

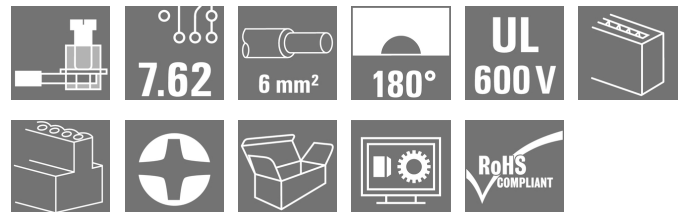
**BVZ 7.62HP/05/180 SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

**Product image**

High-performance female 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 operating reliability thanks to a mating profile that prevents incorrect connection, unique coding diversity, protection against faulty wiring, 4-point contact. Suitable for labelling.

**General ordering data**

|              |                                                                                                                                    |
|--------------|------------------------------------------------------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, female plug, 7.62 mm, Number of poles: 5, 180°, Clamping yoke connection, Clamping range, max.: 10 mm², Box |
| Order No.    | <a href="#">1929960000</a>                                                                                                         |
| Type         | BVZ 7.62HP/05/180 SN BK BX                                                                                                         |
| GTIN (EAN)   | 4032248579747                                                                                                                      |
| Qty.         | 50 pc(s).                                                                                                                          |
| Product data | IEC: 1000 V / 57 A / 0.2 - 10 mm²<br>UL: 600 V / 40.5 A / AWG 24 - AWG 8                                                           |
| Packaging    | Box                                                                                                                                |

Creation date September 16, 2022 10:09:40 PM CEST

**BVZ 7.62HP/05/180 SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

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

|            |         |                 |            |
|------------|---------|-----------------|------------|
| Depth      | 41.2 mm | Depth (inches)  | 1.622 inch |
| Height     | 23.1 mm | Height (inches) | 0.909 inch |
| Width      | 38.1 mm | Width (inches)  | 1.5 inch   |
| Net weight | 25.29 g |                 |            |

**System Parameters**

|                                              |                                      |                                            |                   |
|----------------------------------------------|--------------------------------------|--------------------------------------------|-------------------|
| Product family                               | OMNIMATE Power - series BV/SV 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 inch                             | Conductor outlet direction                 | 180°              |
| Number of poles                              | 5                                    | L1 in mm                                   | 30.48 mm          |
| L1 in inches                                 | 1.2 inch                             | Number of rows                             | 1                 |
| Pin series quantity                          | 1                                    | Rated cross-section                        | 6 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                            | 4.50 mΩ                              | Can be coded                               | Yes               |
| Stripping length                             | 12 mm                                | Tightening torque, min.                    | 0.5 Nm            |
| Tightening torque, max.                      | 0.6 Nm                               | Clamping screw                             | M 3               |
| Screwdriver blade                            | 0.6 x 3.5                            | Plugging cycles                            | 25                |
| Plugging force/pole, max.                    | 16.5 N                               | Pulling force/pole, max.                   | 11 N              |

**Material data**

|                                       |              |                                       |                    |
|---------------------------------------|--------------|---------------------------------------|--------------------|
| Insulating material                   | PA GF        | Colour                                | black              |
| Colour chart (similar)                | RAL 9011     | Insulating material group             | II                 |
| Comparative Tracking Index (CTI)      | ≥ 500        | UL 94 flammability rating             | V-0                |
| Contact base material                 | Copper alloy | Contact material                      | Copper alloy       |
| Contact surface                       | tinned       | Layer structure of plug contact       | 6...8 μm Sn glossy |
| Storage temperature, min.             | -40 °C       | Storage temperature, max.             | 70 °C              |
| Operating temperature, min.           | -50 °C       | Operating temperature, max.           | 125 °C             |
| Temperature range, installation, min. | -25 °C       | Temperature range, installation, max. | 100 °C             |

**Conductors suitable for connection**

|                                                                     |                         |
|---------------------------------------------------------------------|-------------------------|
| Clamping range, min.                                                | 0.2 mm <sup>2</sup>     |
| Clamping range, max.                                                | 10 mm <sup>2</sup>      |
| Wire connection cross section AWG, min.                             | AWG 24                  |
| Wire connection cross section AWG, max.                             | AWG 8                   |
| Solid, min. H05(07) V-U                                             | 0.2 mm <sup>2</sup>     |
| Solid, max. H05(07) V-U                                             | 6 mm <sup>2</sup>       |
| Flexible, min. H05(07) V-K                                          | 0.2 mm <sup>2</sup>     |
| Flexible, max. H05(07) V-K                                          | 10 mm <sup>2</sup>      |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.2 mm <sup>2</sup> min. |                         |
| w. plastic collar ferrule, DIN 46228 pt 4, 6 mm <sup>2</sup> max.   |                         |
| w. wire end ferrule, DIN 46228 pt 1, min.                           | 0.5 mm <sup>2</sup>     |
| w. wire end ferrule, DIN 46228 pt 1, max.                           | 6 mm <sup>2</sup>       |
| Plug gauge in accordance with EN 60999 a x b; ø                     | 2.8 mm x 2.0 mm; 2.4 mm |

**BVZ 7.62HP/05/180 SN BK 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                      | 0.5 mm <sup>2</sup>         |
| wire end ferrule                       |                                                                                                                                                                        | Stripping length             | nominal 14 mm               |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H0.5/18 OR</a>  |
| Cross-section for conductor connection |                                                                                                                                                                        | Type                         | fine-wired                  |
|                                        |                                                                                                                                                                        | nominal                      | 1 mm <sup>2</sup>           |
| wire end ferrule                       |                                                                                                                                                                        | Stripping length             | nominal 15 mm               |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H1.0/18 GE</a>  |
| Cross-section for conductor connection |                                                                                                                                                                        | Type                         | fine-wired                  |
|                                        |                                                                                                                                                                        | nominal                      | 1.5 mm <sup>2</sup>         |
| wire end ferrule                       |                                                                                                                                                                        | Stripping length             | nominal 15 mm               |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H1.5/18D SW</a> |
|                                        |                                                                                                                                                                        | Stripping length             | nominal 12 mm               |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H1.5/12</a>     |
| Cross-section for conductor connection |                                                                                                                                                                        | Type                         | fine-wired                  |
|                                        |                                                                                                                                                                        | nominal                      | 0.75 mm <sup>2</sup>        |
| wire end ferrule                       |                                                                                                                                                                        | Stripping length             | nominal 14 mm               |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H0.75/18 W</a>  |
| Cross-section for conductor connection |                                                                                                                                                                        | Type                         | fine-wired                  |
|                                        |                                                                                                                                                                        | nominal                      | 2.5 mm <sup>2</sup>         |
| wire end ferrule                       |                                                                                                                                                                        | Stripping length             | nominal 14 mm               |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H2.5/19D BL</a> |
|                                        |                                                                                                                                                                        | Stripping length             | nominal 12 mm               |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H2.5/12</a>     |
| Cross-section for conductor connection |                                                                                                                                                                        | Type                         | fine-wired                  |
|                                        |                                                                                                                                                                        | nominal                      | 4 mm <sup>2</sup>           |
| wire end ferrule                       |                                                                                                                                                                        | Stripping length             | nominal 12 mm               |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H4.0/12</a>     |
|                                        |                                                                                                                                                                        | Stripping length             | nominal 14 mm               |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H4.0/20D GR</a> |
| Cross-section for conductor connection |                                                                                                                                                                        | Type                         | fine-wired                  |
|                                        |                                                                                                                                                                        | nominal                      | 6 mm <sup>2</sup>           |
| wire end ferrule                       |                                                                                                                                                                        | Stripping length             | nominal 14 mm               |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H6.0/20 SW</a>  |
|                                        |                                                                                                                                                                        | Stripping length             | nominal 12 mm               |
|                                        |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H6.0/12</a>     |
| 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. |                              |                             |

## BVZ 7.62HP/05/180 SN BK BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

## Rated data acc. to IEC

|                                                                           |                        |                                                                       |                   |
|---------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------|-------------------|
| tested acc. to standard                                                   | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C)                         | 57 A              |
| Rated current, max. number of poles (Tu=20°C)                             | 54 A                   | Rated current, min. number of poles (Tu=40°C)                         | 51 A              |
| Rated current, max. number of poles (Tu=40°C)                             | 41 A                   | Rated voltage for surge voltage class / pollution degree II/2         | 1,000 V           |
| Rated voltage for surge voltage class / pollution degree III/2            | 1,000 V                | Rated voltage for surge voltage class / pollution degree III/3        | 800 V             |
| Rated impulse voltage for surge voltage class/ pollution degree II/2      | 1,000 V                | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 1,000 kV          |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 8 kV                   | Short-time withstand current resistance                               | 3 x 1s with 420 A |
| Clearance, min.                                                           | 10.2 mm                | Creepage distance, min.                                               | 13.8 mm           |

## Rated data acc. to CSA

|                                   |                                                                                    |                                   |                |
|-----------------------------------|------------------------------------------------------------------------------------|-----------------------------------|----------------|
| Institute (CSA)                   |  | Certificate No. (CSA)             | 200039-1534443 |
| Rated voltage (Use group B / CSA) | 600 V                                                                              | Rated voltage (Use group C / CSA) | 600 V          |
| Rated voltage (Use group D / CSA) | 600 V                                                                              | Rated current (Use group B / CSA) | 40.5 A         |
| Rated current (Use group C / CSA) | 40.5 A                                                                             | Rated current (Use group D / CSA) | 5 A            |
| Wire cross-section, AWG, min.     | AWG 24                                                                             | Wire cross-section, AWG, max.     | AWG 8          |
| Reference to approval values      | Specifications are maximum values, details - see approval certificate.             |                                   |                |

## 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 C / UL 1059) | 600 V  |
| Rated voltage (Use group D / UL 1059) | 600 V                                                                               | Rated current (Use group B / UL 1059) | 40.5 A |
| Rated current (Use group C / UL 1059) | 40.5 A                                                                              | Rated current (Use group D / UL 1059) | 5 A    |
| Wire cross-section, AWG, min.         | AWG 24                                                                              | Wire cross-section, AWG, max.         | AWG 8  |
| Reference to approval values          | Specifications are maximum values, details - see approval certificate.              |                                       |        |

## Packing

|           |       |            |        |
|-----------|-------|------------|--------|
| Packaging | Box   | VPE length | 287 mm |
| VPE width | 96 mm | VPE height | 100 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                                                                           |

Creation date September 16, 2022 10:09:41 PM CEST

Catalogue status 09.09.2022 / We reserve the right to make technical changes.

## BVZ 7.62HP/05/180 SN BK BX

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

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

## Technical data

|                                              |                |                                                                                    |                              |
|----------------------------------------------|----------------|------------------------------------------------------------------------------------|------------------------------|
| 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                                                                             |                              |
| 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 conductor cross-section                                      | solid 0.5 mm <sup>2</sup>    |
|                                              |                | Type of conductor and conductor cross-section                                      | stranded 0.5 mm <sup>2</sup> |
|                                              |                | Type of conductor and conductor cross-section                                      | solid 6 mm <sup>2</sup>      |
|                                              |                | Type of conductor and conductor cross-section                                      | stranded 6 mm <sup>2</sup>   |
|                                              |                | Type of conductor and conductor cross-section                                      | AWG 24/1                     |
|                                              |                | Type of conductor and conductor cross-section                                      | AWG 24/19                    |
|                                              |                | Type of conductor and conductor cross-section                                      | AWG 10/1                     |
|                                              |                | Type of conductor and conductor cross-section                                      | AWG 10/19                    |
|                                              | Evaluation     | passed                                                                             |                              |

## BVZ 7.62HP/05/180 SN BK BX

Weidmüller Interface GmbH &amp; Co. KG

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

## Technical data

|                                                           |                |                                               |                              |
|-----------------------------------------------------------|----------------|-----------------------------------------------|------------------------------|
| 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 conductor cross-section | AWG 24/1                     |
|                                                           |                | Type of conductor and conductor cross-section | AWG 24/19                    |
|                                                           | Evaluation     | passed                                        |                              |
|                                                           | Requirement    | 0.3 kg                                        |                              |
|                                                           | Conductor type | Type of conductor and conductor cross-section | solid 0.5 mm <sup>2</sup>    |
|                                                           |                | Type of conductor and conductor cross-section | stranded 0.5 mm <sup>2</sup> |
|                                                           | Evaluation     | passed                                        |                              |
|                                                           | Requirement    | 1.4 kg                                        |                              |
|                                                           | Conductor type | Type of conductor and conductor cross-section | solid 6 mm <sup>2</sup>      |
|                                                           |                | Type of conductor and conductor cross-section | stranded 6 mm <sup>2</sup>   |
|                                                           |                | Type of conductor and conductor cross-section | AWG 10/1                     |
|                                                           |                | Type of conductor and conductor cross-section | AWG 10/19                    |
|                                                           | Evaluation     | passed                                        |                              |
| Pull-out test                                             | Standard       | DIN EN 60999-1 section 9.5 / 12.00            |                              |
|                                                           | Requirement    | ≥10 N                                         |                              |
|                                                           | Conductor type | Type of conductor and conductor cross-section | AWG 24/1                     |
|                                                           |                | Type of conductor and conductor cross-section | AWG 24/19                    |
|                                                           | Evaluation     | passed                                        |                              |
|                                                           | Requirement    | ≥20 N                                         |                              |
|                                                           | Conductor type | Type of conductor and conductor cross-section | solid 0.5 mm <sup>2</sup>    |
|                                                           |                | Type of conductor and conductor cross-section | stranded 0.5 mm <sup>2</sup> |
|                                                           | Evaluation     | passed                                        |                              |
|                                                           | Requirement    | ≥80 N                                         |                              |
|                                                           | Conductor type | Type of conductor and conductor cross-section | solid 6 mm <sup>2</sup>      |
|                                                           |                | Type of conductor and conductor cross-section | stranded 6 mm <sup>2</sup>   |
|                                                           |                | Type of conductor and conductor cross-section | AWG 10/1                     |
|                                                           |                | Type of conductor and conductor cross-section | AWG 10/19                    |
|                                                           | Evaluation     | passed                                        |                              |

**BVZ 7.62HP/05/180 SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Classifications**

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002638    | ETIM 7.0    | EC002638    |
| ETIM 8.0    | 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 |

**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 variants on request
  - Rated current related to rated cross-section & min. No. of poles.
  - Wire end ferrule with plastic collar to DIN 46228/4
  - Wire end ferrule without plastic collar to DIN 46228/1
  - 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.
  - Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months

**Approvals**

Approvals



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

**BVZ 7.62HP/05/180 SN BK BX****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

[www.weidmueller.com](http://www.weidmueller.com)**Technical data****Downloads**

|                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Approval/Certificate/Document of Conformity | <a href="#">Declaration of the Manufacturer</a>                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Engineering Data                            | <a href="#">CAD data – STEP</a>                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Engineering Data                            | <a href="#">EPLAN, WSCAD</a>                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Product Change Notification                 | <a href="#">PCN_2016_138_PL33_Redesign_BVZ_762HP_Abstandshalter_DE</a><br><a href="#">PCN_2016_138_PL33_Redesign_BVZ_762HP_outside_pole_spacer_EN</a><br><a href="#">PCN_2016_275_PL33_plugable_SIBL_EN</a><br><a href="#">PCN_2016_275_PL33_Steckbare_SIBL_DE</a><br><a href="#">20220201 Visual change OMNIMATE® Power PCB terminal blocks and connectors</a><br><a href="#">20220201 Visuelle Änderung OMNIMATE® Power Leiterplattenklemmen und -steckverbinder</a> |
| User Documentation                          | <a href="#">QR-Code product handling video</a>                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Catalogues                                  | <a href="#">Catalogues in PDF-format</a>                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Brochures                                   | <a href="#">FL DRIVES EN</a><br><a href="#">MB DEVICE MANUF. EN</a><br><a href="#">FL DRIVES DE</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><br><a href="#">PO OMNIMATE EN</a>                                                           |

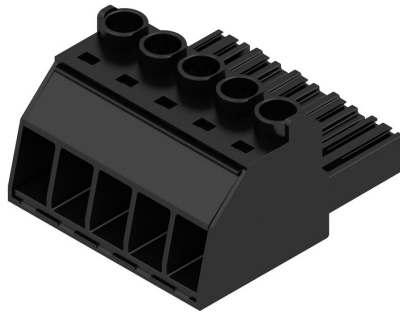
## BVZ 7.62HP/05/180 SN BK BX

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

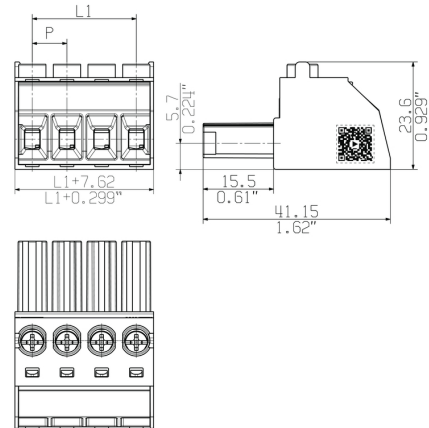
[www.weidmueller.com](http://www.weidmueller.com)

# Drawings

## Product image

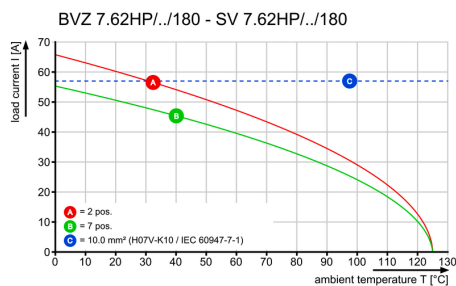


## Dimensional drawing



Similar to illustration

## Graph



## Graph

