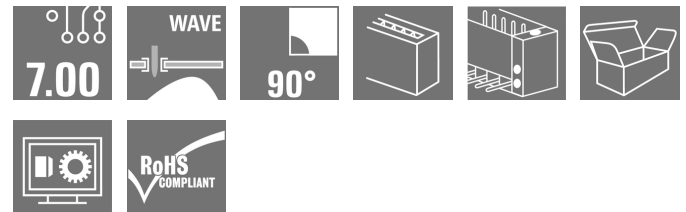


OMNIMATE Power - series STV STV S 2 LS90

Weidmüller Interface GmbH & Co. KG
 Klingenbergstraße 26
 D-32758 Detmold
 Germany
 Fon: +49 5231 14-0
 Fax: +49 5231 14-292083
 www.weidmueller.com

Product image



Similar to illustration

Tried-and-tested power connector system with TOP or leaf spring system. Versatile use.

General ordering data

| | |
|--------------|---|
| Type | STV S 2 LS90 |
| Order No. | 1612480000 |
| Version | PCB plug-in connector, male header, Flange, THT solder connection, 7.00 mm, Number of poles: 2, 90°, Solder pin length (l): 3.2 mm, silver-plated, Pebble grey, Box |
| GTIN (EAN) | 4008 190199203 |
| Qty. | 10 pc(s). |
| Product data | IEC: 1000 V UL: |
| Packaging | Box |

Creation date May 3, 2020 9:31:16 PM CEST

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Technical data**Dimensions and weights**

| | |
|------------|------|
| Net weight | 11 g |
|------------|------|

System specifications

| Product family | OMNIMATE Power - series STV | Type of connection | Board connection |
|--|------------------------------|--|------------------|
| Mounting onto the PCB | THT solder connection | Pitch in mm (P) | 7 mm |
| Pitch in inches (P) | 0.276 inch | Outgoing elbow | 90° |
| Number of poles | 2 | Number of solder pins per pole | 1 |
| Solder pin length (l) | 3.2 mm | Tolerance of solder pin position | ± 0.1 mm |
| Solder eyelet hole diameter (D) | 1.6 mm | Solder eyelet hole diameter tolerance (D) | + 0,1 mm |
| L1 in mm | 7 mm | L1 in inches | 0.276 inch |
| Number of rows | 1 | Pin series quantity | 1 |
| Touch-safe protection acc. to DIN VDE 57 106 | Safe from back-of-hand touch | Touch-safe protection acc. to DIN VDE 0470 | IP 10 |
| Volume resistance | 2.70 mΩ | Can be coded | Yes |
| Plugging force/pole, max. | 4 N | Pulling force/pole, max. | 4 N |


Material data

| | | | |
|----------------------------------|---------------|---------------------------------------|---------------------|
| Insulating material | Wemid (PA) | Colour | Pebble grey |
| Colour chart (similar) | RAL 7032 | Insulating material group | I |
| Comparative Tracking Index (CTI) | ≥ 600 | Insulation strength | ≥ 10 ⁸ Ω |
| UL 94 flammability rating | V-0 | Contact material | CuZn |
| Contact surface | silver-plated | Storage temperature, min. | -25 °C |
| Storage temperature, max. | 50 °C | Max. relative humidity during storage | 70 % |
| Operating temperature, min. | -50 °C | Temperature range, installation, min. | -25 °C |

Rated data acc. to IEC

| | | | |
|---|------------------------|---|-------------------|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, max. number of poles (Tu=20°C) | 18 A |
| Rated current, max. number of poles (Tu=40°C) | 15 A | Rated voltage for surge voltage class / pollution degree II/2 | 1,000 V |
| Rated voltage for surge voltage class / pollution degree III/2 | 500 V | Rated voltage for surge voltage class / pollution degree III/3 | 500 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 180 A |

Rated data acc. to CSA

| | | | |
|-----------------------------------|---|-----------------------------------|-----------|
| Institute (CSA) |  | Certificate No. (CSA) | 12400-343 |
| Rated voltage (Use group D / CSA) | 600 V | Rated current (Use group D / CSA) | 14 A |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Data sheet

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Technical data

Rated data acc. to UL 1059

| | | | |
|---------------------------------------|---|---------------------------------------|--------|
| Institute (UR) |  | Certificate No. (UR) | E92202 |
| Rated voltage (Use group D / UL 1059) | 600 V | Rated current (Use group D / UL 1059) | 14 A |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Rated data acc. to UL 1977

| | | | |
|------------------------------|---|----------------------|--------|
| Institute (UR) |  | Certificate No. (UR) | E92202 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

Packing

| | | | |
|-----------|-------|------------|--------|
| Packaging | Box | VPE length | 55 mm |
| VPE width | 78 mm | VPE height | 113 mm |

Classifications

| | | | |
|-------------|-------------|------------|-------------|
| ETIM 6.0 | EC002637 | ETIM 7.0 | EC002637 |
| eClass 9.0 | 27-44-04-02 | eClass 9.1 | 27-44-04-02 |
| eClass 10.0 | 27-44-04-02 | UNSPSC | 30-21-18-10 |

Notes

| | |
|----------------|---|
| Notes | <ul style="list-style-type: none"> • Additional colours on request • Rated current related to rated cross-section & min. No. of poles. • 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. |
| 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 |

Data sheet**OMNIMATE Power - series STV
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Technical data**Downloads**

| | |
|---|---|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Brochure/Catalogue | MB DEVICE MANUF. EN FL 72H SAMPLE SER EN PO OMNIMATE EN |
| Engineering Data | EPLAN, WSCAD |
| White paper UL 600 V | Download Whitepaper |

Data sheet

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Accessories

Coding elements



**Only connects what is supposed to be connected:
the right connection at the right place.**

Coding elements and locking devices clearly assign connecting elements during the manufacturing process and operation

The coding elements and locking devices are inserted prior to assembly or during the cable assembly phase. The Weidmüller alternative: configure online using the variant configurator to precode prior to delivery.

Incorrect assembly on the circuit board and incorrect plugging of connecting elements is no longer possible. The advantage: no troubleshooting during manufacture and no operational errors by the user.

General ordering data

| Type | STV S KO | Version | Product data | Packaging |
|------------|----------------------------|---|--------------|-----------|
| Order No. | 1613800000 | PCB plug-in connector, Accessories, Coding element, black | | Box |
| GTIN (EAN) | 4008190198923 | | | |
| Qty. | 50 pc(s). | | | |

Recommended wave soldering profiles

Weidmüller Interface GmbH & Co. KG
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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.