugging force/pole, max.                    | 10 N                                   |                   |      |        |
| Pulling force/pole, max.                     | 9 N                                    |                   |      |        |
| Tightening torque                            | Torque type                            | Wire connection   |      |        |
|  | Usage information                      | Tightening torque | min. | 0.4 Nm |
|  | _                                      |                   | max. | 0.5 Nm |

#### **Material data**

| Insulating material                   | PBT                    | Colour                                | black               |
|---------------------------------------|------------------------|---------------------------------------|---------------------|
| Colour chart (similar)                | RAL 9011               | Insulating material group             | Illa                |
| Comparative Tracking Index (CTI)      | ≥ 200                  | Insulation strength                   | ≥ 10 <sup>8</sup> Ω |
| Contact material                      | Au (Gold)              | Contact surface                       | Gold-plated         |
| Layer structure of plug contact       | 23 µm Ni / ≥ 1.5 µm Au | Storage temperature, min.             | -40 °C              |
| Storage temperature, max.             | 70 °C                  | Operating temperature, min.           | -50 °C              |
| Operating temperature, max.           | 100 °C                 | Temperature range, installation, min. | -25 °C              |
| Temperature range, installation, max. | 100 °C                 |                                       |                     |

#### **Conductors suitable for connection**

| Clamping range, min.                    | 0.13 mm²            |
|---|---------------------|
| Clamping range, max.                    | 4 mm <sup>2</sup>   |
| Wire connection cross section AWG, min. | AWG 30              |
| Wire connection cross section AWG, max. | AWG 12              |
| Solid, min. H05(07) V-U                 | 0.2 mm <sup>2</sup> |
| Solid, max. H05(07) V-U                 | 4 mm <sup>2</sup>   |

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| Flexible, min. H05(07) V-K                        | 0.2 mm <sup>2</sup>  |                                  |                          |
|---|--|----------------------------------|--------------------------|
| Flexible, max. H05(07) V-K                        | 4 mm <sup>2</sup>  |                                  |                          |
| w. plastic collar ferrule, DIN 46228 pt 4<br>min. | 4, 0.2 mm <sup>2</sup>   |                                  |                          |
| w. plastic collar ferrule, DIN 46228 pt 4<br>max. | 4, 2.5 mm <sup>2</sup>   |                                  |                          |
| w. wire end ferrule, DIN 46228 pt 1,<br>min.      | 0.2 mm <sup>2</sup>  |                                  |                          |
| w. wire end ferrule, DIN 46228 pt 1, max.         | 4 mm²  |                                  |                          |
| Plug gauge in accordance with EN 60999 a x b; ø   | 2.8 mm x 2.4 mm  |                                  |                          |
| Clampable conductor                               | Cross-section for conductor connection   | Туре                             | fine-wired               |
|   |  | nominal                          | 0.5 mm <sup>2</sup>      |
|   | wire end ferrule   | Stripping length                 | nominal 6 mm             |
|   |  | Recommended wire-<br>end ferrule | H0,5/6                   |
|   | Cross-section for conductor connection   | Туре                             | fine-wired               |
|   |  | nominal                          | 1 mm <sup>2</sup>        |
|   | wire end ferrule   | Stripping length                 | nominal 6 mm             |
|   |  | Recommended wire-<br>end ferrule | H1,0/6                   |
|   | Cross-section for conductor connection   | Туре                             | fine-wired               |
|   |  | nominal                          | 1.5 mm <sup>2</sup>      |
|   | wire end ferrule   | Stripping length                 | nominal 7 mm             |
|   |  | Recommended wire-<br>end ferrule | H1,5/7                   |
|   | Cross-section for conductor connection   | Туре                             | fine-wired               |
|   |  | nominal                          | 2.5 mm <sup>2</sup>      |
|   | wire end ferrule   | Stripping length                 | nominal 7 mm             |
|   |  | Recommended wire-<br>end ferrule | H2,5/7                   |
| Reference text                                    | The outside diameter of the plastic collar shou is to be chosen depending on the product and |                                  | itch (P), Length of ferr |

### Rated data acc. to IEC

| tested acc. to standard   |                        | Rated current, min. number of poles                                   |                   |
|---|------------------------|---|-------------------|
|   | IEC 60664-1, IEC 61984 | (Tu=20°C)   | 23 A              |
| Rated current, max. number of poles (Tu=20°C)                             | 18 A                   | Rated current, min. number of poles (Tu=40°C)                         | 21 A              |
| Rated current, max. number of poles (Tu=40°C)                             | 16 A                   | Rated voltage for surge voltage class / pollution degree II/2         | 400 V             |
| Rated voltage for surge voltage class / pollution degree III/2            | 320 V                  | Rated voltage for surge voltage class / pollution degree III/3        | 250 V             |
| Rated impulse voltage for surge voltage class/ pollution degree II/2      | 4 kV                   | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 4 kV              |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 4 kV                   | Short-time withstand current resistance                               | 3 x 1s with 120 A |

### Rated data acc. to CSA

| Rated voltage (Use group B / CSA) | 300 V  | Rated voltage (Use group C / CSA) | 50 V   |
|-----------------------------------|--------|-----------------------------------|--------|
| Rated voltage (Use group D / CSA) | 300 V  | Rated current (Use group B / CSA) | 20 A   |
| Rated current (Use group D / CSA) | 20 A   | Wire cross-section, AWG, min.     | AWG 30 |
| Wire cross-section, AWG, max.     | AWG 12 |                                   |        |



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# **Technical data**

#### Rated data acc. to UL 1059

| Rated voltage (Use group B / UL 1059) 300 V      |                | Rated voltage (Use group D / UL 1059) 300 V   |  |  |
|--|----------------|---|--|--|
| Rated current (Use group B / UL 10               | 59) 20 A       | Rated current (Use gro  | oup D / UL 1059) 10 A  |  |
| Wire cross-section, AWG, min.                    | AWG 26         | Wire cross-section, AV  | VG, max. AWG 12  |  |
| Packing  |                |   |  |  |
| De also nin n                                    | D              | \/DE  | 220  |  |
| Packaging  | Box            | VPE length  | 338 mm   |  |
| VPE width  | 130 mm         | VPE height  | 27 mm  |  |
| Type tests                                       |                |   |  |  |
| Test: Durability of markings                     | Chandand       | DIA   | LEN C1004  |  |
| rest. Durability of markings                     | Standard       | DIN EN 61984 section 7.3.2 / 09.02 taking<br>pattern from DIN EN 60068-2-70 / 07.96 |  |  |
|  | Test           | mark of origin, rated voltage, rated cross-sec<br>type of material                  |  |  |
|  | Evaluation     | available   |  |  |
|  | Test           | durability  |  |  |
|  | Evaluation     | passed  |  |  |
| Test: Misengagement (Non-<br>interchangeability) | Standard       | DIN EN 60512-13-5 / 11.06, IEC 60512-1302.06  |  |  |
|  | Test           | 180   | 0° turned with coding elements   |  |
|  | Evaluation     | pas   | sed  |  |
|  | Test           | visu  | ual examination  |  |
|  | Evaluation     | passed  |  |  |
| Test: Clampable cross section                    | Standard       |   | I EN 60999-1 section 7 and 9.1 / 12.00, DII<br>60947-1 section 8.2.4.5.1 / 12.02 |  |
|  | Conductor type | ar  | rpe of conductor solid 0.2 mm²<br>nd conductor cross-<br>action                  |  |
|  |                | ar  | rpe of conductor stranded 0.2 mm² and conductor cross-                           |  |
|  |                | ar  | rpe of conductor solid 2.5 mm² solid 2.5 mm² solid conductor cross-              |  |
|  |                | ar  | rpe of conductor stranded 2.5 mm² and conductor cross-                           |  |
|  |                | ar  | rpe of conductor AWG 26/1 and conductor cross-                                   |  |
|  |                | ar  | rpe of conductor AWG 26/19 and conductor cross-                                  |  |

passed

Evaluation



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# **Technical data**

| Test for damage to and accidental<br>loosening of conductors | Standard       | DIN EN 60999-1 section 9.4 / 12.00   |
|--|----------------|--|
|  | Requirement    | 0.2 kg   |
|  | Conductor type | Type of conductor AWG 26/1 and conductor cross-section                     |
|  |                | Type of conductor AWG 26/19 and conductor cross-section                    |
|  | Evaluation     | passed   |
|  | Requirement    | 0.3 kg   |
|  | Conductor type | Type of conductor solid 0.5 mm <sup>2</sup> and conductor cross-section    |
|  |                | Type of conductor stranded 0.5 mm <sup>2</sup> and conductor cross-section |
|  | Evaluation     | passed   |
|  | Requirement    | 0.9 kg   |
|  | Conductor type | Type of conductor AWG 12/1 and conductor cross-section                     |
|  |                | Type of conductor AWG 12/19 and conductor cross-section                    |
|  | Evaluation     | passed   |
| ull-out test   | Standard       | DIN EN 60999-1 section 9.5 / 12.00   |
|  | Requirement    | ≥10 N  |
|  | Conductor type | Type of conductor AWG 26/1 and conductor cross-section                     |
|  |                | Type of conductor AWG 26/19 and conductor cross-section                    |
|  | Evaluation     | passed   |
|  | Requirement    | ≥20 N  |
|  | Conductor type | Type of conductor H05V-U0.5 and conductor cross-section                    |
|  |                | Type of conductor H05V-K0.5<br>and conductor cross-<br>section             |
|  | Evaluation     | passed   |
|  | Requirement    | ≥60 N  |
|  | Conductor type | Type of conductor H07V-U4.0 and conductor cross-section                    |
|  |                | Type of conductor H07V-K4.0 and conductor cross-section                    |
|  |                | Type of conductor AWG 12/1 and conductor cross-section                     |
|  |                | Type of conductor AWG 12/19 and conductor cross-section                    |
|  | Evaluation     | passed   |



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# **Technical data**

| 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                                       | Additional colours on request  |  |  |  |
|   | Gold-plated contact surfaces on request  |  |  |  |
|   | Rated current related to rated cross-section & min. No. of poles.  |  |  |  |
|   | Wire end ferrule without plastic collar to DIN 46228/1   |  |  |  |
|   | Wire end ferrule with plastic collar to DIN 46228/4  |  |  |  |
|   | P on drawing = pitch   |  |  |  |
|   | <ul> <li>Rated data refer only to the component itself. Clearance and creepage distances to other components are to<br/>be designed in accordance with the relevant application standards.</li> </ul>  |  |  |  |
|   | <ul> <li>Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li> </ul>   |  |  |  |
| Approvals                                   |  |  |  |  |
| ROHS  | Conform  |  |  |  |
| Downloads                                   |  |  |  |  |
|   |  |  |  |  |
| Approval/Certificate/Document of Conformity | CB Certificate CB Testreport   |  |  |  |
| Brochure/Catalogue                          | Catalogues in PDF-format   |  |  |  |



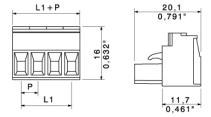
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# **Drawings**

### **Dimensional drawing**



### Graph

