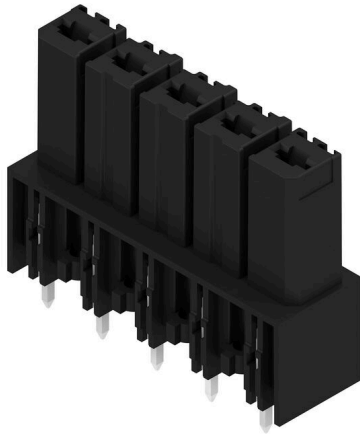


BVL 7.62HP/05/180 3.5SN BK BX

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

www.weidmueller.com

Product image



High-performance female header with solder connection. Side-by-side mounting without sacrificing any poles or with patented multifunction flange for secure, fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity, protection against faulty wiring and 4-point contact.

General ordering data

| | |
|--------------|--|
| Version | PCB plug-in connector, female header, closed side, THT solder connection, 7.62 mm, Number of poles: 5, 180°, Solder pin length (l): 3.5 mm, tinned, black, Box |
| Order No. | 1928650000 |
| Type | BVL 7.62HP/05/180 3.5SN BK BX |
| GTIN (EAN) | 4032248578009 |
| Qty. | 50 items |
| Product data | IEC: 1000 V / 56.8 A UL: 300 V / 42 A |
| Packaging | Box |

BVL 7.62HP/05/180 3.5SN BK BX

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

www.weidmueller.com

Technical data

Approvals

Approvals



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

Dimensions and weights

| | | | |
|------------|---------|-----------------|-------------|
| Depth | 11.4 mm | Depth (inches) | 0.4488 inch |
| Height | 31.4 mm | Height (inches) | 1.2362 inch |
| Width | 38.1 mm | Width (inches) | 1.5 inch |
| Net weight | 10.65 g | | |

Environmental Product Compliance

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

System Parameters

| | | | |
|--|--------------------------------------|--|---------------------------------|
| Product family | OMNIMATE Power - series BV/SV 7.62HP | Type of connection | Board connection |
| Pitch in mm (P) | 7.62 mm | Pitch in inches (P) | 0.300 " |
| Number of poles | 5 | L1 in mm | 30.48 mm |
| L1 in inches | 1.200 " | Number of rows | 1 |
| Pin series quantity | 1 | Touch-safe protection acc. to DIN VDE 57 106 | Safe from finger touch, plugged |
| Touch-safe protection acc. to DIN VDE 0470 | IP 20 | Protection degree | IP20 |
| Volume resistance | 2.00 mΩ | Can be coded | Yes |
| Plugging cycles | 25 | Plugging force/pole, max. | 7 N |
| Pulling force/pole, max. | 4 N | | |

Material data

| | | | |
|---------------------------------------|------------------|---------------------------------------|---------------------|
| Insulating material | PA GF | Colour | black |
| Colour chart (similar) | RAL 9011 | Insulating material group | II |
| Comparative Tracking Index (CTI) | ≥ 500 | Insulation resistance | ≥ 10 ⁸ Ω |
| Moisture Level (MSL) | | UL 94 flammability rating | V-0 |
| Contact material | Cu-alloy | Contact surface | tinned |
| Layer structure of solder connection | 4...6 μm Sn matt | Layer structure of plug contact | 4...6 μm Sn matt |
| Storage temperature, min. | -40 °C | Storage temperature, max. | 70 °C |
| Operating temperature, min. | -50 °C | Operating temperature, max. | 130 °C |
| Temperature range, installation, min. | -25 °C | Temperature range, installation, max. | 130 °C |

Rated data acc. to IEC

| | | | |
|---|--------|---|------|
| Rated current, min. number of poles (Tu=20°C) | 56.8 A | Rated current, max. number of poles (Tu=20°C) | 41 A |
| Rated current, min. number of poles (Tu=40°C) | 41 A | Rated current, max. number of poles (Tu=40°C) | 41 A |

BVL 7.62HP/05/180 3.5SN BK BX

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

www.weidmueller.com

Technical data

| | | | |
|---|-------------------|---|---------|
| Rated voltage for surge voltage class / pollution degree II/2 | 1000 V | Rated voltage for surge voltage class / pollution degree III/2 | 630 V |
| Rated voltage for surge voltage class / pollution degree III/3 | 630 V | Rated impulse voltage for surge voltage class/ pollution degree II/2 | 6 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 420 A | Creepage distance, min. | 9.66 mm |
| Clearance, min. | 6.9 mm | | |

Rated data acc. to CSA

| | | | |
|-----------------------------------|--|-----------------------------------|----------------|
| Institute (CSA) | CSA | Certificate No. (CSA) | 200039-1534443 |
| Rated voltage (Use group B / CSA) | 300 V | Rated voltage (Use group C / CSA) | 300 V |
| Rated voltage (Use group D / CSA) | 600 V | Rated current (Use group B / CSA) | 35 A |
| Rated current (Use group C / CSA) | 35 A | Rated current (Use group D / CSA) | 5 A |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Rated data acc. to UL 1059

| | | | |
|---------------------------------------|--|---------------------------------------|--------|
| Institute (cURus) | CURUS | Certificate No. (cURus) | E60693 |
| Rated voltage (Use group B / UL 1059) | 300 V | Rated voltage (Use group C / UL 1059) | 300 V |
| Rated voltage (Use group D / UL 1059) | 600 V | Rated current (Use group B / UL 1059) | 42 A |
| Rated current (Use group C / UL 1059) | 42 A | Rated current (Use group D / UL 1059) | 5 A |
| Creepage distance, min. | 9.66 mm | Clearance distance, min. | 6.9 mm |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Packing

| | | | |
|-----------|-----------|------------|-----------|
| Packaging | Box | VPE length | 183.00 mm |
| VPE width | 113.00 mm | VPE height | 90.00 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 |
| | Evaluation | available |
| | Test | durability |
| | Evaluation | passed |
| Test: Misengagement (Non-interchangeability) | Standard | DIN EN 61984 section 6.3 and 6.9.1 / 09.02, DIN IEC 512 part 7 section 5 / 05.94 |
| | Test | 180° turned with coding elements |
| | Evaluation | passed |
| | Test | 180° turned without coding elements |
| | Evaluation | passed |

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 • Rated current related to rated cross-section & min. No. of poles. • P on drawing = pitch |

BVL 7.62HP/05/180 3.5SN BK BX

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

www.weidmueller.com

Technical data

- 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

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 | | |

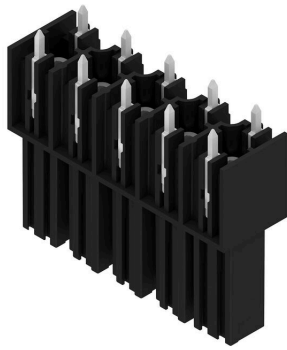
BVL 7.62HP/05/180 3.5SN BK BX

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

www.weidmueller.com

Drawings

Product image



Dimensional drawing



Graph

BVL 7.62HP/./180 - SVZ 7.62HP/./180



Graph

BVL 7.62HP/./180 - SV 7.62HP/./180



Graph

BVL 7.62HP/./180 - SV 7.62HP/./90



BVL 7.62HP/05/180 3.5SN BK BX

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

www.weidmueller.com

Accessories

Coding elements



The pluggable connections for power electronics - optimised for modern drive technologies, e.g. motor starters, frequency converters and servo-controllers. OMNIMATE Power sets the new standard – with increased safety and innovative solutions such as the pluggable shield, integrated signal contacts and one-handed operation.

The three product lines offer you further advantages:

- Application-oriented scalability: from the compact 4 mm² connector for 29 A (IEC) or 20 A (UL) up to the sturdy 16 mm² connector for 76 A (IEC) or 54 A (UL)
- Unlimited usage up to 1,000 V (IEC) or 600 V (UL)
- A variety of application optimised mounting options

Our service:

Design your individual connectors simply by using the product configurator.

General ordering data

| | | | |
|------------|----------------------------|---|--|
| Type | BV/SV 7.62HP KO | Version | |
| Order No. | 1937590000 | PCB plug-in connector, Accessories, Coding element, black, Number | |
| GTIN (EAN) | 4032248608881 | of poles: 1 | |
| Qty. | 50 ST | | |

BVL 7.62HP/05/180 3.5SN BK BX

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

www.weidmueller.com

Counterpart

SV 7.62HP 180G SN



Single-row, high-performance male header for side-by-side mounting without sacrificing any poles or with patented flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, with unique coding diversity and additional fastening in the flange. 3.5 mm pin length is optimised for lead-free wave soldering.

General ordering data

| | | |
|------------|----------------------------|---|
| Type | SV 7.62HP/05/180G 3.5SN... | Version |
| Order No. | 1930630000 | PCB plug-in connector, male header, closed side, THT solder |
| GTIN (EAN) | 4032248580606 | connection, 7.62 mm, Number of poles: 5, 180°, Solder pin length (l): |
| Qty. | 48 ST | 3.5 mm, tinned, black, Box |

SV 7.62HP 270G SN



Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

General ordering data

| | | |
|------------|----------------------------|---|
| Type | SV 7.62HP/05/270G 3.5SN... | Version |
| Order No. | 1931290000 | PCB plug-in connector, male header, closed side, THT solder |
| GTIN (EAN) | 4032248581320 | connection, 7.62 mm, Number of poles: 5, 270°, Solder pin length (l): |
| Qty. | 48 ST | 3.5 mm, tinned, black, Box |

SV 7.62HP 90G SN



Single-row, high-current and high-performance male headers for side-by-side mounting without sacrificing any poles or with flange for fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity and additional fastening in the flange.

General ordering data

| | | |
|------------|----------------------------|--|
| Type | SV 7.62HP/05/90G 3.5SN ... | Version |
| Order No. | 1930300000 | PCB plug-in connector, male header, closed side, THT solder |
| GTIN (EAN) | 4032248580170 | connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l): |
| Qty. | 48 ST | 3.5 mm, tinned, black, Box |

BVL 7.62HP/05/180 3.5SN BK BX

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

www.weidmueller.com

Counterpart

| | | |
|------------|----------------------------|--|
| Type | SV 7.62HP/05/90G 3.5SN ... | Version |
| Order No. | 2465330000 | PCB plug-in connector, male header, closed side, THT solder |
| GTIN (EAN) | 4050118479775 | connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l): |
| Qty. | 48 ST | 3.5 mm, tinned, black, Box |

SV-SMT 7.62HP 270G BX



OMNIMATE Power BV / SV 7.62HP – the 28 kVA performance class

Tailor-made solutions for high performers

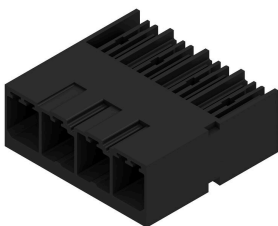
More power reserves for higher load bearing capacity: The OMNIMATE Power BV / SV 7.62HP is the middle-class of the power connector systems. It has a large clamping capacity, high overload resistance and the largest range of variants and accessories to choose from: the high performer of the HP range. HP means High Performance – this performance covers a great deal: the full rated current up to 50°C without derating, unlimited 600-V approval according to UL, and the additional finger safety for 400 V-TN systems (+ 3.0 mm) in compliance with the application directive IEC 61800-5-1.

General ordering data

| | | |
|------------|----------------------------|---|
| Type | SV-SMT 7.62HP/05/270G 2... | Version |
| Order No. | 2499360000 | PCB plug-in connector, male header, closed side, THT/THR solder |
| GTIN (EAN) | 4050118512601 | connection, 7.62 mm, Number of poles: 5, 270°, Solder pin length (l): |
| Qty. | 48 ST | 2.6 mm, tinned, black, Box |

| | | |
|------------|----------------------------|---|
| Type | SV-SMT 7.62HP/05/270G 3... | Version |
| Order No. | 2498420000 | PCB plug-in connector, male header, closed side, THT/THR solder |
| GTIN (EAN) | 4050118511642 | connection, 7.62 mm, Number of poles: 5, 270°, Solder pin length (l): |
| Qty. | 50 ST | 3.5 mm, tinned, black, Box |

SV-SMT 7.62HP 90G BX



OMNIMATE Power BV / SV 7.62HP – the 28 kVA performance class

Tailor-made solutions for high performers

More power reserves for higher load bearing capacity: The OMNIMATE Power BV / SV 7.62HP is the middle-class of the power connector systems. It has a large clamping capacity, high overload resistance and the largest range of variants and accessories to choose from: the high performer of the HP range. HP means High Performance – this performance covers a great deal: the full rated current up to 50°C without derating, unlimited 600-V approval according to UL, and the additional finger safety for 400 V-TN systems (+ 3.0 mm) in compliance with the application directive IEC 61800-5-1.

General ordering data

| | | |
|------------|----------------------------|--|
| Type | SV-SMT 7.62HP/05/90G 2... | Version |
| Order No. | 2499560000 | PCB plug-in connector, male header, closed side, THT/THR solder |
| GTIN (EAN) | 4050118512861 | connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l): |
| Qty. | 48 ST | 2.6 mm, tinned, black, Box |

BVL 7.62HP/05/180 3.5SN BK BX

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

www.weidmueller.com

Counterpart

| | | |
|------------|----------------------------|--|
| Type | SV-SMT 7.62HP/05/90G 3... | Version |
| Order No. | 2498370000 | PCB plug-in connector, male header, closed side, THT/THR solder |
| GTIN (EAN) | 4050118511604 | connection, 7.62 mm, Number of poles: 5, 90°, Solder pin length (l): |
| Qty. | 50 ST | 3.5 mm, tinned, black, Box |

SVF 7.62HP/180G



180° inverted pin header with PUSH IN connection technology for field wiring in 6mm² in a 7.62 pitch, as a "three-flange variant" for enclosure feed-through. Suitable for enclosures with a max. wall thickness of 2mm. Also perfect as a touch-safe solution for reverse voltages. Meets the requirements of UL 1059 600 V Class C and IEC 61800-5-1.

General ordering data

| | | |
|------------|----------------------------|--|
| Type | SVF 7.62HP/05/180G SN B... | Version |
| Order No. | 1060870000 | PCB plug-in connector, male plug, 7.62 mm, Number of poles: |
| GTIN (EAN) | 4032248810840 | 5, 180°, PUSH IN without actuator, Tension-clamp connection, |
| Qty. | 40 ST | Clamping range, max. : 10 mm ² , Box |

SVZ 7.62HP 180 SN



High-performance male header with the proven, 100% maintenance-free Weidmüller steel clamping yoke. Side-by-side mounting without sacrificing any poles or with patented multifunction flange for secure, fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, incorrect wiring protection. Suitable for labelling.

General ordering data

| | | |
|------------|----------------------------|--|
| Type | SVZ 7.62HP/05/180G SN B... | Version |
| Order No. | 1931660000 | PCB plug-in connector, male plug, 7.62 mm, Number of poles: 5, |
| GTIN (EAN) | 4032248581658 | 180°, Clamping yoke connection, Clamping range, max. : 6 mm ² , Box |
| Qty. | 50 ST | |

BVL 7.62HP/05/180 3.5SN BK BX

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

www.weidmueller.com

Counterpart

SVZ 7.62HP 180SH180 SN



High-performance male header with the proven, 100% maintenance-free Weidmüller steel clamping yoke. Side-by-side mounting without sacrificing any poles or with patented multifunction flange for secure, fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, incorrect wiring protection. Suitable for labelling.

General ordering data

| | | |
|------------|----------------------------|--|
| Type | SVZ 7.62HP/05/180SH180 ... | Version |
| Order No. | 1932480000 | PCB plug-in connector, male plug, 7.62 mm, Number of poles: 5, |
| GTIN (EAN) | 4032248583591 | 180°, Clamping yoke connection, Clamping range, max. : 6 mm ² , Box |
| Qty. | 25 ST | |

SVZ 7.62HP 180SH180C SN



High-performance male header with the proven, 100% maintenance-free Weidmüller steel clamping yoke. Side-by-side mounting without sacrificing any poles or with patented multifunction flange for secure, fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, incorrect wiring protection. Suitable for labelling.

General ordering data

| | | |
|------------|----------------------------|--|
| Type | SVZ 7.62HP/05/180RSH180... | Version |
| Order No. | 1951170000 | PCB plug-in connector, male plug, 7.62 mm, Number of poles: 5, |
| GTIN (EAN) | 4032248630141 | 180°, Clamping yoke connection, Clamping range, max. : 6 mm ² , Box |
| Qty. | 25 ST | |

SVZ 7.62HP 180SH180I SN



High-performance male header with the proven, 100% maintenance-free Weidmüller steel clamping yoke. Side-by-side mounting without sacrificing any poles or with patented multifunction flange for secure, fast fixing without tools. Maximum connection and operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, incorrect wiring protection. Suitable for labelling.

General ordering data

| | | |
|------------|----------------------------|--|
| Type | SVZ 7.62HP/05/180RSH180... | Version |
| Order No. | 1932520000 | PCB plug-in connector, male plug, 7.62 mm, Number of poles: 5, |
| GTIN (EAN) | 4032248584130 | 180°, Clamping yoke connection, Clamping range, max. : 6 mm ² , Box |
| Qty. | 25 ST | |