

# HC-K 4/2-ESTS - Contact insert



1686889

<https://www.phoenixcontact.com/us/products/1686889>

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Contact insert, number of positions: 4+2+PE, size: B16, power contacts: 4, control contacts: 2, Pin, Screw connection, 830 V, 80 A, 1.5 mm<sup>2</sup> ... 16 mm<sup>2</sup>, application: Power/signal

## Your advantages

- Shock and vibration-resistant in accordance with DIN EN 61373

## Commercial data

Item number	1686889
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF61
Product key	AF7ABA
GTIN	4017918924119
Weight per piece (including packing)	122.2 g
Weight per piece (excluding packing)	122.2 g
Customs tariff number	85366990
Country of origin	CN

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## Technical data

### Mounting

Assembly note	To ensure correct use, installation in housing with IP54 protection or better is required
	Use wire end protection (screw connections do not have wire protection)

### Product properties

Product type	Contact insert with a fixed no. of positions
Series	HC-K
Application	Power/signal
Type	B16 B32
Number of positions	6
Connection profile	4+2+PE
Contact numbering	1 - 4 (power contacts) 1 - 2 (control contacts)
No. of power contacts	4
No. of control contacts	2
Contact material type	turned
Screwdriver blade	0.8 x 4.5 mm (power contacts)

### Insulation characteristics

Overvoltage category	III
Degree of pollution	3

### Dimensions

Dimensional drawing	
Width	34 mm
Height	42 mm
Length	84.5 mm
Drill hole distance, horizontal	77.5 mm

### Connection data

#### Connection technology

Connection technology	Screw connection (power contacts)
	Screw connection (control contacts)

#### Conductor connection

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Conductor cross-section	1.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> (power contacts)
	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (control contacts)
Connection cross section AWG	16 ... 6 (power contacts)
	20 ... 14 (control contacts)
Tightening torque	0.8 Nm ... 1.2 Nm (PE connection cross-section with cable lug expandable to 16 mm <sup>2</sup> )
	0.5 Nm ... 0.8 Nm (Mounting screws for mounting in the HEAVYCON housing)
	3 Nm (Power contacts for cross sections of 2.5 mm <sup>2</sup> ... 16 mm <sup>2</sup> ; (2 Nm for cross section 2.5 mm <sup>2</sup> ))
	0.5 Nm (control contacts)
Stripping length of the individual wire	1.2 Nm (Power contacts for cross section 1.5 mm <sup>2</sup> )
	14 mm (Power)
	7.5 mm (Signal)

## Electrical properties

Rated voltage (III/3)	830 V (power contacts)
	400 V (control contacts)
Rated surge voltage	8 kV (power contacts)
	6 kV (control contacts)
Rated current	80 A (power contacts)
	16 A (control contacts)

## Mechanical properties

### Mechanical data

Insertion/withdrawal cycles	≥ 500
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## Material specifications

Flammability rating according to UL 94	V0
Contact material	Cu alloy
Contact carrier material	PC
Material of contact surface, power contact	Ag
Material of contact surface, control contact	Ag
Standards/regulations	PC
	PC

## Environmental and real-life conditions

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 125 °C
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## Standards and regulations

### Testing

Standards/regulations	PC: Fire protection in rail vehicles - requirement set R22 acc. to DIN EN 45545-2 (Risk level HL1 - HL2)
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PC: Fire protection in rail vehicles - requirement set R23 acc. to  
DIN EN 45545-2 (Risk level HL1 - HL3)

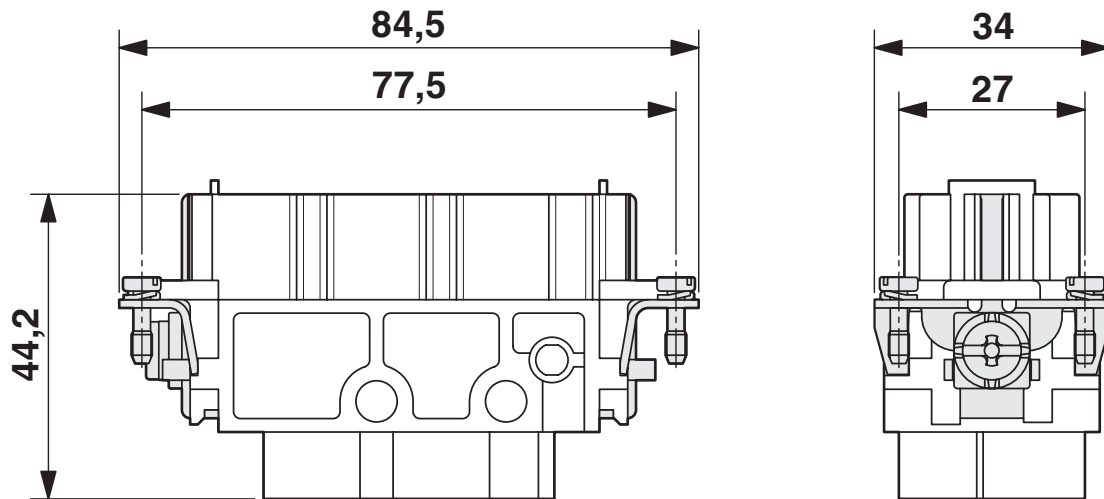
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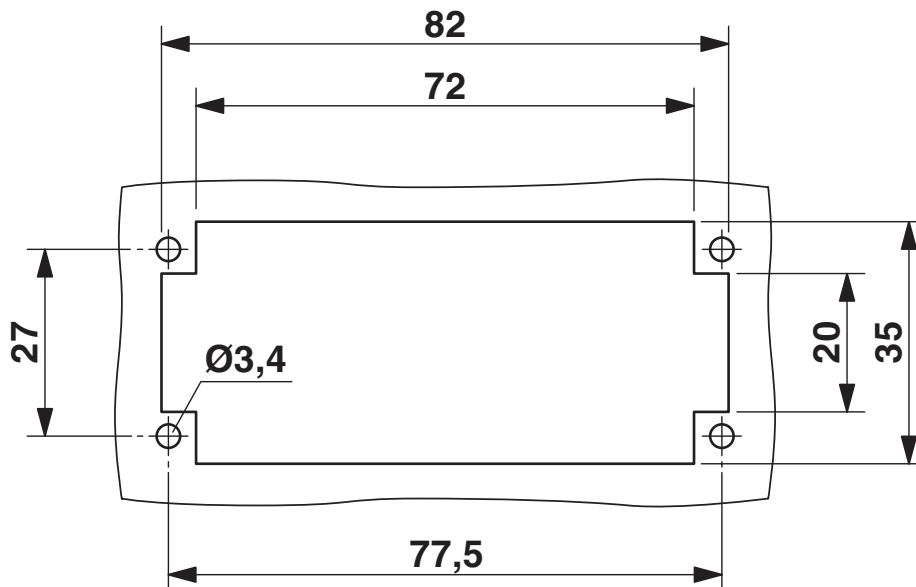
## Drawings

Dimensional drawing



## Male insert

Dimensional drawing



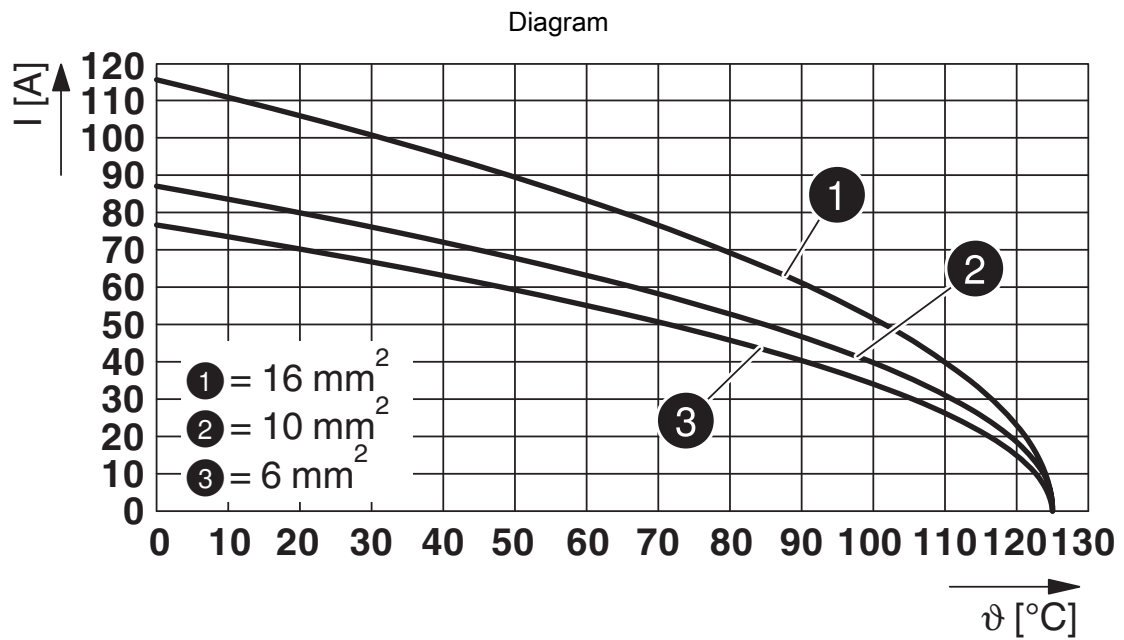
Mounting cutout when used without housing

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Derating diagram

# HC-K 4/2-ESTS - Contact insert




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## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/1686889>

 <b>UL Recognized</b> Approval ID: E118976		Nominal voltage $U_N$	Nominal current $I_N$	Cross section AWG	Cross section $\text{mm}^2$
keine					
Power		600 V	80 A	- 6	-
Control		600 V	16 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
Exemption	6(c)

### China RoHS

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

### EU REACH SVHC

REACH candidate substance (CAS No.)	Lead(CAS: 7439-92-1)
SCIP	1cdb4eed-7837-4c3b-9923-9ac67f935628

### EF3.1 Climate Change

CO2e kg	14.706 kg CO2e
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