

HC-D07-I-CT-M-42V-METAL - Contact insert



1425005

<https://www.phoenixcontact.com/us/products/1425005>

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Contact insert, number of positions: 7+PE, size: D7, Pin, Crimp connection, 42 V, 10 A, 0.14 mm² ... 2.5 mm²

Your advantages

- Can be used in rail vehicles, satisfy DIN EN 45545-2 with requirement sets R22, R23, and R24 in hazard levels HL1, HL2, and HL3.
- Shock and vibration-resistant in accordance with DIN EN 61373

Commercial data

| | |
|--------------------------------------|---------------|
| Item number | 1425005 |
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF61 |
| Product key | AF7ABE |
| GTIN | 4055626383361 |
| Weight per piece (including packing) | 8.71 g |
| Weight per piece (excluding packing) | 8.5 g |
| Customs tariff number | 85389099 |
| Country of origin | CN |

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Technical data

Notes

| | |
|---------|--|
| General | Connectors may be operated only when there is no load/voltage. |
|---------|--|

Mounting

| | |
|---------------|---|
| Assembly note | To ensure correct use, installation in housing with IP54 protection or better is required |
|---------------|---|

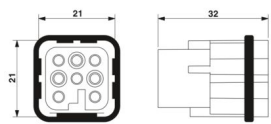
Product properties

| | |
|--------------------------|--|
| Product type | Contact insert with a fixed no. of positions |
| Series | HC-D |
| Type | D7 |
| Number of positions | 7 |
| Note number of positions | 7+PE |
| Connection profile | 7+PE |
| Contact numbering | 1 - 7 |
| Contact material type | turned |

Insulation characteristics

| | |
|----------------------|-----|
| Overvoltage category | III |
| Degree of pollution | 3 |

Dimensions

| | |
|---------------------|--|
| Dimensional drawing |  |
| Height | 32 mm |

Mechanical characteristics

| | |
|------------------|--------|
| Contact diameter | 1.6 mm |
|------------------|--------|

Connection data

Connection technology

| | |
|----------------------------------|------------------|
| Connection technology | Crimp connection |
| Connection in acc. with standard | IEC / EN |

Conductor connection

| | |
|---|--|
| Conductor cross-section | 0.14 mm ² ... 2.5 mm ² |
| Connection cross section AWG | 26 ... 14 |
| Tightening torque | 0.5 Nm ... 0.8 Nm (Mounting screws for mounting in the HEAVYCON housing) |
| Stripping length of the individual wire | 8 mm (0.14 mm ² ... 1.5 mm ²) |

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| | |
|--|-----------------------------|
| | 6 mm (2.5 mm ²) |
|--|-----------------------------|

Electrical properties

| | |
|-----------------------|----------------|
| Rated voltage (III/3) | 42 V |
| Rated surge voltage | 0.8 kV |
| Rated current | 10 A |
| SCCR | 5 kA (UL 2237) |

Mechanical properties

Mechanical data

| | |
|-----------------------------|-------|
| Insertion/withdrawal cycles | ≥ 500 |
|-----------------------------|-------|

Material specifications

| | |
|--|-----------------------|
| Flammability rating according to UL 94 | V0 |
| Seal material Profile gasket | NBR, conductive |
| Contact material | Copper alloy |
| Contact surface material | Ag (alternatively Au) |
| Contact carrier material | PC |
| Standards/regulations | PC |

Environmental and real-life conditions

Ambient conditions

| | |
|---------------------------------|--|
| Ambient temperature (operation) | -40 °C ... 125 °C (including heating up of contacts) |
|---------------------------------|--|

Standards and regulations

| | |
|--|----------------------------|
| Constructional and testing regulations | DIN VDE 0627/86 |
| | DIN VDE 0110/02.79 |
| | DIN VDE 0110-1/04.97 |
| | IEC 60664-1, DIN IEC 60512 |
| | IEC 60352 |
| Tests | DIN VDE 0627/86 |
| | DIN VDE 0110/02.79 |
| | DIN VDE 0110-1/04.97 |
| | IEC 60664-1, DIN IEC 60512 |
| | IEC 60352 |

Testing

| | |
|-----------------------|---|
| Standards/regulations | PC: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3) |
|-----------------------|---|

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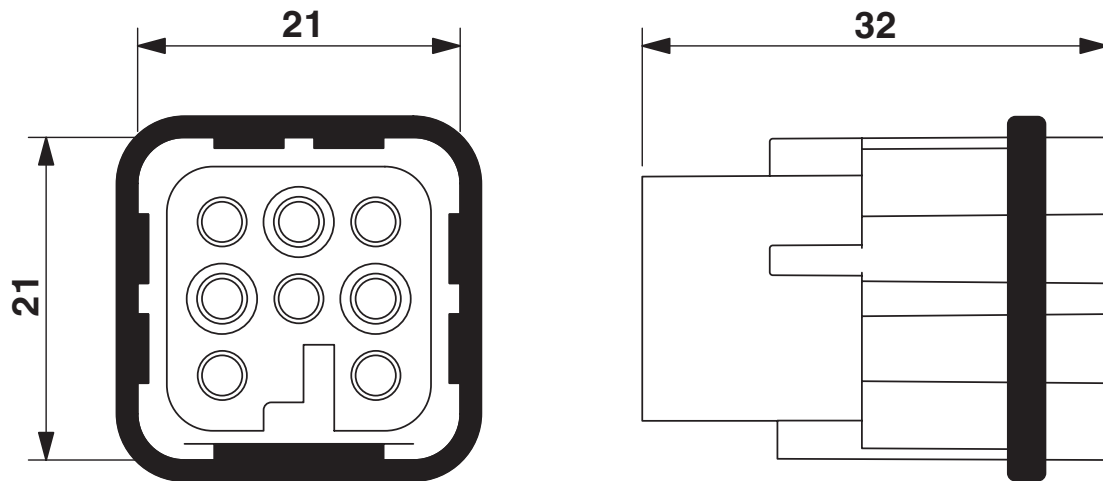


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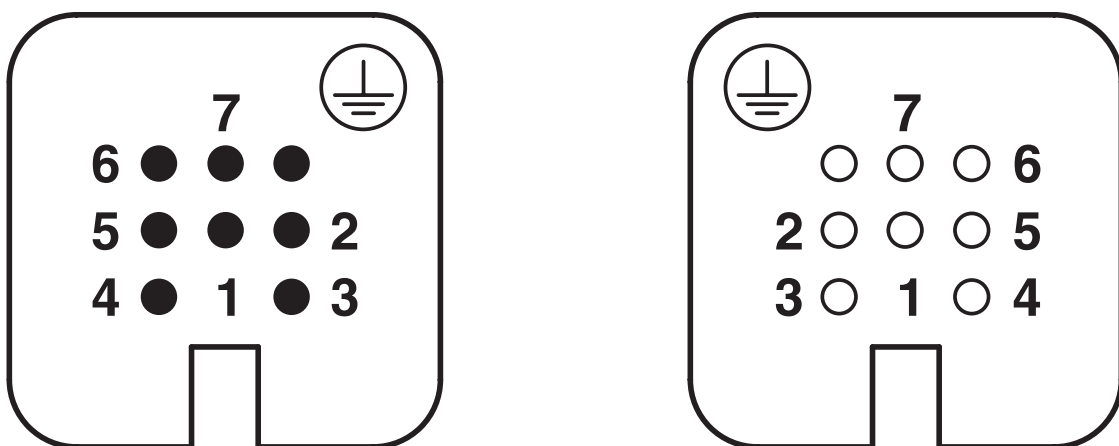
Drawings

Dimensional drawing



Male insert

Schematic diagram

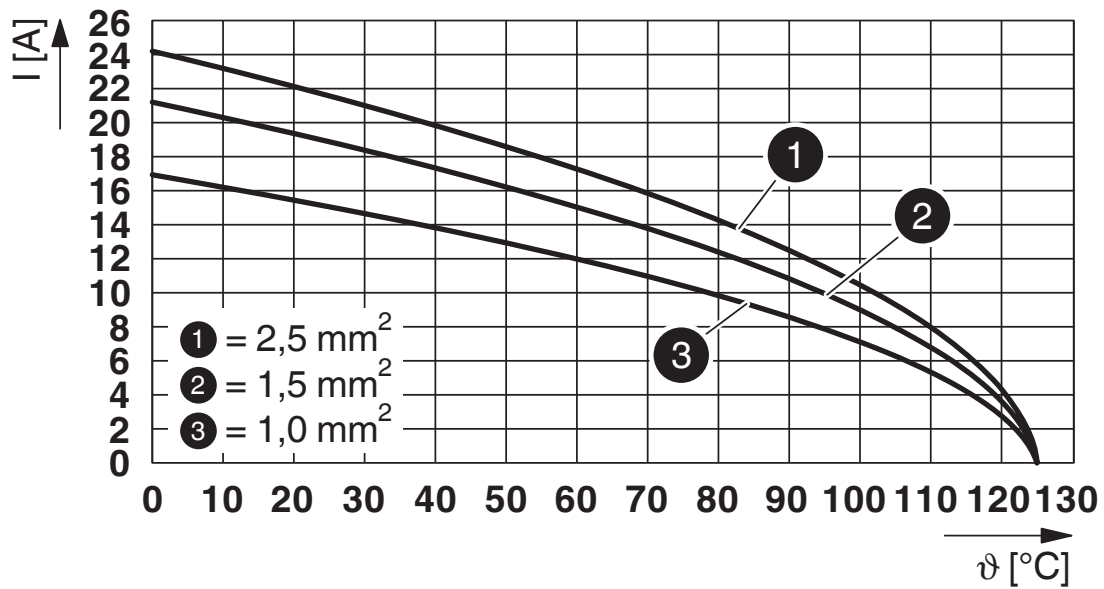


Connector pin assignment connection side: Left pin; right socket

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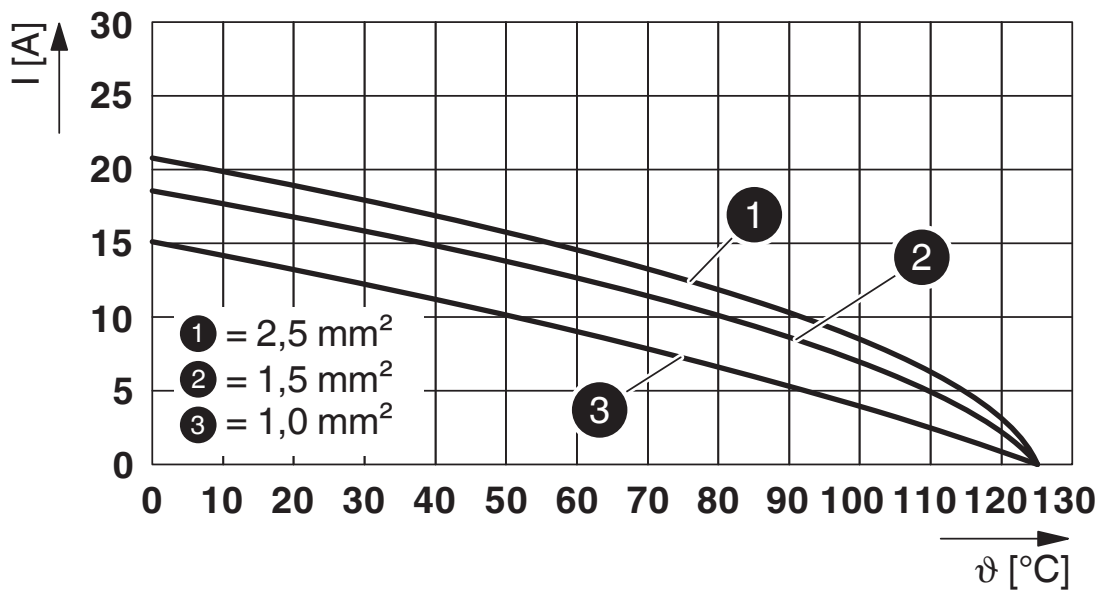
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Diagram



Derating diagram turned contacts

Diagram



Derating diagram rolled contacts

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Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1425005>

DNV

Approval ID: TAE000037S



CSA

Approval ID: 13631

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | | | | |
| | 42 V | 10 A | - 14 | - |



UL Recognized

Approval ID: E118976

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | | | | |
| | 42 V | 10 A | - | - |



UL Recognized

Approval ID: E468743

| | Nominal voltage U_N | Nominal current I_N | Cross section AWG | Cross section mm^2 |
|-------|-----------------------|-----------------------|-------------------|-----------------------------|
| keine | | | | |
| | 42 V | 10 A | - | - |

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Classifications

ECLASS

| | |
|-------------|----------|
| ECLASS-13.0 | 27440205 |
| ECLASS-15.0 | 27440205 |

ETIM

| | |
|-----------|----------|
| ETIM 10.0 | EC000438 |
|-----------|----------|

UNSPSC

| | |
|-------------|----------|
| UNSPSC 21.0 | 39121500 |
|-------------|----------|

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Environmental product compliance

EU RoHS

| | |
|---|--------------------|
| Fulfills EU RoHS substance requirements | Yes, No exemptions |
|---|--------------------|

China RoHS

| | |
|--|--|
| Environment friendly use period (EFUP) | EFUP-E |
| | No hazardous substances above the limits |

EU REACH SVHC

| | |
|-------------------------------------|----------------------------|
| REACH candidate substance (CAS No.) | No substance above 0.1 wt% |
|-------------------------------------|----------------------------|

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