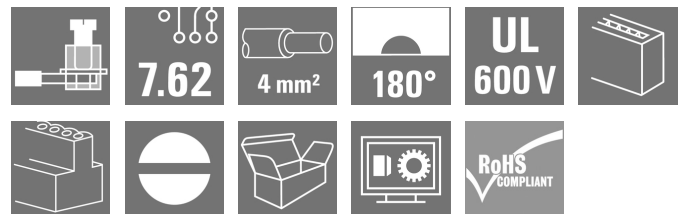


BLZ 7.62HP/10/180 SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com**Product image****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 mm² / 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

| | |
|--------------|--|
| Version | PCB plug-in connector, female plug, 7.62 mm, Number of poles: 10, 180°, Clamping yoke connection, Clamping range, max. : 4 mm ² , Box |
| Order No. | 1980560000 |
| Type | BLZ 7.62HP/10/180 SN OR BX |
| GTIN (EAN) | 4032248675616 |
| Qty. | 20 pc(s). |
| Product data | IEC: 630 V / 29 A / 0.2 - 4 mm ² UL: 600 V / 20 A / AWG 20 - AWG 12 |
| Packaging | Box |

BLZ 7.62HP/10/180 SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data**Dimensions and weights**

| | | | |
|------------|---------|-----------------|------------|
| Depth | 23.3 mm | Depth (inches) | 0.917 inch |
| Height | 18.3 mm | Height (inches) | 0.72 inch |
| Net weight | 20.84 g | | |

System Parameters

| | | | |
|--|--------------------------------------|--|---------------------|
| Product family | OMNIMATE Power - series BL/SL 7.62HP | Type of connection | Field connection |
| Wire connection method | Clamping yoke connection | Pitch in mm (P) | 7.62 mm |
| Pitch in inches (P) | 0.3 " | Conductor outlet direction | 180° |
| Number of poles | 10 | L1 in mm | 68.58 mm |
| L1 in inches | 2.7 " | Number of rows | 1 |
| Pin series quantity | 1 | Rated cross-section | 2.5 mm ² |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch | Touch-safe protection acc. to DIN VDE 0470 | IP 20 |
| Protection degree | IP20 | 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 | Plugging cycles | 25 |
| Plugging force/pole, max. | 9.5 N | Pulling force/pole, max. | 8.5 N |

Material data

| | | | |
|---------------------------------------|----------|---------------------------------------|----------------------------|
| Insulating material | PBT | Colour | orange |
| Colour chart (similar) | RAL 2000 | Insulating material group | IIIa |
| Comparative Tracking Index (CTI) | ≥ 200 | Insulation strength | ≥ 10 ⁸ Ω |
| UL 94 flammability rating | V-0 | Contact material | Cu-alloy |
| Contact surface | tinned | Layer structure of plug contact | 4...8 μm Sn hot-dip tinned |
| 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. | 0.08 mm ² |
| Clamping range, max. | 4 mm ² |
| 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 ² |
| Solid, max. H05(07) V-U | 4 mm ² |
| Flexible, min. H05(07) V-K | 0.2 mm ² |
| Flexible, max. H05(07) V-K | 4 mm ² |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm ² min. | |
| w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm ² max. | |
| w. wire end ferrule, DIN 46228 pt 1, min. | 0.2 mm ² |
| w. wire end ferrule, DIN 46228 pt 1, max. | 2.5 mm ² |
| Plug gauge in accordance with EN 60999 a x b; ø | 2.8 mm x 2.4 mm |

BLZ 7.62HP/10/180 SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

| | | | |
|---------------------|--|------------------------------|------------------------------|
| Clampable conductor | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 0.25 mm ² |
| | wire end ferrule | Stripping length | nominal 10 mm |
| | | Recommended wire-end ferrule | H0.25/12 HBL |
| | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 0.34 mm ² |
| | wire end ferrule | Stripping length | nominal 10 mm |
| | | Recommended wire-end ferrule | H0.34/12 TK |
| | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 0.5 mm ² |
| | wire end ferrule | Stripping length | nominal 6 mm |
| | | Recommended wire-end ferrule | H0.5/6 |
| | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 0.75 mm ² |
| | wire end ferrule | Stripping length | nominal 6 mm |
| | | Recommended wire-end ferrule | H0.75/6 |
| | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 1 mm ² |
| | wire end ferrule | Stripping length | nominal 6 mm |
| | | Recommended wire-end ferrule | H1.0/6 |
| | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 1.5 mm ² |
| | wire end ferrule | Stripping length | nominal 7 mm |
| | | Recommended wire-end ferrule | H1.5/7 |
| | Cross-section for conductor connection | Type | fine-wired |
| | | nominal | 2.5 mm ² |
| | wire end ferrule | Stripping length | nominal 7 mm |
| | | Recommended wire-end ferrule | H2.5/7 |

Reference text The outside diameter of the plastic collar should not be larger than the pitch (P), Length of ferrules is to be chosen depending on the product and the rated voltage.

Rated data acc. to IEC

| | | | |
|---|------------------------|---|-------------------|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C) | 29 A |
| Rated current, max. number of poles (Tu=20°C) | 26.5 A | Rated current, min. number of poles (Tu=40°C) | 25 A |
| Rated current, max. number 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 |

BLZ 7.62HP/10/180 SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data**Rated data acc. to CSA**

Institute (CSA)



Certificate No. (CSA)

200039-1121690

| | |
|-----------------------------------|--|
| Rated voltage (Use group B / CSA) | 600 V |
| Rated voltage (Use group D / CSA) | 600 V |
| Rated current (Use group C / CSA) | 20 A |
| Wire cross-section, AWG, min. | AWG 20 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. |

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

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

| | |
|---------------------------------------|--|
| Rated voltage (Use group B / UL 1059) | 600 V |
| Rated voltage (Use group D / UL 1059) | 600 V |
| Rated current (Use group C / UL 1059) | 20 A |
| Wire cross-section, AWG, min. | AWG 20 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. |

| | |
|---------------------------------------|--------|
| Rated voltage (Use group C / UL 1059) | 600 V |
| Rated current (Use group B / UL 1059) | 20 A |
| Rated current (Use group D / UL 1059) | 5 A |
| Wire cross-section, AWG, max. | AWG 12 |

Packing

| | | | |
|-----------|--------|------------|--------|
| Packaging | Box | VPE length | 349 mm |
| VPE width | 134 mm | VPE height | 30 mm |

Type tests

| | | |
|--|------------|--|
| Test: Durability of markings | Standard | DIN EN 61984 section 7.3.2 / 09.02 taking pattern from DIN EN 60068-2-70 / 07.96 |
| | Test | mark of origin, type identification, pitch, type of material, date clock |
| | Evaluation | available |
| | Test | durability |
| | Evaluation | passed |
| Test: Misengagement (Non-interchangeability) | Standard | DIN EN 61984 section 6.3 and 6.9.1 / 09.02 |
| | Test | 180° turned with coding elements |
| | Evaluation | passed |
| | Test | 180° turned without coding elements |
| | Evaluation | passed |

BLZ 7.62HP/10/180 SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

| | | |
|---|----------------|--|
| Test: Clampable cross section | Standard | DIN EN 60999-1 section 7 and 9.1 / 12.00, DIN EN 60947-1 section 8.2.4.5.1 / 12.02 |
| | Conductor type | Type of conductor and solid 0.5 mm ² conductor cross-section |
| | | Type of conductor and stranded 0.5 mm ² conductor cross-section |
| | | Type of conductor and solid 2.5 mm ² conductor cross-section |
| | | Type of conductor and stranded 2.5 mm ² conductor cross-section |
| | | Type of conductor and AWG 20/1 conductor cross-section |
| | | Type of conductor and AWG 20/19 conductor cross-section |
| | | Type of conductor and AWG 12/1 conductor cross-section |
| | | Type of conductor and AWG 12/19 conductor cross-section |
| | Evaluation | passed |
| Test for damage to and accidental loosening of conductors | Standard | DIN EN 60999-1 section 9.4 / 12.00 |
| | Requirement | 0.2 kg |
| | Conductor type | Type of conductor and AWG 28/1 conductor cross-section |
| | | Type of conductor and AWG 28/19 conductor cross-section |
| | Evaluation | passed |
| | Requirement | 0.3 kg |
| | Conductor type | Type of conductor and H05V-U0.5 conductor cross-section |
| | | Type of conductor and H05V-K0.5 conductor cross-section |
| | Evaluation | passed |
| | Requirement | 0.7 kg |
| | Conductor type | Type of conductor and AWG 14/1 conductor cross-section |
| | | Type of conductor and AWG 14/19 conductor cross-section |
| | Evaluation | passed |
| | Requirement | 0.9 kg |
| | Conductor type | Type of conductor and H07V-U4.0 conductor cross-section |
| | | Type of conductor and H07V-K4.0 conductor cross-section |
| | Evaluation | passed |

BLZ 7.62HP/10/180 SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Technical data

| | | |
|---------------|----------------|---|
| Pull-out test | Standard | DIN EN 60999-1 section 9.5 / 12.00 |
| | Requirement | ≥5 N |
| | Conductor type | Type of conductor and AWG 28/1 conductor cross-section |
| | | Type of conductor and AWG 28/19 conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥20 N |
| | Conductor type | Type of conductor and H05V-U0.5 conductor cross-section |
| | | Type of conductor and H05V-K0.5 conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥50 N |
| | Conductor type | Type of conductor and AWG 14/1 conductor cross-section |
| | | Type of conductor and AWG 14/19 conductor cross-section |
| | | Type of conductor and H07V-K4.0 conductor cross-section |
| | Evaluation | passed |
| | Requirement | ≥60 N |
| | Conductor type | Type of conductor and H07V-U4.0 conductor cross-section |
| | Evaluation | passed |

Classifications

| | | | |
|-------------|-------------|-------------|-------------|
| ETIM 6.0 | EC002638 | ETIM 7.0 | EC002638 |
| ETIM 8.0 | EC002638 | ETIM 9.0 | EC002638 |
| ECLASS 9.0 | 27-44-03-09 | ECLASS 9.1 | 27-44-03-09 |
| ECLASS 10.0 | 27-44-03-09 | ECLASS 11.0 | 27-46-02-02 |
| ECLASS 12.0 | 27-46-02-02 | ECLASS 13.0 | 27-46-02-02 |

Environmental Product Compliance

| | |
|------------------------|-----------------------------|
| REACH SVHC | / |
| RoHS Compliance Status | Compliant without exemption |

BLZ 7.62HP/10/180 SN OR BX**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

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 | <ul style="list-style-type: none"> • Additional variants 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 • 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. • 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 • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months |

Approvals

Approvals



| | |
|-------------------------|------------|
| ROHS | Conform |
| UL File Number Search | UL Website |
| Certificate No. (cURus) | E60693 |

Downloads

| | |
|---|---|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Engineering Data | CAD data – STEP |
| Product Change Notification | 20220627 Change OMNIMATE® Power BLZ 7.62HP 20220627 Technische Änderung OMNIMATE® Power BLZ 7.62HP |
| User Documentation | QR-Code product handling video |
| Catalogues | Catalogues in PDF-format |
| Brochures | FL DRIVES EN MB DEVICE MANUF. EN FL DRIVES DE FL HEATING ELECTR EN FL APPL. INVERTER EN FL BASE STATION EN FL ELEVATOR EN FL POWER SUPPLY EN FL 72H SAMPLE SER EN PO OMNIMATE EN |

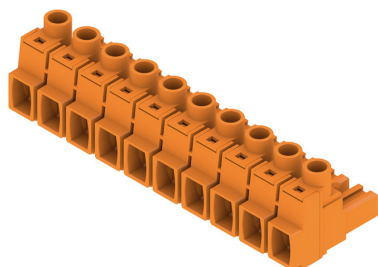
BLZ 7.62HP/10/180 SN OR BX

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

www.weidmueller.com

Drawings

Product image



Dimensional drawing



Graph



Graph

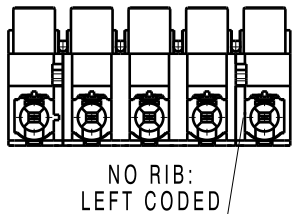
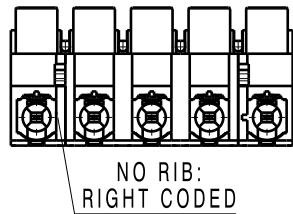
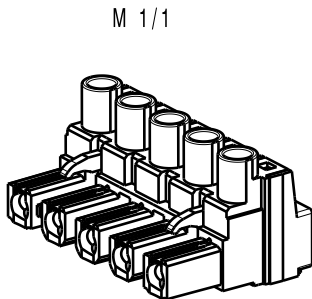
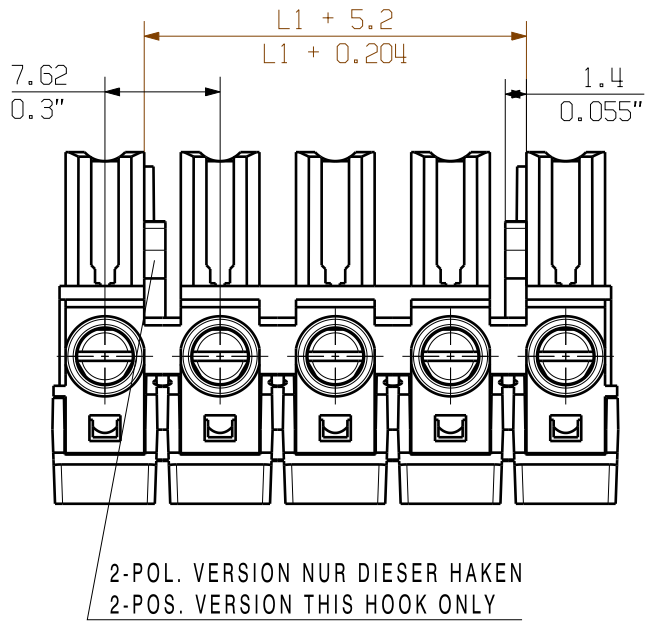
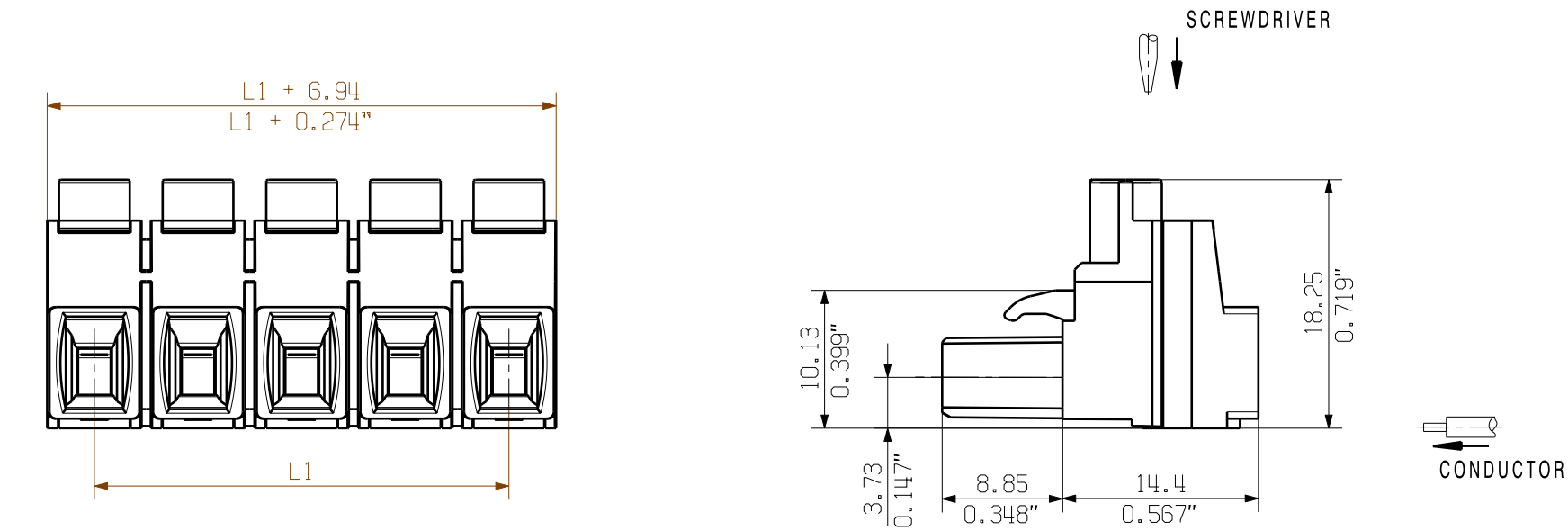


The reproduction, distribution and utilization of this document as well as the communication of its contents to others without explicit authorization is prohibited. Offenders will be held liable for the payment of damages. Weidmueller exclusively reserves the right to file for patents, utility models or designs.

© Weidmueller Interface GmbH & Co. KG

Dimensions without tolerances are no check dimensions

The English version is binding



BEDRUCKUNGSVORLAGE SIEHE ZNG: 43764
PRINT DRAWING NO.:43764
ORDER NUMBERS SEE SHEET: S 43761
CODING SCHEME SEE SHEET: K 43761
REPRESENTED: BLZ7.62HP/5/180

| | | |
|---|---------|-----------|
| 6 | 38,10 | 1,500 |
| 5 | 30,48 | 1,200 |
| 4 | 22,86 | 0,900 |
| 3 | 15,24 | 0,600 |
| 2 | 7,62 | 0,300 |
| n | L1 [mm] | L1 [Inch] |

For the mounting of PCBs, it should be noted that the rated data given in the catalogue relates only to the connection elements. The necessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to VDE 0110. The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmueller connectors are tested to the DIN VDE 0627 standard, and are valid for its field of application. Provided that the connectors are used to the intended purpose, all requirements with respect to the occurring of electrical, mechanical, thermic and corrosive stress will be satisfied.

| | | | | | |
|---------------------------------------|--|---------------------------------|------------|--|-----------------------|
| General tolerance: DIN ISO 2768-mK | | 94081/5 02.05.17 HELIS_MA 00 | | Cat.no.: . | |
| | | Modification | | Weidmüller | |
| | | Date | Name | 3 43761 06 | |
| Scale: 2:1 | | Drawn | 24.04.2017 | HELIS_MA | Drawing no. Issue no. |
| Supersedes: . | | Responsible | | KRUG_M | Sheet 01 of 02 sheets |
| | | Checked | 11.05.2017 | HELIS_MA | |
| | | Approved | | LANG_T | |
| | | | | BLZ 7.62HP/./180 BUCHSENLEISTE SOCKET BLOCK | |
| | | | | Product file: BLZ/SL 7.62 HP | |
| | | | | 7375 | |