

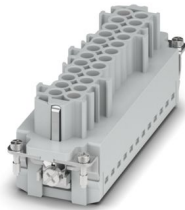
# HC-HV10-I-PT-F - Contact insert



1407745

<https://www.phoenixcontact.com/us/products/1407745>

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: 10+2+PE, size: B24, power contacts: 10, control contacts: 2, number of connections per position: 1, Socket, Push-in connection, 690 V, 16 A, 0.14 mm<sup>2</sup> ... 2.5 mm<sup>2</sup>, 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

## Commercial data

Item number	1407745
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF61
Product key	AF7ABG
GTIN	4046356777506
Weight per piece (including packing)	98 g
Weight per piece (excluding packing)	90 g
Customs tariff number	85366990
Country of origin	CN

# HC-HV10-I-PT-F - Contact insert



1407745

<https://www.phoenixcontact.com/us/products/1407745>

## Technical data

### Mounting

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

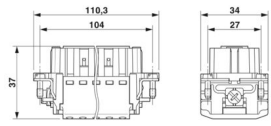
### Product properties

Product type	Contact insert with a fixed no. of positions
Series	HC-HV
Application	Power
Type	B24 B48
Number of positions	12
Connection profile	10+2+PE
Number of connections per position	1
No. of power contacts	10
No. of control contacts	2

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Dimensions

Dimensional drawing	
Width	34 mm
Height	34.6 mm
Length	111 mm
Drill hole distance, horizontal	104 mm

### Mechanical characteristics

Contact diameter	2.5 mm
------------------	--------

### Connection data

#### Connection technology

Connection technology	Push-in connection (power contacts) Push-in connection (control contacts)
Number of connections per position	1

#### Conductor connection

Conductor cross-section	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> 0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (control contacts)
-------------------------	---

# HC-HV10-I-PT-F - Contact insert



1407745

<https://www.phoenixcontact.com/us/products/1407745>

Connection cross section AWG	26 ... 14 (power contacts)
	26 ... 14 (control contacts)
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 (power contacts)
	8 mm ... 10 mm (control contacts)

## Electrical properties

Rated voltage (III/2) contacts	830 V
Rated voltage (III/3)	690 V
Rated surge voltage (III/2)	8 kV
Rated surge voltage (III/3)	6 kV
Rated surge voltage	8 kV (power contacts)
	6 kV (control contacts)
Rated current	16 A
	16 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 carrier material	PC
Material of contact surface, power contact	Ag
Material of contact surface, control contact	Ag
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)
-----------------------	---

# HC-HV10-I-PT-F - Contact insert

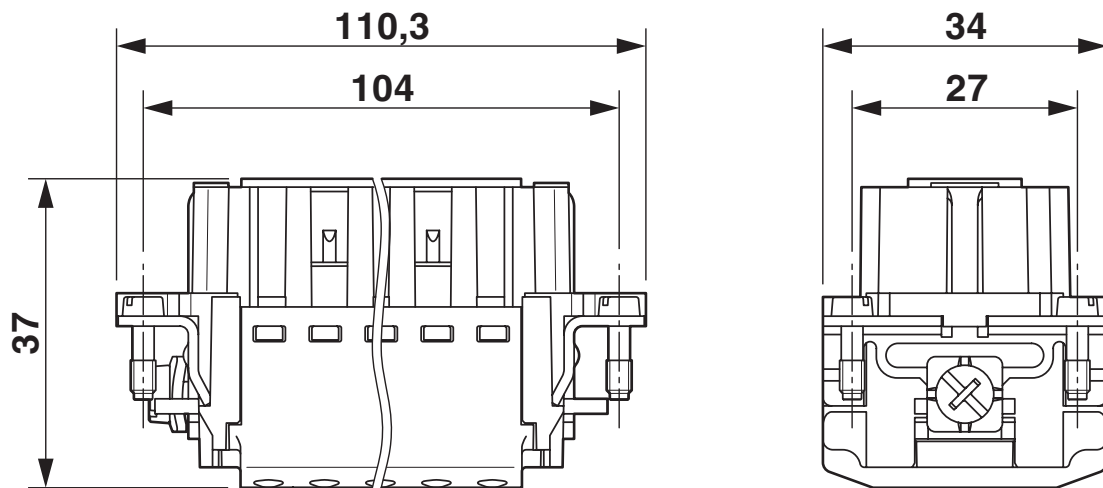


1407745

<https://www.phoenixcontact.com/us/products/1407745>

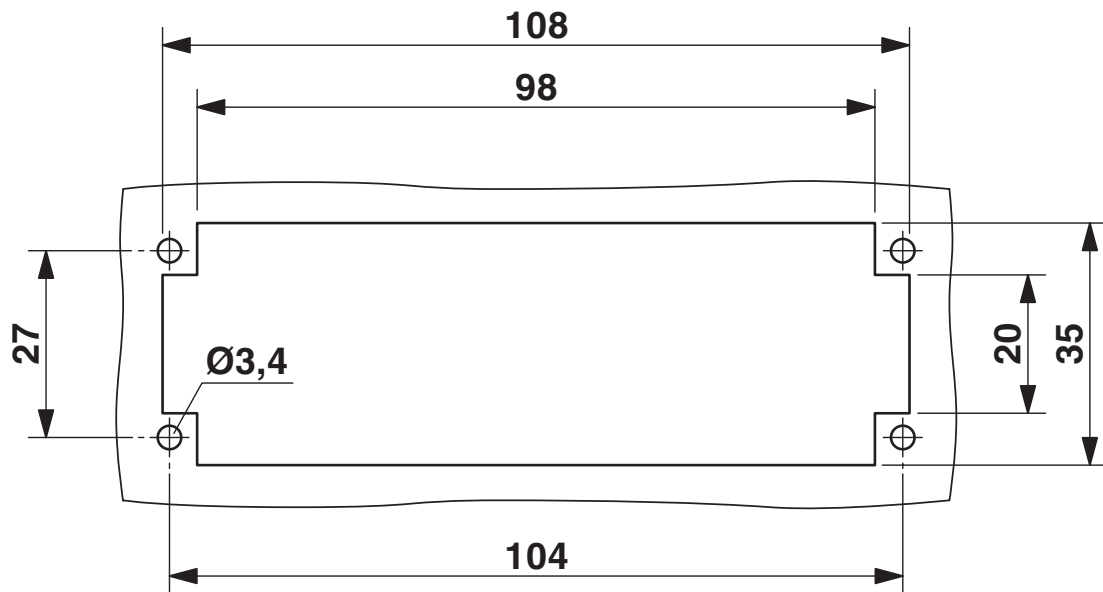
## Drawings

Dimensional drawing



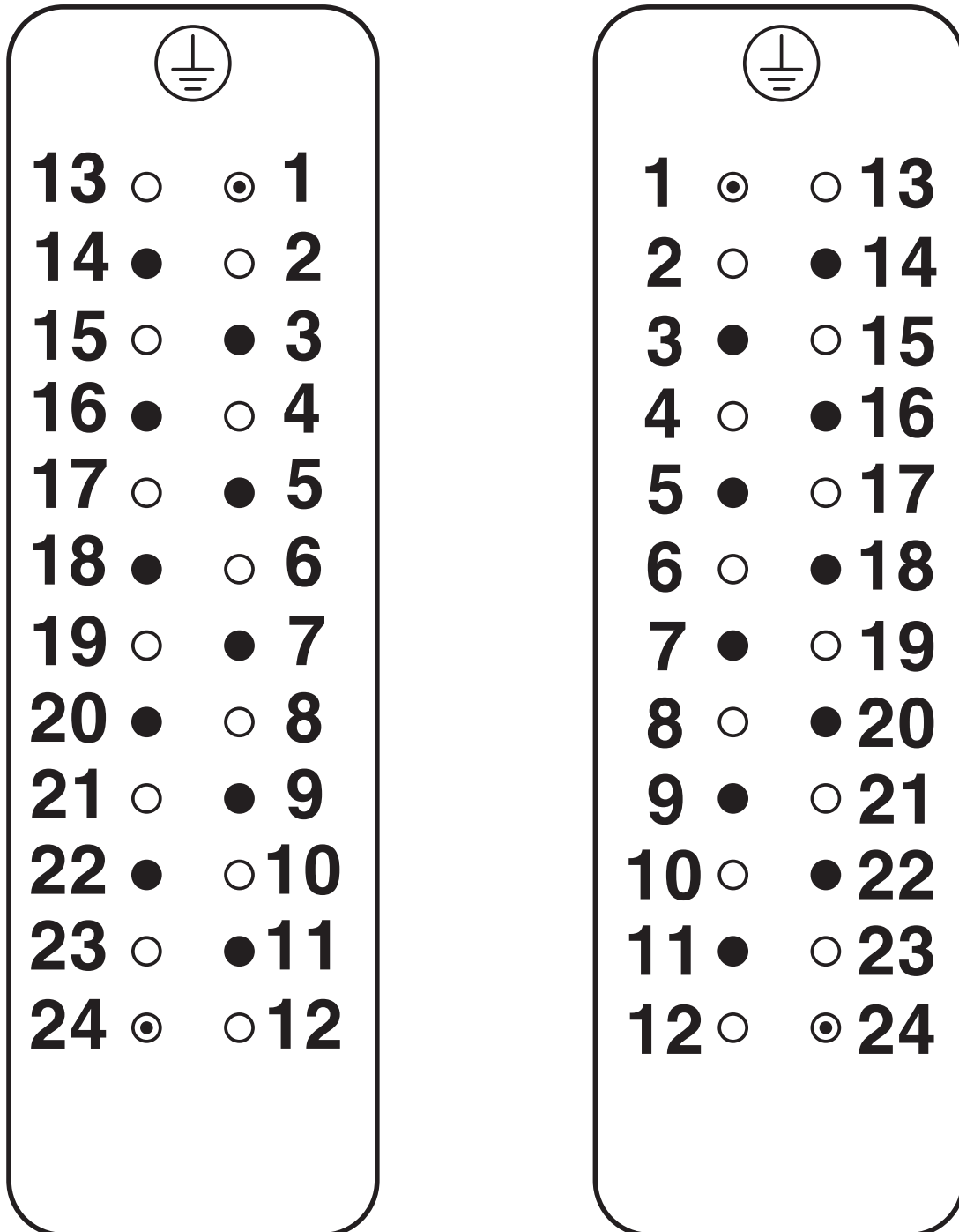
Dimensional drawing

Dimensional drawing



Mounting cutout when used without housing

Schematic diagram

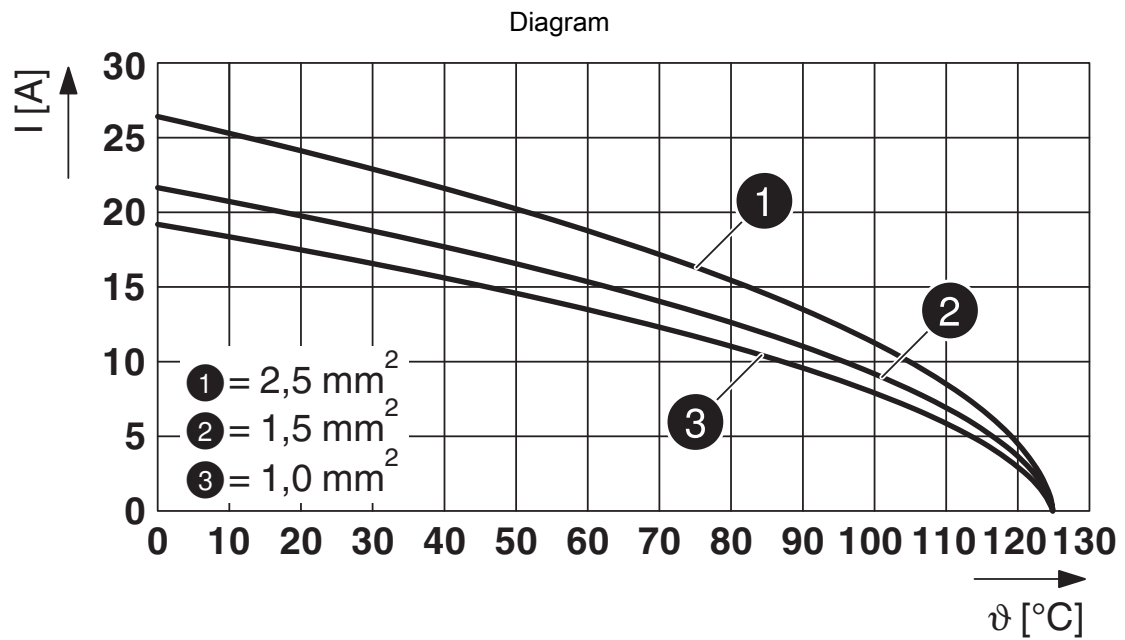


View termination side

# HC-HV10-I-PT-F - Contact insert

1407745

<https://www.phoenixcontact.com/us/products/1407745>



Derating diagram

# HC-HV10-I-PT-F - Contact insert



1407745

<https://www.phoenixcontact.com/us/products/1407745>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1407745>

### DNV

Approval ID: TAE000037S



### CSA

Approval ID: 013631\_0\_000

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	600 V	15 A	- 14	-



### UL Recognized

Approval ID: E118976

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	600 V	20 A	- 14	-



### cULus Recognized

Approval ID: E468743

	Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine				
	600 V	20 A	- 14	-

# HC-HV10-I-PT-F - Contact insert



1407745

<https://www.phoenixcontact.com/us/products/1407745>

## Classifications

### ECLASS

ECLASS-13.0	27440205
ECLASS-15.0	27440205

### ETIM

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

### UNSPSC

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

# HC-HV10-I-PT-F - Contact insert



1407745

<https://www.phoenixcontact.com/us/products/1407745>

## 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)