

**HDC HQ 5 MC****Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

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

A small unit that packs a big punch. The electrical values speak for themselves. Proven HE crimp contacts can also be used here.

Number of poles: **5 (+PE)**Rated current: **16 A**Rated voltage: **250 V**Rated voltage acc. to UL/CSA: **600 V AC/DC**

Crimp connection

**General ordering data**

|            |  |
|------------|--|
| Version    | HDC insert, Male, 250 V, 16 A, Number of poles: 5, Crimp connection, Size: 1 |
| Order No.  | <a href="#">1912440000</a>   |
| Type       | HDC HQ 5 MC  |
| GTIN (EAN) | 4032248542031  |
| Qty.       | 1 pc(s).   |

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## Technical data

## Dimensions and weights

|            |        |                 |            |
|------------|--------|-----------------|------------|
| Depth      | 21 mm  | Depth (inches)  | 0.827 inch |
| Height     | 40 mm  | Height (inches) | 1.575 inch |
| Width      | 21 mm  | Width (inches)  | 0.827 inch |
| Net weight | 12.2 g |                 |            |

## Temperatures

|                   |                   |
|-------------------|-------------------|
| Limit temperature | -40 °C ... 125 °C |
|-------------------|-------------------|

## Dimensions

|                |       |                   |       |
|----------------|-------|-------------------|-------|
| Height of plug | 40 mm | Total length base | 21 mm |
| Width          | 21 mm |                   |       |

## General data

|                               |       |                                      |   |
|-------------------------------|-------|--------------------------------------|---|
| BG                            | 1     | Colour                               | beige   |
| Free from halogens            | false | Insulating material                  | PC glass-fibre reinforced (UL-listed and railway-certified) |
| Insulating material group     | IIIa  | Insulation strength                  | 10 <sup>10</sup> Ω  |
| Low smoke acc. DIN EN 45545-2 | Yes   | Material                             | Copper alloy  |
| Number of poles               | 5     | Plugging cycles, gold                | ≥ 500   |
| Plugging cycles, silver       | ≥ 500 | Pollution severity                   | 3   |
| Rated current (DIN EN 61984)  | 16 A  | Rated impulse voltage (DIN EN 61984) | 6 kV  |
| Rated voltage (DIN EN 61984)  | 250 V | Rated voltage according to UL/CSA    | 600 V AC/DC   |
| Series                        | HQ    | Size                                 | 1   |
| Type                          | Male  | Type of connection                   | Crimp connection  |
| UL 94 flammability rating     | V-0   | Volume resistance                    | ≤2 mΩ   |

## Connection data PE

|                                       |              |                                       |                     |
|---------------------------------------|--------------|---------------------------------------|---------------------|
| Blade size, slotted (PE connection)   | SD 0.6 x 3.5 | Connection type PE                    | Screw connection    |
| Fixing screw                          | M 3          | Rated cross-section                   | 2.5 mm <sup>2</sup> |
| Stripping length PE connection        | 10 mm        | Tightening torque, max. PE connection | 0.55 Nm             |
| Tightening torque, min. PE connection | 0.5 Nm       | Wire cross section, AWG (PE), max.    | AWG 14              |
| Wire cross section, AWG (PE), min.    | AWG 20       |                                       |                     |

## Version

|   |                     |   |                     |
|---|---------------------|---|---------------------|
| BG  | 1                   | Conductor cross-section, max.   | 4 mm <sup>2</sup>   |
| Conductor cross-section, min.   | 0.5 mm <sup>2</sup> | Material  | Copper alloy        |
| Size  | 1                   | Stripping length, rated connection  | 7.5 mm              |
| Type of connection  | Crimp connection    | Volume resistance   | ≤2 mΩ               |
| Wire connection cross section AWG, max.   | AWG 12              | Wire connection cross section AWG, min.   | AWG 20              |
| Wire connection cross section, finely stranded, max.                                    | 2.5 mm <sup>2</sup> | Wire connection cross section, finely stranded, min.                                    | 0.5 mm <sup>2</sup> |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 2.5 mm <sup>2</sup> | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.5 mm <sup>2</sup> |

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## Classifications

|             |             |             |             |
|-------------|-------------|-------------|-------------|
| ETIM 6.0    | EC000438    | ETIM 7.0    | EC000438    |
| ETIM 8.0    | EC000438    | ETIM 9.0    | EC000438    |
| ECLASS 9.0  | 27-44-02-05 | ECLASS 9.1  | 27-44-02-05 |
| ECLASS 10.0 | 27-44-02-05 | ECLASS 11.0 | 27-44-02-05 |
| ECLASS 12.0 | 27-44-02-05 | ECLASS 13.0 | 27-44-02-05 |

|                     |                           |
|---------------------|---------------------------|
| Substance           | Acetone                   |
| Chemical resistance | Resistant                 |
| Substance           | Ammonia, watery           |
| Chemical resistance | Conditionally resistant   |
| Substance           | Petrol                    |
| Chemical resistance | Resistant                 |
| Substance           | Benzene                   |
| Chemical resistance | Resistant                 |
| Substance           | Diesel oil                |
| Chemical resistance | Conditionally resistant   |
| Substance           | Acetic acid, concentrated |
| Chemical resistance | Resistant                 |
| Substance           | Potassium hydroxide       |
| Chemical resistance | Conditionally resistant   |
| Substance           | Methanol                  |
| Chemical resistance | Conditionally resistant   |
| Substance           | Motor oil                 |
| Chemical resistance | Conditionally resistant   |
| Substance           | Lye, diluted              |
| Chemical resistance | Resistant                 |
| Substance           | Hydrochlorofluorocarbons  |
| Chemical resistance | Conditionally resistant   |
| Substance           | Outdoor use               |
| Chemical resistance | Conditionally resistant   |

## Environmental Product Compliance

|                                      |  |
|--------------------------------------|--|
| REACH SVHC                           | Lead 7439-92-1 Potassium perfluorobutane sulfonate 29420-49-3  |
| SCIP                                 | b67daa31-7dca-434d-8290-da7fb52f83a2   |
| Chemical resistance                  | de.myview.objectmodel.impl.BlockImpl@7f996142 de.myview.objectmodel.impl.BlockImpl@3644c5f5<br>de.myview.objectmodel.impl.BlockImpl@4783f7fb de.myview.objectmodel.impl.BlockImpl@5c04fba1<br>de.myview.objectmodel.impl.BlockImpl@68230212 de.myview.objectmodel.impl.BlockImpl@78d8098e<br>de.myview.objectmodel.impl.BlockImpl@20bc0541 de.myview.objectmodel.impl.BlockImpl@5b9e3b04<br>de.myview.objectmodel.impl.BlockImpl@2bdd91f7 de.myview.objectmodel.impl.BlockImpl@1371797b<br>de.myview.objectmodel.impl.BlockImpl@53a7e059 de.myview.objectmodel.impl.BlockImpl@794bb732 |
| RoHS Compliance Status               | Compliant with exemption   |
| RoHS Exemption (if applicable/known) | 6c   |

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Catalogue status 13.07.2024 / We reserve the right to make technical changes.

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## Approvals

Approvals



|                         |            |
|-------------------------|------------|
| ROHS                    | Conform    |
| UL File Number Search   | UL Website |
| Certificate No. (cURus) | E92202     |

## Downloads

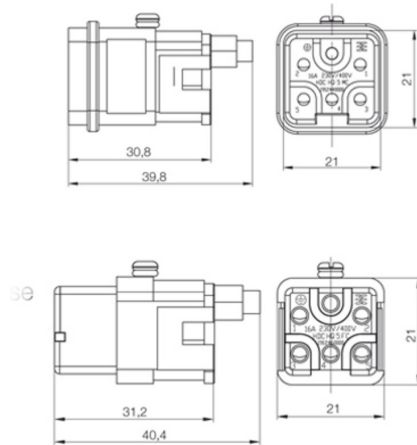
|                  |  |
|------------------|--|
| Engineering Data | <a href="#">CAD data – STEP</a>  |
| Catalogues       | <a href="#">Catalogues in PDF-format</a>                               |
| Brochures        | <a href="#">FL FIELDWIRING EN</a><br><a href="#">FL FIELDWIRING EN</a> |

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## Drawings



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[www.weidmueller.com](http://www.weidmueller.com)**Accessories****Slotted screwdriver**

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip

**General ordering data**

|            |                            |                          |
|------------|----------------------------|--------------------------|
| Type       | SDIS 0.8X4.0X100           | Version                  |
| Order No.  | <a href="#">9008400000</a> | Screwdriver, Screwdriver |
| GTIN (EAN) | 4032248056361              |                          |
| Qty.       | 1 pc(s).                   |                          |
| Type       | SDIS 0.6X3.5X100           | Version                  |
| Order No.  | <a href="#">9008390000</a> | Screwdriver, Screwdriver |
| GTIN (EAN) | 4032248056354              |                          |
| Qty.       | 1 pc(s).                   |                          |

**Contact removal tools**

Weidmüller offers a variety of crimping tools, contact removal tools, and fibre optic tools.

**General ordering data**

|            |                            |                             |
|------------|----------------------------|-----------------------------|
| Type       | REMOVAL TOOL HE            | Version                     |
| Order No.  | <a href="#">1866750000</a> | Tools, Contact Removal Tool |
| GTIN (EAN) | 4032248437078              |                             |
| Qty.       | 1 pc(s).                   |                             |

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## Accessories

## Crimping tools



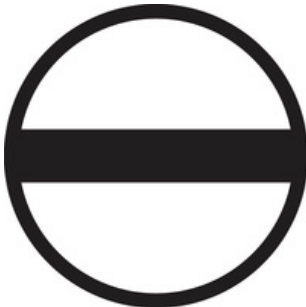
## Crimping tools for turned contacts

- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation
- With stop for exact positioning of the contacts.

## General ordering data

|            |                            |  |
|------------|----------------------------|--|
| Type       | CTIN CM 1.6/2.5            | Version  |
| Order No.  | <a href="#">9205430000</a> | Pressing tool, Crimping tool for contacts, 0.14mm <sup>2</sup> , 6mm <sup>2</sup> , 4-indent |
| GTIN (EAN) | 4032248733446              | crimp  |
| Qty.       | 1 pc(s).                   |  |
| Type       | CTX CM 1.6/2.5             | Version  |
| Order No.  | <a href="#">9018490000</a> | Pressing tool, Crimping tool for contacts, 0.14mm <sup>2</sup> , 4mm <sup>2</sup> , W crimp  |
| GTIN (EAN) | 4008190884598              |  |
| Qty.       | 1 pc(s).                   |  |

## Slotted screwdriver



Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip

## General ordering data

|            |                            |                          |
|------------|----------------------------|--------------------------|
| Type       | SDS 0.8X4.0X100            | Version                  |
| Order No.  | <a href="#">9008340000</a> | Screwdriver, Screwdriver |
| GTIN (EAN) | 4032248056293              |                          |
| Qty.       | 1 pc(s).                   |                          |
| Type       | SDS 0.6X3.5X100            | Version                  |
| Order No.  | <a href="#">9008330000</a> | Screwdriver, Screwdriver |
| GTIN (EAN) | 4032248056286              |                          |
| Qty.       | 1 pc(s).                   |                          |

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## Accessories

## HE

Various accessories are available for our inserts. This includes coding elements for the inserts.



## General ordering data

|            |                            |   |
|------------|----------------------------|---|
| Type       | HDC HE CP                  | Version   |
| Order No.  | <a href="#">1003240000</a> | Heavy-duty connectors, Accessories, Coding System |
| GTIN (EAN) | 4032248698233              |   |
| Qty.       | 100 pc(s).                 |   |

## Crimp contacts HE

Crimps provide a electrical and mechanical connection between wire and contact that is both secure and reliable. The optimal crimp connection is gas-tight and corrosion-resistant.



## General ordering data

|            |                            |   |
|------------|----------------------------|---|
| Type       | HDC-C-HE-SM4.0AG           | Version   |
| Order No.  | <a href="#">1200900000</a> | Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male, |
| GTIN (EAN) | 4008190115906              | Conductor cross-section, max.: 4, turned, Copper alloy            |
| Qty.       | 100 pc(s).                 |   |
| Type       | HDC-C-HE-SM0.5AG           | Version   |
| Order No.  | <a href="#">1200500000</a> | Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male, |
| GTIN (EAN) | 4008190159627              | Conductor cross-section, max.: 0.5, turned, Copper alloy          |
| Qty.       | 100 pc(s).                 |   |
| Type       | HDC-C-HE-SM4.65AU          | Version   |
| Order No.  | <a href="#">1116540000</a> | Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male, |
| GTIN (EAN) | 4032248897261              | Conductor cross-section, max.: 4.65, turned, Copper alloy         |
| Qty.       | 100 pc(s).                 |   |
| Type       | HDC-C-HE-SM0.75-1.00AG     | Version   |
| Order No.  | <a href="#">1200600000</a> | Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male, |
| GTIN (EAN) | 4008190171308              | Conductor cross-section, max.: 1, turned, Copper alloy            |
| Qty.       | 100 pc(s).                 |   |
| Type       | HDC-C-HE-SM0.5AU           | Version   |
| Order No.  | <a href="#">1651420000</a> | Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male, |
| GTIN (EAN) | 4008190400095              | Conductor cross-section, max.: 0.5, turned, Copper alloy          |
| Qty.       | 100 pc(s).                 |   |

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|            |                            |   |
|------------|----------------------------|---|
| Type       | HDC-C-HE-SM0.75-1.00AU     | Version   |
| Order No.  | <a href="#">1651430000</a> | Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male, |
| GTIN (EAN) | 4008190400101              | Conductor cross-section, max.: 1, turned, Copper alloy            |
| Qty.       | 100 pc(s).                 |   |
| Type       | HDC-C-HE-SM4.0AU           | Version   |
| Order No.  | <a href="#">1651460000</a> | Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male, |
| GTIN (EAN) | 4008190400132              | Conductor cross-section, max.: 4, turned, Copper alloy            |
| Qty.       | 100 pc(s).                 |   |
| Type       | HDC-C-HE-SM1.5AG           | Version   |
| Order No.  | <a href="#">1200700000</a> | Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male, |
| GTIN (EAN) | 4008190074920              | Conductor cross-section, max.: 1.5, turned, Copper alloy          |
| Qty.       | 100 pc(s).                 |   |
| Type       | HDC-C-HE-SM2.5AG           | Version   |
| Order No.  | <a href="#">1200800000</a> | Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male, |
| GTIN (EAN) | 4008190131913              | Conductor cross-section, max.: 2.5, turned, Copper alloy          |
| Qty.       | 100 pc(s).                 |   |
| Type       | HDC-C-HE-SM1.5AU           | Version   |
| Order No.  | <a href="#">1651440000</a> | Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male, |
| GTIN (EAN) | 4008190400118              | Conductor cross-section, max.: 1.5, turned, Copper alloy          |
| Qty.       | 100 pc(s).                 |   |
| Type       | HDC-C-HE-SM2.5AU           | Version   |
| Order No.  | <a href="#">1651450000</a> | Heavy-duty connectors, Crimp contact, HE, HEE, HQ, MixMate, Male, |
| GTIN (EAN) | 4008190400125              | Conductor cross-section, max.: 2.5, turned, Copper alloy          |
| Qty.       | 100 pc(s).                 |   |

# Tightening torques and screwing tools

| Screw size         | Connector type                          | Dia. tightening torque in Nm  | Recommended blade inserts and AF size for hexagon socket |
|--------------------|---|---|--|
| <b>M 2.5</b>       | <b>Signal contacts</b>                  |   |  |
|                    | S 6/6                                   | 0.5 - 0.55  | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | S 6/12                                  | 0.5 - 0.55  | SD 0.6 x 3.5 mm or PZ0                                   |
| <b>M 2.9 x 0.5</b> | <b>Fastening screws</b>                 |   |  |
|                    | HQ 4/2                                  | 0.8 (plastic) / 1.1 (metal)   | SD 0.6 x 3.5 mm or PH0                                   |
|                    | HQ 8                                    | 0.8 (plastic) / 1.1 (metal)   | SD 0.6 x 3.5 mm or PH0                                   |
|                    | HQ 17                                   | 0.8 (plastic) / 1.1 (metal)   | SD 0.6 x 3.5 mm or PH0                                   |
| <b>M 3</b>         | <b>Contact screws</b>                   |   |  |
|                    | HA 3                                    | 0.5 - 0.55  | SD 0.5 x 3.0 mm  |
|                    | HA 4                                    | 0.5 - 0.55  | SD 0.5 x 3.0 mm  |
|                    | HA 10 bis HA 48                         | 0.5 - 0.55  | SD 0.6 x 3.5 mm or PH0                                   |
|                    | HE                                      | 0.5 - 0.55  | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | HVE                                     | 0.5 - 0.55  | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | <b>Signal contacts:</b>                 |   |  |
|                    | S 4/2                                   | 0.5 - 0.55  | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | S 4/8                                   | 0.5 - 0.55  | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | <b>PE connection via female contact</b> |   |  |
|                    | S 4                                     | 0.5 - 0.8   | SD 0.6 x 3.5 mm  |
|                    | ConCept modular frame, metal            | 0.5 - 0.55  | SD 0.6 x 3.5 mm  |
|                    | <b>PE terminal</b>                      |   |  |
|                    | HQ 5                                    | 0.5 - 0.55  | SD 0.6 x 3.5 or 0.8 x 4 mm                               |
|                    | HQ 7                                    | 0.5 - 0.55  | SD 0.6 x 3.5 or 0.8 x 4 mm                               |
|                    | <b>Fastening screws</b>                 | 0.5 - 0.55  | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | <b>Guide pin</b>                        | 0.5 - 0.55  | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | <b>Guide bush</b>                       | 0.5 - 0.55  | SD 0.6 x 3.5 mm or PZ0                                   |
|                    | <b>Coding pins</b>                      | 0.5 - 0.55  | SD 0.6 x 3.5 mm or PZ0                                   |
| <b>M 4</b>         | <b>Contact screws</b>                   |   |  |
|                    | HSB                                     | 1.2 - 1.5   | SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1                        |
|                    | <b>PE connection via male contact</b>   |   |  |
|                    | S 4                                     | 0.5 - 0.8   | SD 0.6 x 3.5 mm  |
|                    | ConCept modular frame, metal            | 1.2 - 1.5   | SD 0.6 x 3.5 mm  |
|                    | <b>PE terminal</b>                      |   |  |
|                    | HA                                      | 1.2 - 1.5   | SD 0.6 x 3.5 or 0.8 x 4 mm or PH1                        |
|                    | HE                                      | 1.2 - 1.5   | SD 0.6 x 3.5 or 0.8 x 4 mm or PH1                        |
|                    | HEE                                     | 1.2 - 1.5   | SD 0.6 x 3.5 or 0.8 x 4 mm or PH1                        |
|                    | HVE                                     | 1.2 - 1.5   | SD 0.6 x 3.5 or 0.8 x 4 mm or PH1                        |
|                    | HD                                      | 1.2 - 1.5   | SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1                        |
|                    | HDD                                     | 1.2 - 1.5   | SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1                        |
|                    | S 6/6 (for signal contacts)             | 1.2 - 1.5   | 0.8 x 4 mm or PZ1  |
|                    | ConCept modular frame, plastic          | 1.2 - 1.5   | 0.8 x 4 mm or PZ1  |
| <b>M 5</b>         | <b>PE terminal</b>                      |   |  |
|                    | HSB                                     | 2 - 2.5   | SD 1 x 5.5 mm or PZ2                                     |
|                    | S 4/0 (Screw connection)                | 2 - 2.5   | SD 1.2 x 6.5 mm or PH2                                   |
|                    | S 4/0 (Axial screw connection)          | 2 - 2.5   | SD 0.8 x 4 mm or PZ 2                                    |
|                    | S 4/2                                   | 2 - 2.5   | SD 1.2 x 6.5 mm or PH2                                   |
|                    | S 4/8                                   | 2 - 2.5   | SD 1.2 x 6.5 mm or PH2                                   |
|                    | S 6/12                                  | 2 - 2.5   | SD 0.8 x 4 mm or PZ 2                                    |
|                    | S 6/36                                  | 2 - 2.5   | SD 1.2 x 6.5 mm or PH2                                   |
|                    | S 8/24                                  | 2 - 2.5   | SD 1.2 x 6.5 mm or PH2                                   |
|                    | S 12/2                                  | 2 - 2.5   | SD 1.2 x 6.5 mm or PH2                                   |
| <b>M 6</b>         | <b>Power contacts</b>                   |   |  |
|                    | S 4/0 (Screw connection)                | 1.2 (1.5 mm <sup>2</sup> ) / 2 (2.5 mm <sup>2</sup> ) / 3 (4-16 mm <sup>2</sup> ) | SD 0.8 x 4 mm  |
|                    | S 4/2                                   | 1.2 (1.5 mm <sup>2</sup> ) / 2 (2.5 mm <sup>2</sup> ) / 3 (4-16 mm <sup>2</sup> ) | SD 0.8 x 4 mm  |
|                    | S 4/8                                   | 1.2 (1.5 mm <sup>2</sup> ) / 2 (2.5 mm <sup>2</sup> ) / 3 (4-16 mm <sup>2</sup> ) | SD 0.8 x 4 mm  |
| <b>M 7 x 0.75</b>  | <b>Power contacts</b>                   |   |  |
|                    | S 4                                     | 1.1 - 1.7   | SW 2   |
|                    | S 6/6 (+ PE)                            | 6 - 8   | SW 4   |
| <b>M 8 x 0.75</b>  | <b>Power contacts</b>                   |   |  |
|                    | S 6/12                                  | 1.1 - 1.7   | SW 2   |
|                    | S 8/0 (+ PE)                            | 6 (10-16 mm <sup>2</sup> ) - 7 (25 mm <sup>2</sup> )                              | SW 4   |
| <b>M10 x 1</b>     | <b>Power contacts</b>                   |   |  |
|                    | S 4/0 (Axial connection)                | 2 - 3   | SW 3   |

Increasing the tightening torque does not improve the contact resistance. The stated torque settings offer optimal mechanical, thermal and electrical conditions. Exceeding the recommended values may even damage the conductor and terminal.