

**SV 7.62IT/02/270MSF2 3.5SN BK BX SO****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

270° male header with 7.62 pitch for 400 V IT power networks according to IEC 61800-5-1.

UL approval as per UL840 600 V.

Meets the extended requirements on 5.5 mm touch safety for IT power networks as per IEC 61800-5-1 for 400 V to earth when combined with female header BVZ 7.62 IT...

Without a female header, the mating profile guarantees minimum touch safety of >3 mm with 20 N pressure on the test finger.

**General ordering data**

|              |                                                                                                                                    |
|--------------|------------------------------------------------------------------------------------------------------------------------------------|
| Version      | PCB plug-in connector, male header, THT solder connection, 7.62 mm, Number of poles: 2, 270°, Solder pin length (l): 3.5 mm, black |
| Order No.    | <a href="#">2629980000</a>                                                                                                         |
| Type         | SV 7.62IT/02/270MSF2 3.5SN BK BX SO                                                                                                |
| GTIN (EAN)   | 4050118633603                                                                                                                      |
| Qty.         | 78 pc(s).                                                                                                                          |
| Product data | UL: / 40.5 A                                                                                                                       |

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## Technical data

## Dimensions and weights

|            |     |
|------------|-----|
| Net weight | 0 g |
|------------|-----|

## System specifications

|                                          |                                         |                                          |                  |
|------------------------------------------|-----------------------------------------|------------------------------------------|------------------|
| Product family                           | OMNIMATE Power - series<br>BV/SV 7.62IT | Type of connection                       | Board connection |
| Mounting onto the PCB                    | THT solder connection                   | Pitch in mm (P)                          | 7.62 mm          |
| Pitch in inches (P)                      | 0.3 inch                                | Outgoing elbow                           | 270°             |
| Number of poles                          | 2                                       | Solder pin length (l)                    | 3.5 mm           |
| Solder pin length tolerance              | +0.1 / -0.3 mm                          | Solder pin dimensions                    | 0.8 x 1.0 mm     |
| Solder eyelet hole diameter (D)          | 1.3 mm                                  | L1 in mm                                 | 15.24 mm         |
| L1 in inches                             | 0.6 inch                                | Pin series quantity                      | 1                |
| Tightening torque for screw flange, min. | 0.2 Nm                                  | Tightening torque for screw flange, max. | 0.3 Nm           |

## Material data

|                                       |                                   |                                       |                                   |
|---------------------------------------|-----------------------------------|---------------------------------------|-----------------------------------|
| Colour                                | black                             | Colour chart (similar)                | RAL 9011                          |
| Layer structure of solder connection  | 1...3 µm Ni / 4...6 µm Sn<br>matt | Layer structure of plug contact       | 1...3 µm Ni / 4...6 µm Sn<br>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

|                 |        |                         |        |
|-----------------|--------|-------------------------|--------|
| Clearance, min. | 6.9 mm | Creepage distance, min. | 9.6 mm |
|-----------------|--------|-------------------------|--------|

## Rated data acc. to UL 1059

|                                       |        |                                       |        |
|---------------------------------------|--------|---------------------------------------|--------|
| Rated current (Use group B / UL 1059) | 40.5 A | Rated current (Use group C / UL 1059) | 40.5 A |
| Clearance distance, min.              | 6.9 mm | Creepage distance, min.               | 9.6 mm |

## Packing

|            |   |           |   |
|------------|---|-----------|---|
| VPE length | 0 | VPE width | 0 |
| VPE height | 0 |           |   |

## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC002637    | ETIM 7.0    | EC002637    |
| ETIM 8.0    | EC002637    | ECLASS 9.0  | 27-44-04-02 |
| ECLASS 9.1  | 27-44-04-02 | ECLASS 10.0 | 27-44-04-02 |
| ECLASS 11.0 | 27-46-02-01 |             |             |

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[www.weidmueller.com](http://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"><li>• Additional colours on request</li><li>• Rated current related to rated cross-section &amp; min. No. of poles.</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><li>• MFX and MSFX: X= Position of the middle flange e.g. MF2, MSF3</li><li>• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li></ul> |

**Downloads**

|            |                                          |
|------------|------------------------------------------|
| Catalogues | <a href="#">Catalogues in PDF-format</a> |
|------------|------------------------------------------|

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## Mating connector (fully pluggable)

## BVZ 7.72IT 180MSF SN



180° female plug with a 7.62 pitch for IT power networks. Meets the requirements of UL1059 600 V class C. In combination with male header SV 7.62 IT.. with leading contact.

Meets the extended requirements on 5.5 mm touch safety for IT power networks as per IEC 61800-5-1 for 400 V to earth.

The self-locking (optionally also screwable) middle flange reduces the space requirements by one pitch width in comparison with conventional solutions.

On request also available without middle flange interlock.

## General ordering data

| Type       | BVZ 7.62IT/02/180MSF2 S ... | Version                                                                         | Product data                                  | Packaging |
|------------|-----------------------------|---------------------------------------------------------------------------------|-----------------------------------------------|-----------|
| Order No.  | <a href="#">2629720000</a>  | PCB plug-in connector, female plug, 7.62 mm, Number of poles: 2,                | IEC: 1000 V / 41 A / 0.2 - 10 mm <sup>2</sup> | Box       |
| GTIN (EAN) | 4050118633702               | 180°, Clamping yoke connection, Clamping range, max. : 10 mm <sup>2</sup> , Box | UL: 600 V / 40.5 A / AWG 24 - AWG             |           |
| Qty.       | 52 pc(s).                   |                                                                                 | 8                                             |           |

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## 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 mm<sup>2</sup> connector for 29 A (IEC) or 20 A (UL) up to the sturdy 16 mm<sup>2</sup> 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

## General ordering data

| Type       | BV/SV 7.62HP KO            | Version                                                           | Product data | Packaging |
|------------|----------------------------|-------------------------------------------------------------------|--------------|-----------|
| Order No.  | <a href="#">1937590000</a> | PCB plug-in connector, Accessories, Coding element, black, Number |              | Box       |
| GTIN (EAN) | 4032248608881              | of poles: 1                                                       |              |           |
| Qty.       | 50 pc(s).                  |                                                                   |              |           |

## Recommended wave soldering profiles

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### Single Wave:



### Double Wave:



### Wave soldering profiles

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:

- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

We reserve the right to make technical changes.