

HDC insert HDC HDD 42 MC

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The HDD series with machined crimp contacts is designed for high pole counts in tight spaces. Users save installation space with the smaller design, without having to limit the number of poles.

The wire connection level is designed as a crimp contact. The established crimp connection has been used as a standard for decades. Crimp contacts are not delivered with the inserts.

Number of poles: 42

Rated current: **10 A**

Rated voltage: **250 V**

Nominal voltage acc. to UL/CSA: **600 V AC/DC**

Crimp connection

General ordering data

| | |
|------------|---|
| Type | HDC HDD 42 MC |
| Order No. | 1651170000 |
| Version | HDC insert, Pin, 250 V, 10 A, No. of poles: 42, Crimp connection, Size: 4 |
| GTIN (EAN) | 4008190299774 |
| Qty. | 1 pc(s). |

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Technical data**Dimensions and weights**

| | | | |
|------------|-------|-----------------|------------|
| Width | 34 mm | Width (inches) | 1.339 inch |
| Height | 35 mm | Height (inches) | 1.378 inch |
| Depth | 64 mm | Depth (inches) | 2.52 inch |
| Net weight | 45 g | | |

Temperatures

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

Dimensions

| | | | |
|----------------|-------|-------------------|-------|
| Height of plug | 35 mm | Total length base | 64 mm |
|----------------|-------|-------------------|-------|

General data

| | | | |
|--------------------------------------|---------------------|------------------------------|---|
| Conductor cross-section | 2.5 mm ² | Insulating material | PC glass-fibre reinforced (UL-listed and railway-certified) |
| Insulating material group | IIIa | Insulation strength | 10 ¹⁰ Ω |
| Material | Copper alloy | No. of poles | 42 |
| Plugging cycles, gold | ≥ 500 | Plugging cycles, silver | ≥ 500 |
| Pollution severity | 3 | Rated current (DIN EN 61984) | 10 A |
| Rated impulse voltage (DIN EN 61984) | 4 kV | Rated voltage (DIN EN 61984) | 250 V |
| Rated voltage according to UL/CSA | 600 V AC/DC | Series | HDD |
| Size | 4 | Surface finish | Silver passivated, gold |
| Type | Pin | UL 94 flammability rating | V-0 |
| Volume resistance | ≤ 4mΩ | | |

Connection data PE

| | | | |
|---|---------------------|---|----------------------------|
| Blade size, crosshead | size PZ 1 | Blade size, slotted (PE connection) | SD 0.6 x 3.5, SD 0.8 x 4.0 |
| Connection type PE | Screw connection | Fixing screw | M 4 |
| Rated cross-section | 2.5 mm ² | Stripping length PE connection | 10 mm |
| Tightening torque, max. PE connection | 1.5 Nm | Tightening torque, min. PE connection | 1.2 Nm |
| Wire connection cross section, finely stranded, max. | 2.5 mm ² | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 2.5 mm ² |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.5 mm ² | Wire connection cross-section, finely stranded, min. | 0.5 mm ² |
| Wire cross section, AWG (PE), max. | AWG 14 | Wire cross section, AWG (PE), min. | AWG 20 |
| Wire cross-section, solid, max. | 2.5 mm ² | Wire cross-section, solid, min. | 0.5 mm ² |

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Technical data

Version

| | | | |
|---|---------------------|---|-------------------------|
| Conductor cross-section, max. | 2.5 mm ² | Conductor cross-section, min. | 0.14 mm ² |
| Material | Copper alloy | Size | 4 |
| Stripping length, rated connection | 8 mm | Surface finish | Silver passivated, gold |
| Type of connection | Crimp connection | Volume resistance | ≤ 4mΩ |
| Wire connection cross section AWG, max. | AWG 14 | Wire connection cross section AWG, min. | AWG 26 |
| Wire connection cross section, finely stranded, max. | 2.5 mm ² | Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max. | 2.5 mm ² |
| Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min. | 0.5 mm ² | Wire connection cross-section, finely stranded, min. | 0.5 mm ² |
| Wire cross-section, solid, max. | 2.5 mm ² | Wire cross-section, solid, min. | 0.5 mm ² |

Classifications

| | | | |
|------------|-------------|------------|-------------|
| ETIM 3.0 | EC001121 | ETIM 4.0 | EC001121 |
| ETIM 5.0 | EC001121 | ETIM 6.0 | EC000438 |
| UNSPSC | 30-21-18-01 | eClass 5.1 | 27-14-34-19 |
| eClass 6.2 | 27-26-12-04 | eClass 7.1 | 27-44-02-05 |
| eClass 8.1 | 27-44-02-05 | eClass 9.0 | 27-44-02-05 |
| eClass 9.1 | 27-44-02-05 | | |

Approvals

Approvals



ROHS

Conform

Downloads

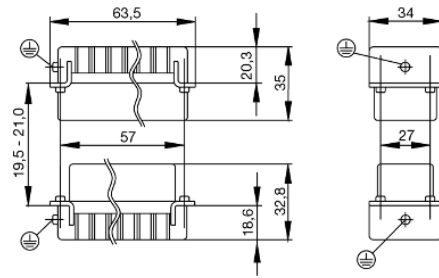
| | |
|--------------------|---|
| Brochure/Catalogue | CAT 3 HDC 17/18 EN FL FIELDWIRING EN |
| Engineering Data | EPLAN, WSCAD, Zuken E3.S |
| Engineering Data | STEP |

Data sheet

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Drawings



Tightening torques and screwing tools

| Screw size | Connector type | Dia. tightening torque in Nm | Recommended blade inserts and AF size for hexagon socket | |
|--------------------------------|---|---|--|-----------------------------------|
| M 2.5 | Signal contacts | | | |
| | S 6/6 | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZO | |
| | S 6/12 | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZO | |
| M 2.9 x 0.5 | Fastening screws | | | |
| | 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 | |
| M 3 | Contact screws | | | |
| | 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 PZO | |
| | HVE | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZO | |
| | Signal contacts: | | | |
| | S 4/2 | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZO | |
| | S 4/8 | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZO | |
| | PE connection via female contact | | | |
| | 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 | |
| | PE terminal | | | |
| | 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 | |
| | Fastening screws | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZO | |
| | Guide pin | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZO | |
| | Guide bush | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZO | |
| | Coding pins | 0.5 - 0.55 | SD 0.6 x 3.5 mm or PZO | |
| | M 4 | Contact screws | | |
| | | HSB | 1.2 - 1.5 | SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1 |
| | | PE connection via male contact | | |
| | | 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 | |
| PE terminal | | | | |
| 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 | |
| M 5 | | PE terminal | | |
| | | 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 | |
| | M 6 | Power contacts | | |
| S 4/0 (Screw connection) | | 1.2 (1.5 mm ²) / 2 (2.5 mm ²) / 3 (4-16 mm ²) | SD 0.8 x 4 mm | |
| S 4/2 | | 1.2 (1.5 mm ²) / 2 (2.5 mm ²) / 3 (4-16 mm ²) | SD 0.8 x 4 mm | |
| S 4/8 | | 1.2 (1.5 mm ²) / 2 (2.5 mm ²) / 3 (4-16 mm ²) | SD 0.8 x 4 mm | |
| M 7 x 0.75 | Power contacts | | | |
| | S 4 | 1.1 - 1.7 | SW 2 | |
| | S 6/6 (+ PE) | 6 - 8 | SW 4 | |
| M 8 x 0.75 | Power contacts | | | |
| | S 6/12 | 1.1 - 1.7 | SW 2 | |
| | S 8/0 (+ PE) | 6 (10-16 mm ²) - 7 (25 mm ²) | SW 4 | |
| M10 x 1 | Power contacts | | | |
| | 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.