

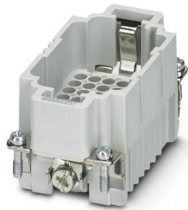
# HC-DD42-I-CT-M - Contact insert



1584059

<https://www.phoenixcontact.com/us/products/1584059>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Contact insert, number of positions: 42+PE, size: B10, number of connections per position: 1, Pin, 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	1584059
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF61
Product key	AF7ABF
GTIN	4046356133364
Weight per piece (including packing)	43.2 g
Weight per piece (excluding packing)	43.2 g
Customs tariff number	85389099
Country of origin	CN

# HC-DD42-I-CT-M - Contact insert



1584059

<https://www.phoenixcontact.com/us/products/1584059>

## Technical data

### Notes

General	For housing HC-B10
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
---------------	---

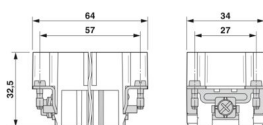
### Product properties

Product type	Contact insert with a fixed no. of positions
Series	HC-DD
Application	Signal
Type	B10
Number of positions	42
Connection profile	42+PE
Contact numbering	1 - 42
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	32.5 mm
Length	64 mm
Drill hole distance, horizontal	57 mm
Drill hole distance, vertical	27 mm

### Mechanical characteristics

Minimum housing height	72 mm
Contact diameter	1.6 mm

### Connection data

# HC-DD42-I-CT-M - Contact insert



1584059

<https://www.phoenixcontact.com/us/products/1584059>

## 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
-----------------------------	-------

## 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)
---------------------------------	--

## 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

# HC-DD42-I-CT-M - Contact insert



1584059

<https://www.phoenixcontact.com/us/products/1584059>

	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)

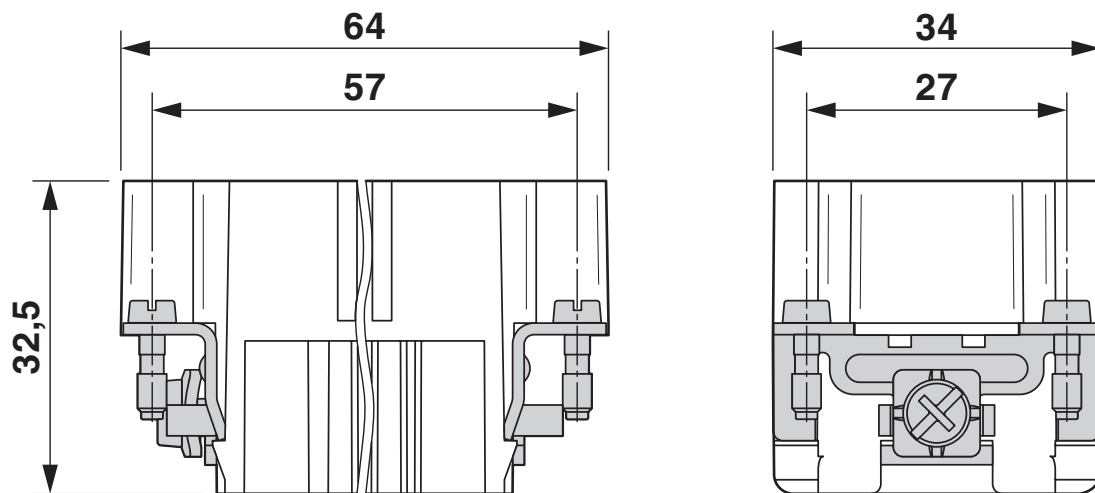
# HC-DD42-I-CT-M - Contact insert

1584059

<https://www.phoenixcontact.com/us/products/1584059>

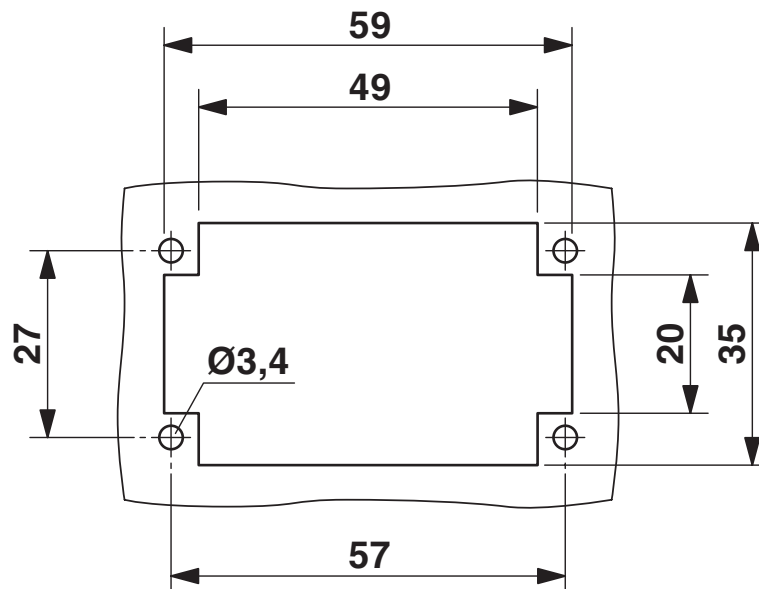
## Drawings

Dimensional drawing



Male insert

Dimensional drawing



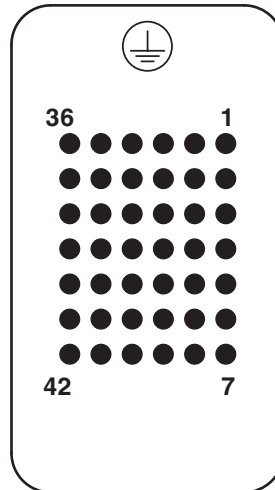
Mounting cutout when used without housing

# HC-DD42-I-CT-M - Contact insert

1584059

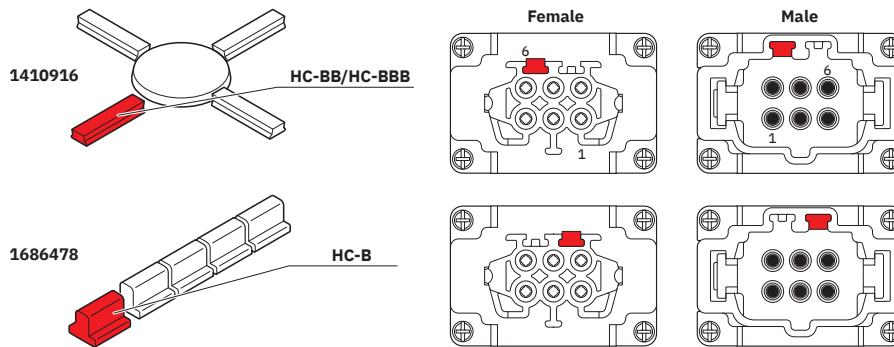
<https://www.phoenixcontact.com/us/products/1584059>

Schematic diagram



Connector pin assignment, connection side

Schematic diagram



Coding options

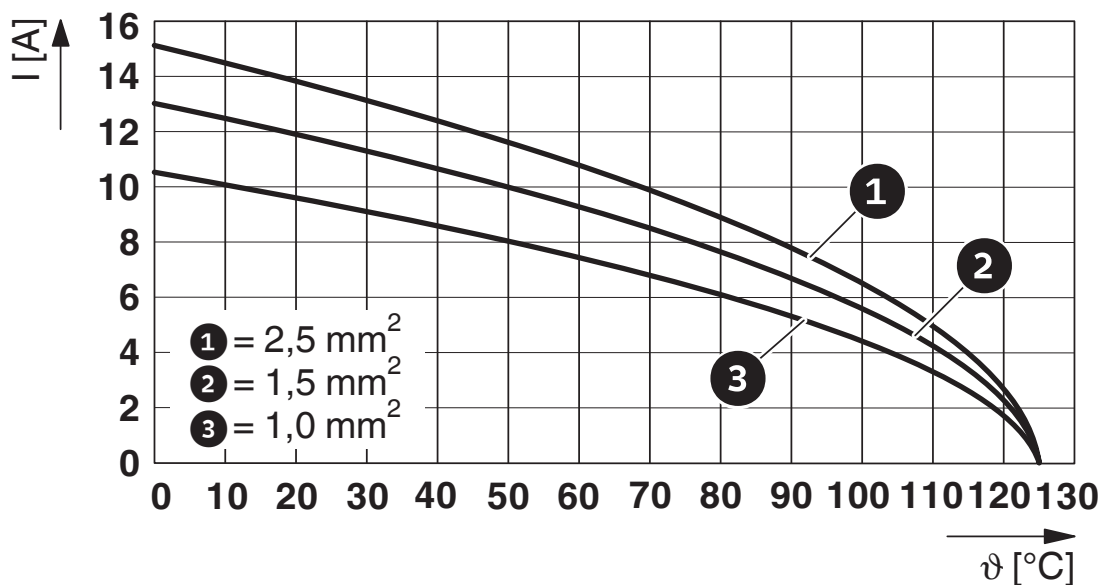
# HC-DD42-I-CT-M - Contact insert



1584059

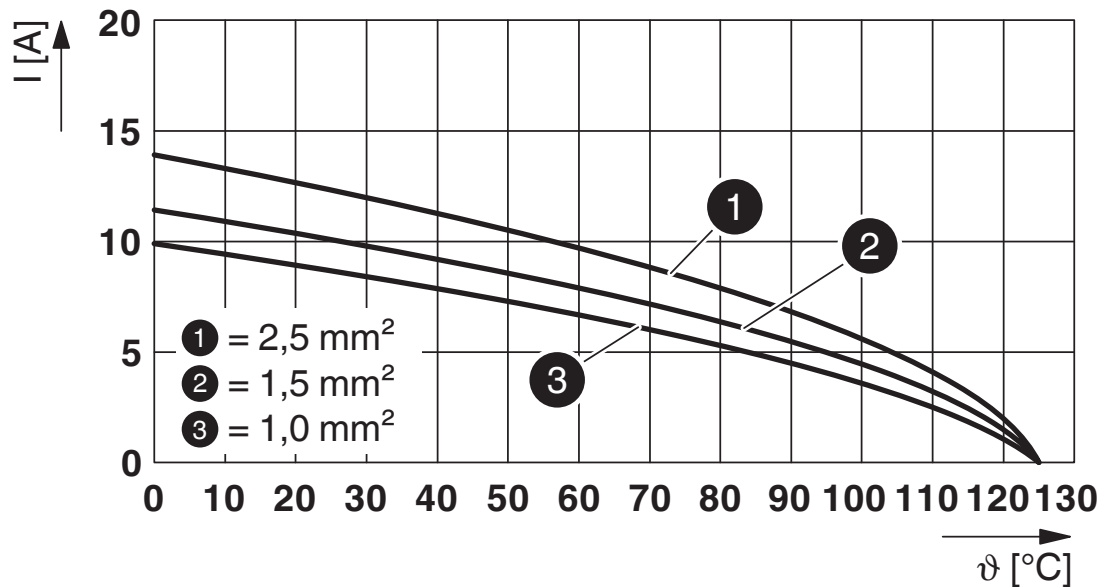
<https://www.phoenixcontact.com/us/products/1584059>

Diagram



Derating diagram turned contacts

Diagram



Derating diagram rolled contacts

# HC-DD42-I-CT-M - Contact insert



1584059

<https://www.phoenixcontact.com/us/products/1584059>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1584059>

### 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	-

# HC-DD42-I-CT-M - Contact insert



1584059

<https://www.phoenixcontact.com/us/products/1584059>

## Classifications

### ECLASS

ECLASS-13.0	27440205
ECLASS-15.0	27440205

### ETIM

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

### UNSPSC

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

# HC-DD42-I-CT-M - Contact insert



1584059

<https://www.phoenixcontact.com/us/products/1584059>

## 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%
-------------------------------------	----------------------------

Phoenix Contact 2026 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)