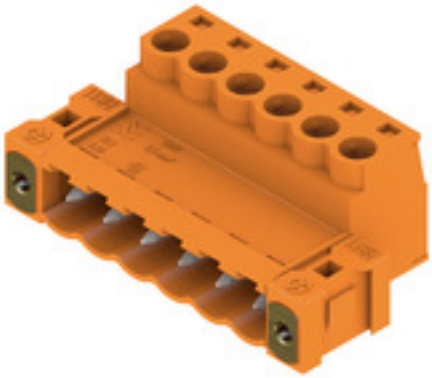
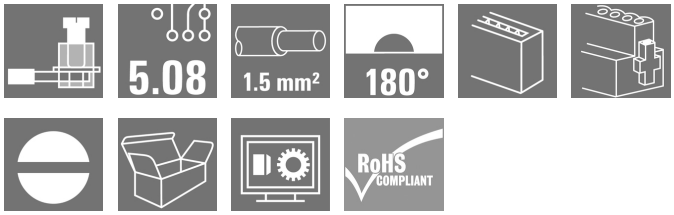
# SLS 5.08/06/180F SN OR BX

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

www.weidmueller.com

## Product image






Male plugs with clamping-yoke screw wire-connect system. The male plugs provide space for labelling and can be coded.

### General ordering data

| | |
|---|---|
| Version | PCB plug-in connector, male plug, 5.08 mm, Number of poles: 6, 180°, Clamping yoke connection, Clamping range, max. : 3.31 mm², Box |
| Order No. | 1846400000 |
| Type | SLS 5.08/06/180F SN OR BX |
| GTIN (EAN) | 4032248362103 |
| Qty. | 42 pc(s). |
| Product data | IEC: 400 V / 21.5 A / 0.2 - 2.5 mm²<br>UL: 300 V / 14 A / AWG 26 - AWG 12 |
| Packaging | Box |

Creation date March 12, 2024 5:35:18 PM CET

# SLS 5.08/06/180F SN OR BX

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## Technical data

### Dimensions and weights

| | | | |
|---|---|---|---|
| Depth | 22.2 mm | Depth (inches) | 0.874 inch |
| Height | 15.3 mm | Height (inches) | 0.602 inch |
| Net weight | 11.3 g | | |

### System Parameters

| | |
|---|---|
| Product family | OMNIMATE Signal - series BL/SL 5.08 |
| Type of connection | Field connection |
| Wire connection method | Clamping yoke connection |
| Pitch in mm (P) | 5.08 mm |
| Pitch in inches (P) | 0.2 " |
| Conductor outlet direction | 180° |
| Number of poles | 6 |
| L1 in mm | 25.4 mm |
| L1 in inches | 1 " |
| Number of rows | 1 |
| Pin series quantity | 1 |
| Touch-safe protection acc. to DIN VDE 57 106 | finger-safe plugged/ back-of-hand-safe unplugged |
| Touch-safe protection acc. to DIN VDE 0470 | IP20 plugged/ IP10 unplugged |
| Protection degree | IP20, when fully mounted |
| Volume resistance | ≤5 mΩ |
| Can be coded | Yes |
| Stripping length | 7 mm |
| Clamping screw | M 2.5 |
| Screwdriver blade | 0.6 x 3.5 |
| Screwdriver blade standard | DIN 5264-A |
| Plugging cycles | 25 |
| Plugging force/pole, max. | 4 N |
| Pulling force/pole, max. | 3 N |
| Tightening torque | Torque type: Wire connection<br>Usage information: Tightening torque: min. 0.4 Nm, max. 0.5 Nm |

### Material data

| | | | |
|---|---|---|---|
| Insulating material | PBT | Colour | orange |
| Colour chart (similar) | RAL 2000 | Insulating material group | IIIa |
| Comparative Tracking Index (CTI) | ≥ 200 | UL 94 flammability rating | V-0 |
| Contact material | Cu-alloy | Contact surface | tinned |
| Layer structure of plug contact | 4...8 µm Sn hot-dip tinned | 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. | 0.13 mm² |
| Clamping range, max. | 3.31 mm² |
| Wire connection cross section AWG, min. | AWG 26 |
| Wire connection cross section AWG, max. | AWG 12 |
| Solid, min. H05(07) V-U | 0.2 mm² |

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## Technical data

| | | | | |
|---|---|---|---|---|
| Solid, max. H05(07) V-U | 2.5 mm² | | | |
| Stranded, min. H07V-R | 0.2 mm² | | | |
| Stranded, max. H07V-R | 2.5 mm² | | | |
| Flexible, min. H05(07) V-K | 0.2 mm² | | | |
| Flexible, max. H05(07) V-K | 2.5 mm² | | | |
| w. plastic collar ferrule, DIN 46228 pt 4, min. | 0.2 mm² | | | |
| w. plastic collar ferrule, DIN 46228 pt 4, max. | 2.5 mm² | | | |
| w. wire end ferrule, DIN 46228 pt 1, min. | 0.2 mm² | | | |
| w. wire end ferrule, DIN 46228 pt 1, max. | 2.5 mm² | | | |
| Plug gauge in accordance with EN 60999 a x b; ø | 2.8 mm x 2.0 mm; 2.4 mm | | | |
| Clampable conductor | Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 0.5 mm² | |
| | wire end ferrule | Stripping length | nominal | 6 mm |
| | | Recommended wire-end ferrule | H0,5/6 | |
| | Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 1 mm² | |
| | wire end ferrule | Stripping length | nominal | 6 mm |
| | | Recommended wire-end ferrule | H1,0/6 | |
| | Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 1.5 mm² | |
| | wire end ferrule | Stripping length | nominal | 7 mm |
| | | Recommended wire-end ferrule | H1,5/7 | |
| | Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 2.5 mm² | |
| | wire end ferrule | Stripping length | nominal | 7 mm |
| | | Recommended wire-end ferrule | H2,5/7 | |
| | Cross-section for conductor connection | Type | fine-wired | |
| | | nominal | 0.75 mm² | |
| | wire end ferrule | Stripping length | nominal | 6 mm |
| | | Recommended wire-end ferrule | H0,75/6 | |
| 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. | | | |

### Rated data acc. to IEC

| | | | |
|---|---|---|---|
| tested acc. to standard | IEC 60664-1, IEC 61984 | Rated current, min. number of poles (Tu=20°C) | 21.5 A |
| Rated current, max. number of poles (Tu=20°C) | 16 A | Rated current, min. number of poles (Tu=40°C) | 18 A |
| Rated current, max. number of poles (Tu=40°C) | 14 A | Rated voltage for surge voltage class / pollution degree II/2 | 400 V |
| Rated voltage for surge voltage class / pollution degree III/2 | 320 V | Rated voltage for surge voltage class / pollution degree III/3 | 250 V |
| Rated impulse voltage for surge voltage class/ pollution degree II/2 | 4 kV | Rated impulse voltage for surge voltage class/ pollution degree III/2 | 4 kV |
| Rated impulse voltage for surge voltage class/ contamination degree III/3 | 4 kV | Short-time withstand current resistance | 3 x 1s with 120 A |

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## Technical data

### Rated data acc. to CSA

| | | | |
|---|---|---|---|
| Rated voltage (Use group B / CSA) | 300 V | Rated voltage (Use group D / CSA) | 300 V |
| Rated current (Use group B / CSA) | 15 A | Rated current (Use group D / CSA) | 10 A |
| Wire cross-section, AWG, min. | AWG 26 | Wire cross-section, AWG, max. | AWG 12 |

### Rated data acc. to UL 1059

| | | | |
|---|---|---|---|
| Institute (UR) | | Certificate No. (UR) | E60693 |
| Rated voltage (Use group B / UL 1059) | 300 V | Rated voltage (Use group D / UL 1059) | 300 V |
| Rated current (Use group B / UL 1059) | 14 A | Rated current (Use group D / UL 1059) | 10 A |
| Wire cross-section, AWG, min. | AWG 26 | Wire cross-section, AWG, max. | AWG 12 |
| Reference to approval values | Specifications are maximum values, details - see approval certificate. | | |

### Packing

| | | | |
|---|---|---|---|
| Packaging | Box | VPE length | 350 mm |
| VPE width | 139 mm | VPE height | 31 mm |

### Type tests

| | | | |
|---|---|---|---|
| Test: Durability of markings | Standard | VDE 0627 Tab. 7 item 3/6.86 | |
| | Test | durability | |
| | Evaluation | passed | |
| Test: Clampable cross section | Standard | VDE 0609 part 1 06.83, EN 60947-1 03.91 | |
| | Conductor type | Type of conductor and conductor cross-section | H05V-U0.5 |
| | | Type of conductor and conductor cross-section | H05V-K0.5 |
| | | Type of conductor and conductor cross-section | H05V-U2.5 |
| | | Type of conductor and conductor cross-section | H05V-K2.5 |
| | | Type of conductor and conductor cross-section | AWG 28 |
| | | Type of conductor and conductor cross-section | AWG 14 |
| | Evaluation | passed | |

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## Technical data

| | | | |
|---|---|---|---|
| Test for damage to and accidental loosening of conductors | Standard | EN 60947-1/1991 section 8.2.4.3 | |
| | Requirement | 0.3 kg | |
| | Conductor type | Type of conductor and conductor cross-section | H05V-U0.5 |
| | | Type of conductor and conductor cross-section | H05V-K0.5 |
| | Evaluation | passed | |
| | Requirement | 0.7 kg | |
| | Conductor type | Type of conductor and conductor cross-section | H07V-U2.5 |
| | | Type of conductor and conductor cross-section | H07V-K2.5 |
| | Evaluation | passed | |
| Pull-out test | Standard | EN 60947-1/1991 section 8.2.4.4 | |
| | Requirement | ≥5 N | |
| | Conductor type | Type of conductor and conductor cross-section | AWG 28/1 |
| | | Type of conductor and conductor cross-section | AWG 28/7 |
| | Evaluation | passed | |
| | Requirement | ≥50 N | |
| | Conductor type | Type of conductor and conductor cross-section | H07V-U2.5 |
| | | Type of conductor and conductor cross-section | H07V-K2.5 |
| | | Type of conductor and conductor cross-section | AWG 14/19 |
| | Evaluation | passed | |

### Classifications

| | | | |
|---|---|---|---|
| ETIM 6.0 | EC002638 | ETIM 7.0 | EC002638 |
| ETIM 8.0 | EC002638 | ETIM 9.0 | 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 | ECLASS 13.0 | 27-46-02-02 |

### Environmental Product Compliance

| | |
|---|---|
| REACH SVHC | Lead 7439-92-1 |
| SCIP | 5f72207e-da7b-4e67-98e6-158600cbc2d0 |

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## 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 | • Additional variants on request<br>• Rated current related to rated cross-section & min. No. of poles.<br>• Wire end ferrule without plastic collar to DIN 46228/1<br>• Wire end ferrule with plastic collar to DIN 46228/4<br>• P on drawing = pitch<br>• 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.<br>• 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<br>• Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months |

### Approvals

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

### Downloads

| | |
|---|---|
| Approval/Certificate/Document of Conformity | Declaration of the Manufacturer |
| Engineering Data | CAD data – STEP |
| Catalogues | Catalogues in PDF-format |
| Brochures | FL DRIVES EN<br>MB DEVICE MANUF. EN<br>FL DRIVES DE<br>FL BUILDING SAFETY EN<br>FL APPL LED LIGHTING EN<br>FL INDUSTR.CONTROLS EN<br>FL MACHINE SAFETY EN<br>FL HEATING ELECTR EN<br>FL APPL_INVERTER EN<br>FL_BASE_STATION_EN<br>FL ELEVATOR EN<br>FL POWER SUPPLY EN<br>FL 72H SAMPLE SER EN<br>PO OMNIMATE EN<br>PO OMNIMATE EN |

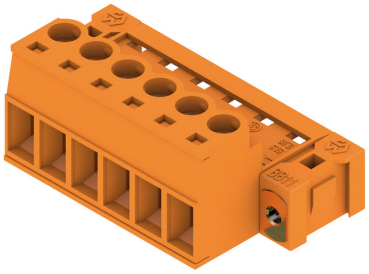
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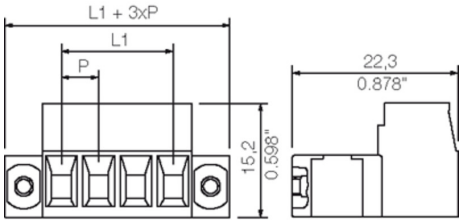
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## Drawings

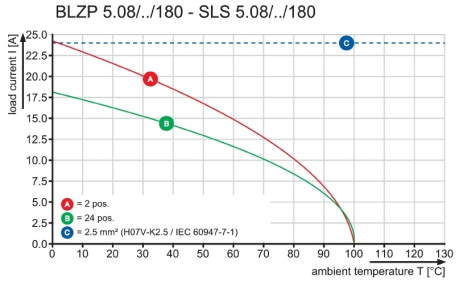
### Product image



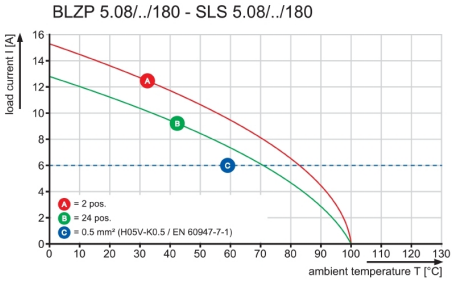
### Dimensional drawing



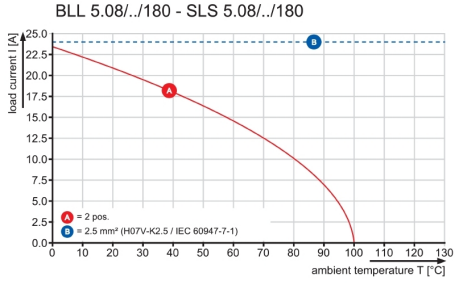

### Graph




### Graph




### Graph



# SLS 5.08/06/180F SN OR BX

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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 | BLZ/SL KO OR BX | Version | Product data | Packaging |
| Order No. | 1573010000 | PCB plug-in connector, Accessories, Coding element, orange, Number | | Box |
| GTIN (EAN) | 4008190048396 | of poles: 1 | | |
| Qty. | 100 pc(s). | | | |

| | | | | |
|---|---|---|---|---|
| Type | BLZ/SL KO BK BX | Version | Product data | Packaging |
| Order No. | 1545710000 | PCB plug-in connector, Accessories, Coding element, black, Number | | Box |
| GTIN (EAN) | 4008190087142 | of poles: 1 | | |
| Qty. | 50 pc(s). | | | |

### Additional accessories



**No task is too small when creating the perfect solution.** br />
Connections form just one part of the overall process. Small details are often the key to the perfect solution in applications where potentials are tested, grouped or even isolated.
A system is not a system without small but useful details:

- Test plugs - ensure reliable pick-up from diagnostic sockets
- Cross-connectors - ensure a stable electrical distribution contact directly at the connection
- Compartment partition elements - divide a large number of male connectors into several separate socket connector channels
- Locks and clips - optional vibration-resistant clip-on connection or mounting for male and female connectors

In tandem with the manufacturing process and application - more accessories = smaller workload

### General ordering data

| | | | | |
|---|---|---|---|---|
| Type | SL AT SW | Version | Product data | Packaging |
| Order No. | 1770240000 | PCB plug-in connector, Accessories, Spacer, black, Number of poles: 1 | | Box |
| GTIN (EAN) | 4032248117710 | | | |
| Qty. | 100 pc(s). | | | |

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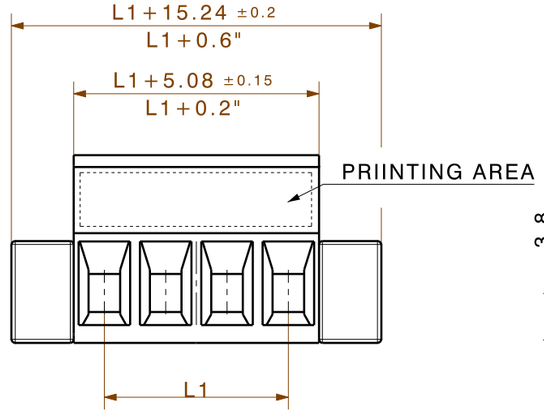
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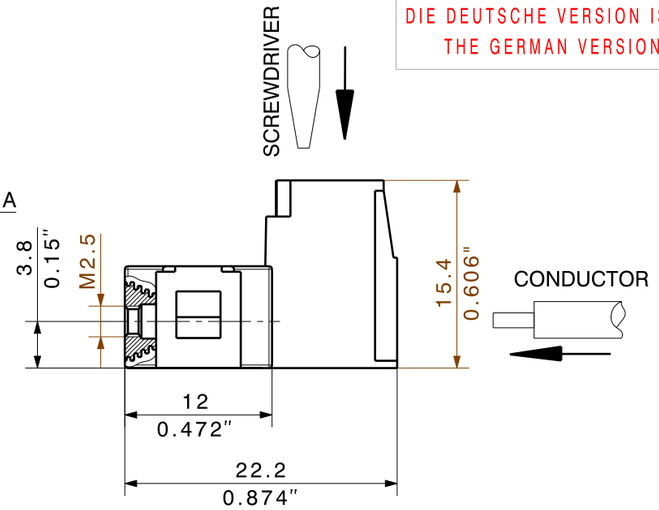
## Accessories

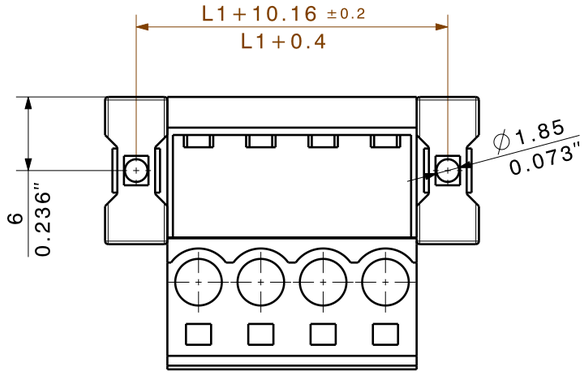
| Type | SL AT OR | Version | Product data | Packaging |
|---|---|---|---|---|
| Order No. | 1598300000 | PCB plug-in connector, Accessories, Spacer, orange, Number of poles: | | Box |
| GTIN (EAN) | 4008190189266 | 1 | | |
| Qty. | 100 pc(s). | | | |

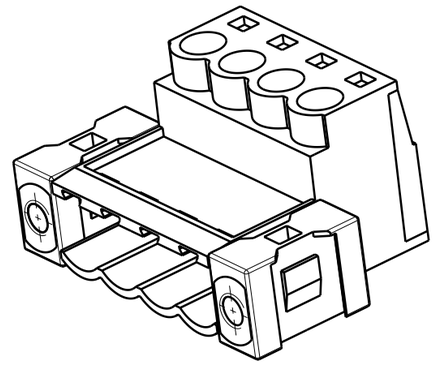
WEITERGABE SOWIE VERVIELFAELTIGUNG DIESES DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATTET.
ZUWIDERHANDLUNGEN VERPFLICHTEN ZU SCHADENERSATZ. ALLE RECHTE FUER DEN FALL DER PATENT-, GEBRAUCHSMUSTER- ODER GESCHMACKSMUSTEREINTRAGUNG VORBEHALTEN.
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DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING



| n | L1 [mm] | L1 [Inch] |
|---|---|---|
| 24 | 116,84 | 4,600 |
| 23 | 111,76 | 4,400 |
| 22 | 106,68 | 4,200 |
| 21 | 101,60 | 4,000 |
| 20 | 96,52 | 3,800 |
| 19 | 91,44 | 3,600 |
| 18 | 86,36 | 3,400 |
| 17 | 81,28 | 3,200 |
| 16 | 76,20 | 3,000 |
| 15 | 71,12 | 2,800 |
| 14 | 66,04 | 2,600 |
| 13 | 60,96 | 2,400 |
| 12 | 55,88 | 2,200 |
| 11 | 50,80 | 2,000 |
| 10 | 45,72 | 1,800 |
| 9 | 40,64 | 1,600 |
| 8 | 35,56 | 1,400 |
| 7 | 30,48 | 1,200 |
| 6 | 25,40 | 1,000 |
| 5 | 20,32 | 0,800 |
| 4 | 15,24 | 0,600 |
| 3 | 10,16 | 0,400 |
| 2 | 5,08 | 0,200 |

For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.
The neccessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.
The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

SHOWN: SLS 5.08/04/180F

RoHS COMPLIANT

METRIC TOLERANCES:
X. = ±0.3
X.X = ±0.1
X.XX = ±0.05

53611/5
06.10.10 HERTEL_S 01

MODIFICATION

CAT.NO.: .

Weidmüller

C 34205 03
DRAWING NO. ISSUE NO.

SHEET 01 OF 02 SHEETS

| | DATE | NAME |
|---|---|---|
| DRAWN | 26.03.2007 | HERTEL_S |
| RESPONSIBLE | | HERTEL_S |
| CHECKED | 06.10.2010 | HECKERT_M |
| APPROVED | | HECKERT_M |

SCALE: 2:1
SUPERSEDES: .
SUPERSEDED BY: .

# SLS 5.08/../180 F(FI)..

STIFTLEISTE
PIN HEADER

PRODUCT FILE: SLS 5.08 7314