

https://www.phoenixcontact.com/us/products/1407735



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Contact insert, number of positions: 24+PE, size: B24, number of connections per position: 1, Socket, Push-in connection, 500 V, 16 A, 0.14 mm² ... 2.5 mm², application: Power

Your advantages

- Easy installation without tools, even when mounted, with push-in connection technology
- · Shortest installation time compared to other connection technologies
- · Quick and effortless wiring, in particular when space is tight
- · Automatic cabling with robots possible
- · Safe wiring and operation with color-coded actuators
- Shock and vibration-resistant in accordance with DIN EN 61373
- · Cost-effective and fast coding with plastic profiles
- Test pick-off for 2 mm test plug

Commercial data

| Item number | 1407735 |
|--------------------------------------|---------------|
| Packing unit | 1 pc |
| Minimum order quantity | 1 pc |
| Sales key | BF61 |
| Product key | AF7ABC |
| GTIN | 4046356777704 |
| Weight per piece (including packing) | 115 g |
| Weight per piece (excluding packing) | 115 g |
| Customs tariff number | 85366990 |
| Country of origin | CN |



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Technical data

Notes

| General | only use flexible conductors with ferrules |
|---------|----------------------------------------------------------------|
| 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-B |
| Application | Power |
| Туре | B24 |
| | B48 |
| Number of positions | 24 |
| Connection profile | 24+PE |
| Contact numbering | 1 - 24 |
| Number of connections per position | 1 |
| Contact material type | rolled |
| Insulation characteristics | |
| Overvoltage category | III |
| | |

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Dimensions

Degree of pollution

| Dimensional drawing | 110,3 |
|---------------------------------|--------|
| Width | 34 mm |
| Height | 37 mm |
| Length | 111 mm |
| Drill hole distance, horizontal | 104 mm |
| Drill hole distance, vertical | 27 mm |
| Mechanical characteristics | |
| Contact diameter | 2.5 mm |

Connection data

Connection technology

| Connection technology | Push-in connection |
|------------------------------------|--------------------|
| Number of connections per position | 1 |



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Conductor connection

| Conductor cross section | 0.14 mm² 2.5 mm² |
|------------------------------|----------------------------------------------------------------------|
| Connection cross section AWG | 26 14 |
| Tightening torque | 0.8 Nm 1.2 Nm (PE connection) |
| | 0.5 Nm 0.8 Nm (Mounting screws for mounting in the HEAVYCON housing) |
| Stripping length | 8 mm 10 mm |

Electrical properties

| Rated voltage (III/3) | 500 V |
|-----------------------|-----------------------|
| Rated surge voltage | 6 kV |
| Rated current | 16 A (power contacts) |
| SCCR | 5 kA (UL 2237) |

Mechanical properties

Mechanical data

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

Material specifications

| Flammability rating according to UL 94 | V0 |
|----------------------------------------|----------------------------|
| Contact material | Copper alloy |
| Contact surface material | Ag/Sn (tarnish protection) |
| 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

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) |

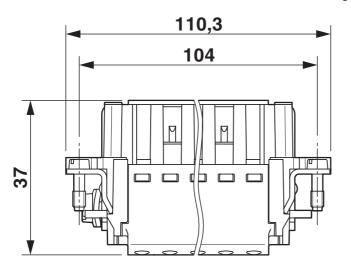


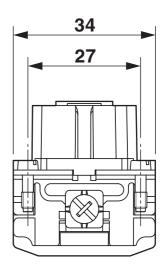
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Drawings

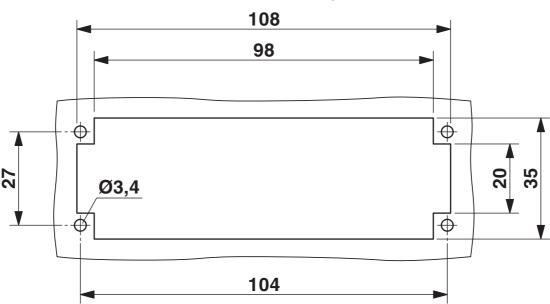
Dimensional drawing





Dimensional drawing

Dimensional drawing



Mounting cutout when used without housing



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Schematic diagram



1 0 0 13

20 014

3 0 0 15

40 016

5 0 0 17

6 0 0 18

7 0 0 19

8 0 0 20

9 0 0 21

100 022

110 023

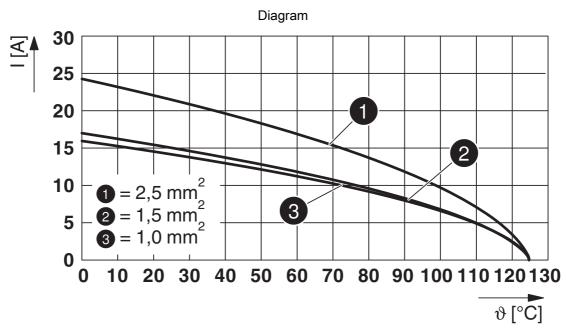
120 024

Connector pin assignment, connection side



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Derating diagram



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Approvals

To download certificates, visit the product detail page: https://www.phoenixcontact.com/us/products/1407735

| DNV | |
|-----------------|----------|
| Approval ID: TA | E0000375 |

| • | CSA Approval ID: 13631 | | | | |
|-------|---------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| keine | | | | | |
| | | 600 V | 10 A | - 14 | - |

| 7. | UL Recognized Approval ID: E118976 | | | | |
|-----------|-------------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| keine | | | | | |
| | | 600 V | 13 A | - 14 | - |

| c FL vs | cULus Recognized Approval ID: E468743 | | | | |
|----------------|---------------------------------------|--------------------------------|--------------------------------|-------------------|-------------------------------|
| | | Nominal voltage U _N | Nominal current I _N | Cross section AWG | Cross section mm ² |
| keine | | | | | |
| | | 600 V | 13 A | - 14 | - |



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Classifications

ECLASS

| | ECLASS-13.0 | 27440205 | | | |
|--------|-------------|----------|--|--|--|
| | ECLASS-15.0 | 27440205 | | | |
| ΕΊ | ETIM | | | | |
| | ETIM 9.0 | 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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