

# HC-DD24-I-CT-F - Contact insert



1584046

<https://www.phoenixcontact.com/us/products/1584046>

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Contact insert, number of positions: 24+PE, size: B6, number of connections per position: 1, Socket, Crimp connection, 250 V, 10 A, 0.14 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, application: Signal

## 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	1584046
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF61
Product key	AF7ABF
GTIN	4046356133357
Weight per piece (including packing)	39.94 g
Weight per piece (excluding packing)	39.5 g
Customs tariff number	85389099
Country of origin	CN

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## Technical data

### Notes

General	For housing HC-B6
General	Connectors may be operated only when there is no load/voltage.
General	It is imperative that guide pins (HC-CST) and sockets (HC-CBU) are used to prevent tip collision due to misalignment.

### Mounting

Assembly note	To ensure correct use, installation in housing with IP54 protection or better is required
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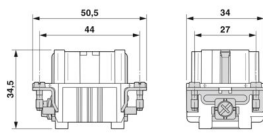
### Product properties

Product type	Contact insert with a fixed no. of positions
Series	HC-DD
Application	Signal
Type	B6
Number of positions	24
Connection profile	24+PE
Contact numbering	1 - 24
Number of connections per position	1
Contact material type	turned rolled

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Dimensions

Dimensional drawing	
Width	34 mm
Height	34.5 mm
Length	50.5 mm
Drill hole distance, horizontal	44 mm
Drill hole distance, vertical	27 mm

### Mechanical characteristics

Minimum housing height	72 mm
Contact diameter	1.6 mm

### Connection data

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## Connection technology

Connection technology	Crimp connection
Number of connections per position	1
Connection in acc. with standard	IEC / EN

## Conductor connection

Conductor cross-section	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
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 of the individual wire	8 mm (0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> )
	6 mm (2.5 mm <sup>2</sup> )

## Electrical properties

Rated voltage (III/3)	250 V
Rated surge voltage	4 kV
Rated current	10 A
SCCR	5 kA (UL 2237)

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	≥ 500
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## Material specifications

Flammability rating according to UL 94	V0
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)
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## 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

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	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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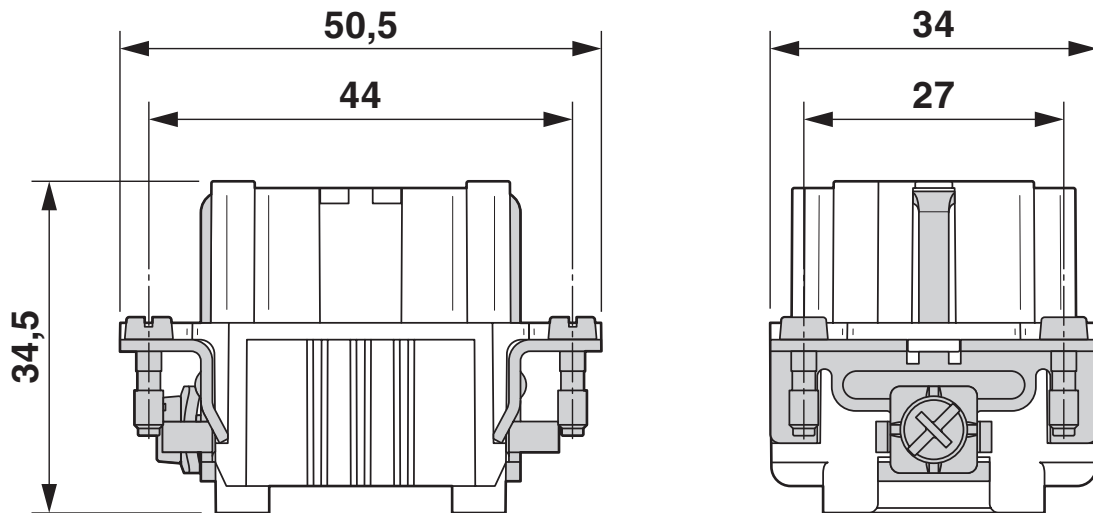
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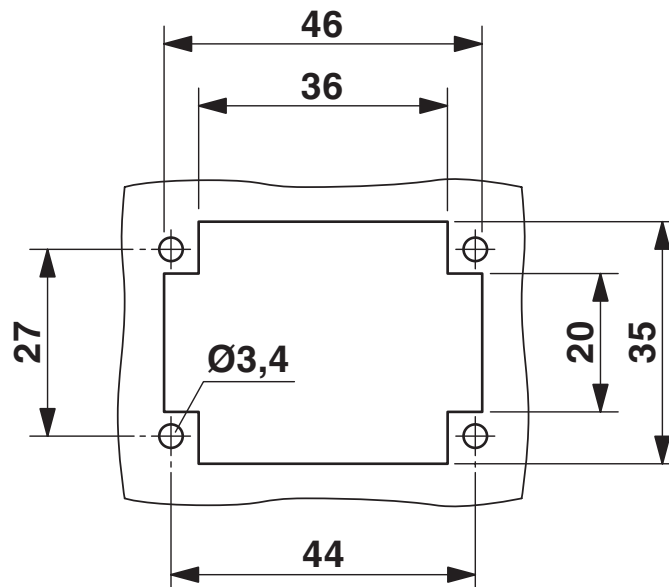
## Drawings

Dimensional drawing



## Female insert

Dimensional drawing



Mounting cutout when used without housing

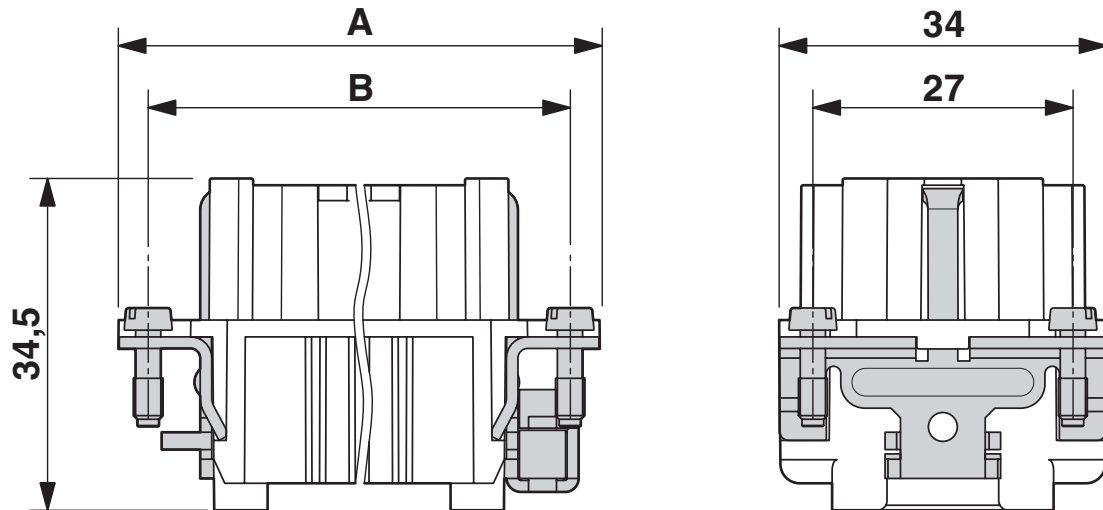
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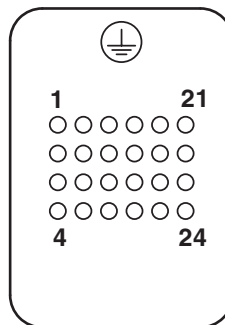
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Dimensional drawing



Schematic diagram



Connector pin assignment, connection side

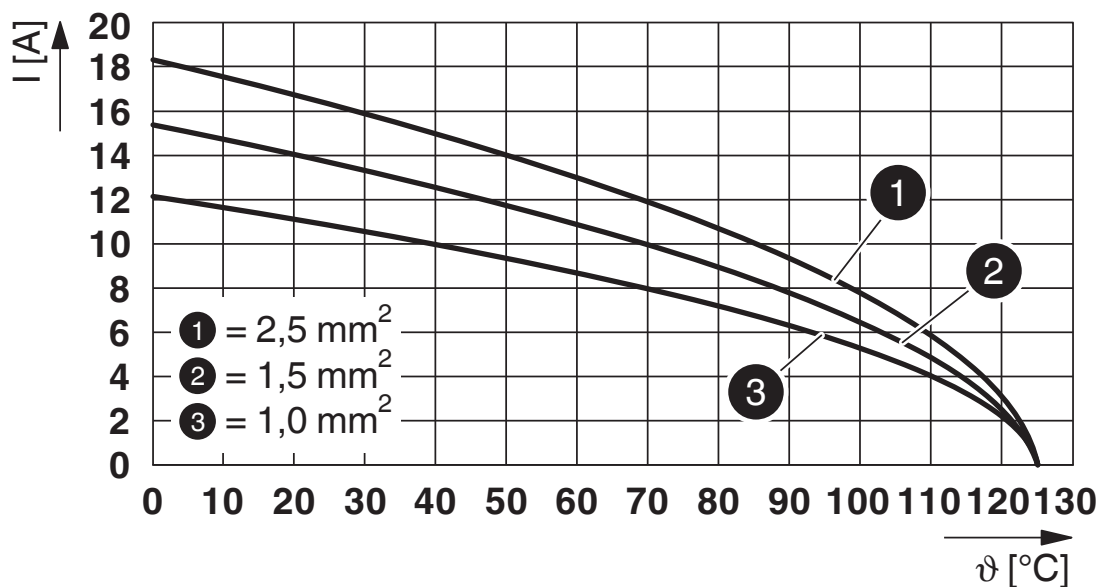
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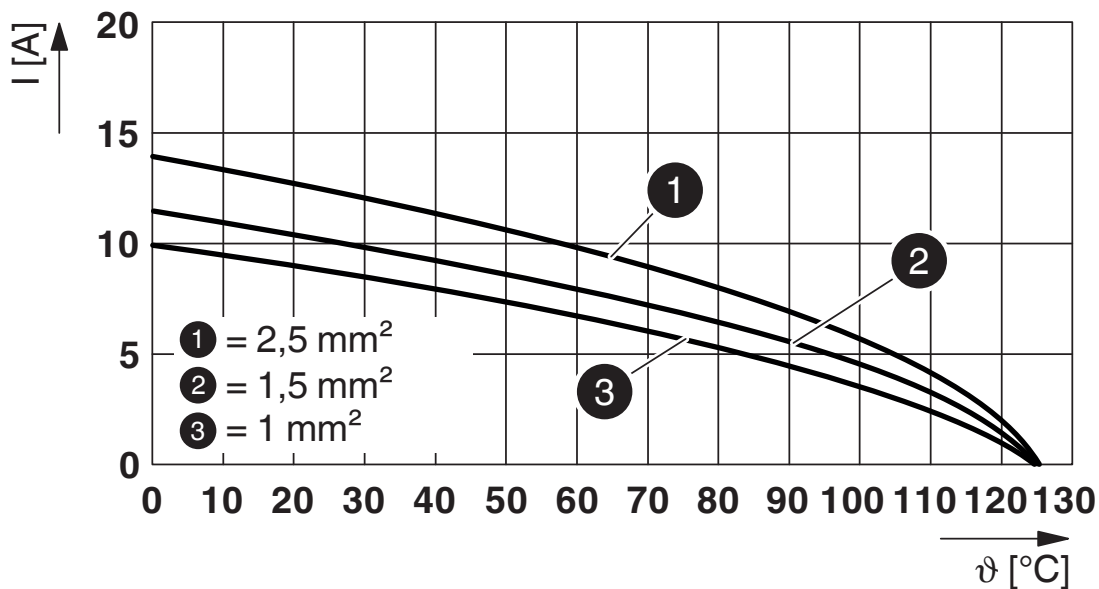
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Diagram



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/1584046>

### DNV

Approval ID: TAE000037S



### CSA

Approval ID: 013631\_6233\_01

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	250 V	7 A	26 - 14	-



### cUL Recognized

Approval ID: E118976

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	250 V	7 A	- 14	-



### UL Recognized

Approval ID: E118976

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	250 V	10 A	- 14	-



### cULus Recognized

Approval ID: E468743

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	250 V	7 A	- 14	-

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## Classifications

### ECLASS

ECLASS-13.0	27440205
ECLASS-15.0	27440205

### ETIM

ETIM 10.0	EC000438
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### UNSPSC

UNSPSC 21.0	39121500
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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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