

**OMNIMATE Power - series STV**  
**STV S 8 SB**
**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

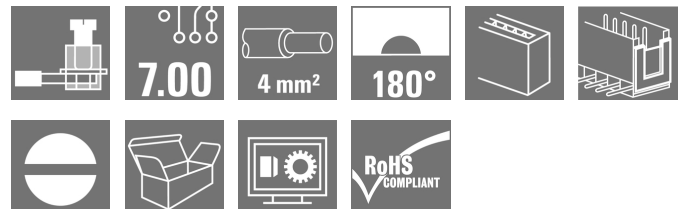
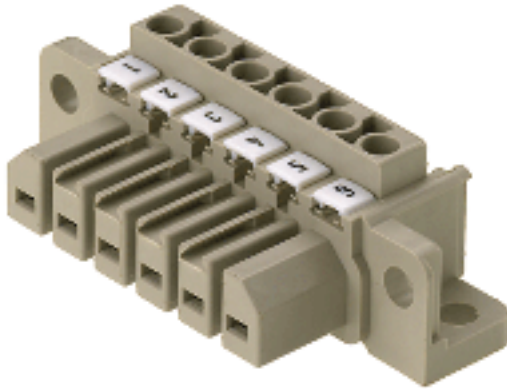
D-32758 Detmold

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**Product image**


Similar to illustration

Tried-and-tested power connector system for straight conductor-conductor connections. Counterpart also available with optional solder pins for PCB connection. Versatile thanks to mounting bracket for fixing to enclosure and screw locking, plus extensive accessories.

**General ordering data**

|              |                                                                                                                                    |
|--------------|------------------------------------------------------------------------------------------------------------------------------------|
| Type         | STV S 8 SB                                                                                                                         |
| Order No.    | <a href="#">1612140000</a>                                                                                                         |
| Version      | PCB plug-in connector, female plug, 7.00 mm, Number of poles: 8, 180°, Clamping yoke connection, Clamping range, max. : 4 mm², Box |
| GTIN (EAN)   | 4008190198855                                                                                                                      |
| Qty.         | 10 pc(s).                                                                                                                          |
| Product data | IEC: 1000 V / 32 A / 0.5 - 4 mm²<br>UL: 600 V / 25 A / AWG 22 - AWG 12                                                             |
| Packaging    | Box                                                                                                                                |

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### Technical data

#### Dimensions and weights

|            |         |                 |            |
|------------|---------|-----------------|------------|
| Height     | 21.4 mm | Height (inches) | 0.843 inch |
| Depth      | 30.2 mm | Depth (inches)  | 1.189 inch |
| Net weight | 36.9 g  |                 |            |

#### System Parameters

|                                            |                             |                                              |                        |
|--------------------------------------------|-----------------------------|----------------------------------------------|------------------------|
| Product family                             | OMNIMATE Power - series STV | Type of connection                           | Field connection       |
| Wire connection method                     | Clamping yoke connection    | Pitch in mm (P)                              | 7 mm                   |
| Pitch in inches (P)                        | 0.276 inch                  | Conductor outlet direction                   | 180°                   |
| Number of poles                            | 8                           | L1 in mm                                     | 49 mm                  |
| L1 in inches                               | 1.929 inch                  | Number of rows                               | 1                      |
| Pin series quantity                        | 1                           | 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                            | 1.80 mΩ                |
| Can be coded                               | Yes                         | Stripping length                             | 9 mm                   |
| Tightening torque, min.                    | 0.5 Nm                      | Tightening torque, max.                      | 0.6 Nm                 |
| Clamping screw                             | M 3                         | Screwdriver blade                            | 0.6 x 3.5              |
| Screwdriver blade standard                 | DIN 5264                    |                                              |                        |

#### 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 <sup>8</sup> Ω |
| UL 94 flammability rating             | V-0           | Contact material                      | CuZn                |
| Contact surface                       | silver-plated | 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.                                                | 0.32 mm <sup>2</sup> |
| Clamping range, max.                                                | 4 mm <sup>2</sup>    |
| Wire connection cross section AWG, min.                             | AWG 22               |
| Wire connection cross section AWG, max.                             | AWG 12               |
| Solid, min. H05(07) V-U                                             | 0.5 mm <sup>2</sup>  |
| Solid, max. H05(07) V-U                                             | 4 mm <sup>2</sup>    |
| Flexible, min. H05(07) V-K                                          | 0.5 mm <sup>2</sup>  |
| Flexible, max. H05(07) V-K                                          | 4 mm <sup>2</sup>    |
| w. plastic collar ferrule, DIN 46228 pt 4, 0.5 mm <sup>2</sup> min. |                      |
| w. plastic collar ferrule, DIN 46228 pt 4, 4 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.                           | 4 mm <sup>2</sup>    |
| Plug gauge in accordance with EN 60999 a x b; ø                     | 2.8 mm x 2.2 mm      |

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**Technical data**

|                     |                                                                                                                                                                        |                              |                             |       |  |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|-----------------------------|-------|--|
| Clampable conductor | Cross-section for conductor connection                                                                                                                                 | Type                         | fine-wired                  |       |  |
|                     |                                                                                                                                                                        | nominal                      | 2.5 mm²                     |       |  |
|                     | wire end ferrule                                                                                                                                                       | Stripping length             | nominal                     | 10 mm |  |
|                     |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H2,5/15D BL</a> |       |  |
|                     | Cross-section for conductor connection                                                                                                                                 | Type                         | fine-wired                  |       |  |
|                     |                                                                                                                                                                        | nominal                      | 4 mm²                       |       |  |
|                     | wire end ferrule                                                                                                                                                       | Stripping length             | nominal                     | 12 mm |  |
|                     |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H4,0/18D GR</a> |       |  |
|                     |                                                                                                                                                                        | Stripping length             | nominal                     | 9 mm  |  |
|                     |                                                                                                                                                                        | Recommended wire-end ferrule | <a href="#">H4,0/9</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. |                              |                             |       |  |
| Max. clamping range | 4 mm²                                                                                                                                                                  |                              |                             |       |  |

**Rated data acc. to IEC**

|                                                                           |                        |  |                                                                       |                   |
|---------------------------------------------------------------------------|------------------------|--|-----------------------------------------------------------------------|-------------------|
| tested acc. to standard                                                   | IEC 60664-1, IEC 61984 |  | Rated current, min. number of poles (Tu=20°C)                         | 32 A              |
| Rated current, max. number of poles (Tu=20°C)                             | 28 A                   |  | Rated current, min. number of poles (Tu=40°C)                         | 32 A              |
| Rated current, max. number of poles (Tu=40°C)                             | 24 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 340 A |

**Rated data acc. to CSA**

|                               |                                                                                     |  |                               |           |
|-------------------------------|-------------------------------------------------------------------------------------|--|-------------------------------|-----------|
| Institute (CSA)               |  |  | Certificate No. (CSA)         | 12400-343 |
| Wire cross-section, AWG, min. | AWG 20                                                                              |  | Wire cross-section, AWG, max. | AWG 12    |
| Reference to approval values  | Specifications are maximum values, details - see approval certificate.              |  |                               |           |

**Rated data acc. to UL 1059**

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

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**Technical data****Rated data acc. to UL 1977**

|                               |                                                                                   |                               |        |
|-------------------------------|-----------------------------------------------------------------------------------|-------------------------------|--------|
| Institute (UR)                |  | Certificate No. (UR)          | E92202 |
| Reference to approval values  | Specifications are maximum values, details - see approval certificate.            | Rated voltage (UL 1977)       | 600 V  |
| Rated current (UL 1977)       | 25 A                                                                              | AWG-conductor, min. (UL 1977) | 22     |
| AWG-conductor, max. (UL 1977) | 12                                                                                |                               |        |

**Packing**

|           |       |            |        |
|-----------|-------|------------|--------|
| Packaging | Box   | VPE length | 67 mm  |
| VPE width | 88 mm | VPE height | 143 mm |

**Classifications**

|             |             |            |             |
|-------------|-------------|------------|-------------|
| ETIM 6.0    | EC002638    | ETIM 7.0   | EC002638    |
| eClass 9.0  | 27-44-03-09 | eClass 9.1 | 27-44-03-09 |
| eClass 10.0 | 27-44-03-09 | UNSPSC     | 30-21-18-10 |

**Notes**

|                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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>• Crimp form A for wire end ferrules with PZ 6/5 crimping tool are recommended for the largest cable sizes.</li> <li>• Wire end ferrule without plastic collar to DIN 46228/1</li> <li>• Wire end ferrule with plastic collar to DIN 46228/4</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>• Long term storage of the product with average temperature of 50 °C and average humidity 70%, 36 months</li> </ul> |
| 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                                                                             |

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## Technical data

### Downloads

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

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## Drawings

### Dimensional drawing

