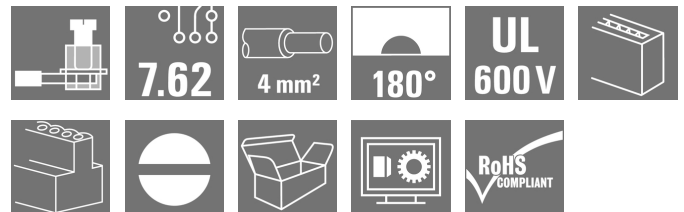


## OMNIMATE Power - series BL/SL 7.62HP BLZ 7.62HP/03/180 SN BK BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com



### Power on board - 100% safety, 100% integration, 100% cost-effectiveness:

The compact, efficient solution for UL-600V applications in the lower performance range.

High-performance female header for applications up to 12 kVA:

- 29 A with 400 V (IEC)
- 20 A at 600 V (UL)
- 0.08 - 4 mm<sup>2</sup> / AWG 28 - 12

Assisting in device approval:

- Meets the requirements of 600 V according to UL 508 / UL 840.
- When plugged, meets the increased requirements on touch safety as per IEC 68100-5-1

The slimming diet for multiple-stage device series:

Reduce the size and cut costs in the high-volume lower performance range without compromising device approval!

### General ordering data

|              |   |
|--------------|---|
| Type         | BLZ 7.62HP/03/180 SN BK BX  |
| Order No.    | <a href="#">1059590000</a>  |
| Version      | PCB plug-in connector, female plug, 7.62 mm, No. of poles: 3, 180°, Clamping yoke connection, Clamping range, max.: 4 mm <sup>2</sup> , Box |
| GTIN (EAN)   | 4032248807543   |
| Qty.         | 100 pc(s).  |
| Product data | IEC: 630 V / 29 A / 0.2 - 4 mm <sup>2</sup><br>UL: 600 V / 20 A / AWG 20 - AWG 12   |
| Packaging    | Box   |

**OMNIMATE Power - series BL/SL 7.62HP  
BLZ 7.62HP/03/180 SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

**Technical data****Dimensions and weights**

Net weight 6.46 g

**System parameters**

|  |                                      |  |                          |
|--|--------------------------------------|--|--------------------------|
| Product family                               | OMNIMATE Power - series BL/SL 7.62HP | Type of connection                         | Clamping yoke connection |
| Wire connection method                       | Clamping yoke connection             | Pitch in mm (P)                            | 7.62 mm                  |
| Pitch in inches (P)                          | 0.3 inch                             | Conductor outlet direction                 | 180°                     |
| No. of poles                                 | 3                                    | L1 in mm                                   | 15.24 mm                 |
| L1 in inches                                 | 0.6 inch                             | Number of rows                             | 1                        |
| Pin series quantity                          | 1                                    | Rated cross-section                        | 2.5 mm <sup>2</sup>      |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch               | Touch-safe protection acc. to DIN VDE 0470 | IP 20                    |
| Volume resistance                            | 5.00 mΩ                              | Can be coded                               | Yes                      |
| Stripping length                             | 7 mm                                 | Tightening torque, min.                    | 0.4 Nm                   |
| Tightening torque, max.                      | 0.5 Nm                               | Clamping screw                             | M 2.5                    |
| Screwdriver blade                            | 0.6 x 3.5                            | Screwdriver blade standard                 | DIN 5264                 |
| push-in force/pole                           | 10 N                                 | Withdrawal force per pole                  | 8 N                      |
| Packaging                                    | Box                                  |  |                          |

**Material data**

|                                       |          |                                       |                          |
|---------------------------------------|----------|---------------------------------------|--------------------------|
| Insulating material                   | PBT      | Colour                                | Black                    |
| Colour chart (similar)                | RAL 9011 | Insulating material group             | Illa                     |
| CTI                                   | ≥ 200    | Insulation resistance                 | ≥ 10 <sup>8</sup> Ω      |
| UL 94 flammability rating             | V-0      | Contact material                      | Copper alloy             |
| Contact surface                       | tinned   | Layer structure of plug contact       | 4-8 μm Sn hot-dip tinned |
| Storage temperature, min.             | -25 °C   | Storage temperature, max.             | 55 °C                    |
| Max. relative humidity during storage | 80 %     | 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.                            | 0.08 mm <sup>2</sup> | Clamping range, max.                            | 4 mm <sup>2</sup>   |
| Wire connection cross section AWG, min.         | AWG 28               | 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>   |
| 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, min. | 0.2 mm <sup>2</sup>  | w. plastic collar ferrule, DIN 46228 pt 4, max. | 2.5 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.       | 2.5 mm <sup>2</sup> |
| Plug gauge acc. to EN 60999 a x b; Ø            | 2.8 mm x 2.4 mm      |   |                     |

## OMNIMATE Power - series BL/SL 7.62HP BLZ 7.62HP/03/180 SN BK BX

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

## Technical data


### Rated data acc. to IEC

|   |                        |   |                   |
|---|------------------------|---|-------------------|
| tested acc. to standard   | IEC 60664-1, IEC 61984 | Rated current, min. no. of poles (Tu=20°C)                            | 29 A              |
| Rated current, max. no. of poles (Tu=20°C)                                | 26.5 A                 | Rated current, min. no. of poles (Tu=40°C)                            | 25 A              |
| Rated current, max. no. of poles (Tu=40°C)                                | 23 A                   | Rated voltage for surge voltage class / pollution degree II/2         | 630 V             |
| Rated voltage for surge voltage class / pollution degree III/2            | 500 V                  | Rated voltage for surge voltage class / pollution degree III/3        | 400 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 | 6 kV              |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 6 kV                   | Short-time withstand current resistance                               | 3 x 1s with 180 A |
| Clearance, min.   | 9.8 mm                 | Creepage distance, min.   | 11.3 mm           |

### Rated data acc. to CSA

|                               |        |                               |        |
|-------------------------------|--------|-------------------------------|--------|
| Rated voltage (Use group B)   | 600 V  | Rated voltage (Use group C)   | 600 V  |
| Rated voltage (use group D)   | 600 V  | Rated current (use group B)   | 20 A   |
| Rated current (use group C)   | 20 A   | Rated current (use group D)   | 5 A    |
| Wire cross-section, AWG, min. | AWG 20 | Wire cross-section, AWG, max. | AWG 12 |

### Rated data acc. to UL 1059

|                               |   |                               |        |
|-------------------------------|---|-------------------------------|--------|
| Institute (cURus)             |  | Certificate No. (cURus)       | E60693 |
| Rated voltage (use group B)   | 600 V   | Rated voltage (use group C)   | 600 V  |
| Rated voltage (use group D)   | 600 V   | Rated current (use group B)   | 20 A   |
| Rated current (use group C)   | 20 A  | Rated current (use group D)   | 5 A    |
| Wire cross-section, AWG, min. | AWG 20  | Wire cross-section, AWG, max. | AWG 12 |
| Reference to approval values  | Specifications are maximum values, details - see approval certificate.              |                               |        |

### Classifications

|            |             |            |             |
|------------|-------------|------------|-------------|
| ETIM 4.0   | EC002637    | ETIM 5.0   | EC002637    |
| ETIM 6.0   | EC002637    | UNSPSC     | 30-21-18-10 |
| eClass 5.1 | 27-26-07-04 | eClass 6.2 | 27-26-07-04 |
| eClass 7.1 | 27-44-04-02 | eClass 8.1 | 27-44-04-02 |
| eClass 9.0 | 27-44-04-02 | eClass 9.1 | 27-44-04-02 |

**OMNIMATE Power - series BL/SL 7.62HP  
BLZ 7.62HP/03/180 SN BK BX**

**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

**Technical data**
**Notes**

|                |   |
|----------------|---|
| Notes          | <ul style="list-style-type: none"> <li>• Additional colours on request</li> <li>• Gold-plated contact surfaces on request</li> <li>• Rated current related to rated cross-section &amp; min. No. of poles.</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</li> <li>• P on drawing = pitch</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> </ul> |
| 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.  |

**Approvals**

Approvals



ROHS Conform

**Downloads**

|   |   |
|---|---|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of the Manufacturer</a>   |
| Brochure/Catalogue                          | <a href="#">FL DRIVES EN</a><br><a href="#">MB DEVICE MANUF. EN</a><br><a href="#">FL DRIVES DE</a><br><a href="#">CAT 2 PORTFOLIOGUIDE EN</a><br><a href="#">FL HEATING ELECTR EN</a><br><a href="#">FL APPL_INVERTER EN</a><br><a href="#">FL_BASE_STATION EN</a><br><a href="#">FL ELEVATOR EN</a><br><a href="#">FL POWER SUPPLY EN</a><br><a href="#">FL 72H SAMPLE SER EN</a><br><a href="#">PO OMNIMATE EN</a> |
| Engineering Data                            | <a href="#">EPLAN_WSCAD</a>   |
| Engineering Data                            | <a href="#">STEP</a>  |
| Motion controllers white paper              | <a href="#">Download Whitepaper</a>   |
| White Paper UL 600 V                        | <a href="#">Download Whitepaper</a>   |

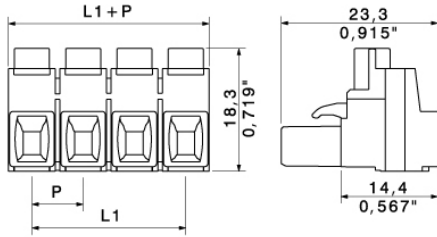
**Data sheet**

**OMNIMATE Power - series BL/SL 7.62HP  
BLZ 7.62HP/03/180 SN BK BX**

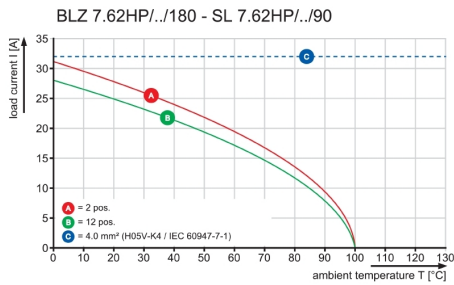
**Weidmüller Interface GmbH & Co. KG**  
Klingenbergstraße 16  
D-32758 Detmold  
Germany  
Fon: +49 5231 14-0  
Fax: +49 5231 14-292083  
www.weidmueller.com

**Drawings**

**Dimensional drawing**



**Graph**



**Graph**

