

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, $1.5~\text{mm}^2$... $16~\text{mm}^2$

Commercial data

Item number	1686889
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF61
Product key	BF7ABA
Catalog page	Page 565 (C-2-2019)
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

Notes

General	For housing HC-B16
General	Connectors may be operated only when there is no load/voltage.

Mounting

Assembly instructions	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
Туре	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)

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Dimensions

Overvoltage category

Degree of pollution

Dimensional drawing	84.5 77.5 - 27 - 27 - 27 - 27
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)



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	Screw connection (control contacts)
Conductor connection	
Conductor cross section	1.5 mm ² 16 mm ² (power contacts)
	0.5 mm ² 2.5 mm ² (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 mm²)
	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 ² 16 mm ² ; (2 Nm for cross section 2.5 mm ²))
	0.5 Nm (control contacts)
	1.2 Nm (Power contacts for cross section 1.5 mm²)
Stripping length of the individual wire	14 mm (Power)
	7.5 mm (Signal)
ectrical 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)
echanical properties	
Mechanical data	
Insertion/withdrawal cycles	≥ 500
aterial specifications	
ateriai specifications	
Flammability rating according to UL 94	V0
·	V0 Cu alloy
Flammability rating according to UL 94	
Flammability rating according to UL 94 Contact material	Cu alloy
Flammability rating according to UL 94 Contact material Contact carrier material	Cu alloy PC
Flammability rating according to UL 94 Contact material Contact carrier material Material of contact surface, power contact	Cu alloy PC Ag
Flammability rating according to UL 94 Contact material Contact carrier material Material of contact surface, power contact Material of contact surface, control contact	Cu alloy PC Ag Ag PC: Fire protection in rail vehicles - requirement set R22 acc. to
Flammability rating according to UL 94 Contact material Contact carrier material Material of contact surface, power contact Material of contact surface, control contact	Cu alloy PC Ag Ag PC: Fire protection in rail vehicles - requirement set R22 acc. to DIN EN 45545-2 (Risk level HL1 - HL2) PC: Fire protection in rail vehicles - requirement set R23 acc. to
Flammability rating according to UL 94 Contact material Contact carrier material Material of contact surface, power contact Material of contact surface, control contact Standards/regulations	Cu alloy PC Ag Ag PC: Fire protection in rail vehicles - requirement set R22 acc. to DIN EN 45545-2 (Risk level HL1 - HL2) PC: Fire protection in rail vehicles - requirement set R23 acc. to

Standards and regulations



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Testing

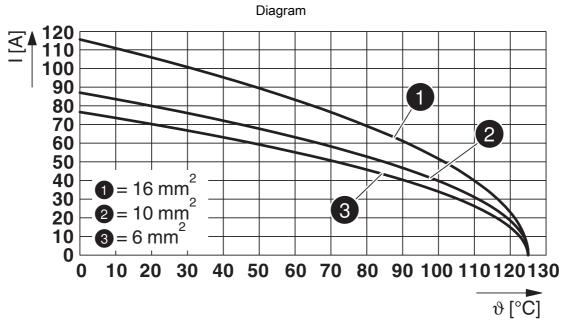
Standards/regulations	PC: Fire protection in rail vehicles - requirement set R22 acc. to DIN EN 45545-2 (Risk level HL1 - HL2)
	PC: Fire protection in rail vehicles - requirement set R23 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)



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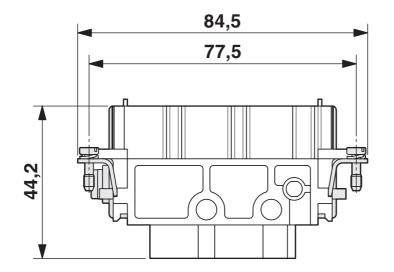


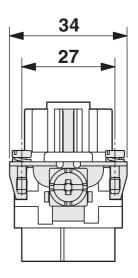
Drawings



Derating diagram

Dimensional drawing



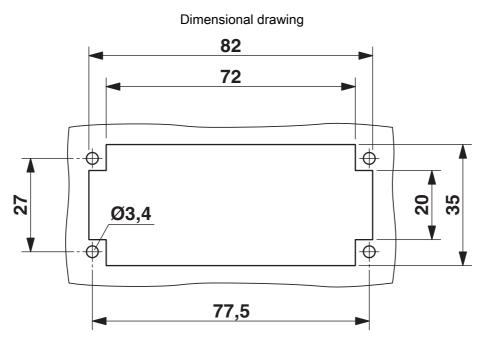


Male insert



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Mounting cutout when used without housing



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Approvals

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

UL Recognize Approval ID: E118	ed 1976			
	Nominal voltage U_N	Nominal current I _N	Cross section AWG	Cross section mm ²
Power	600 V	80 A	- 6	-
Control	600 V	16 A	14	-

EAC
Approval ID: RU C-DE.BL08.B.00511



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Classifications

ECLASS

	ECLASS-11.0	27440205	
	ECLASS-12.0	27440205	
	ECLASS-13.0	27440205	
ETIM			
	ETIM 8.0	EC000438	
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)			



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Accessories

HC-CB - Coding bolt

1772722

https://www.phoenixcontact.com/us/products/1772722



Coding pin, prevents mismating of up to six connectors with an identical number of positions

HC-CST - Coding element

1676857

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Coding peg for coding up to 16 connectors



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HC-CBU - Coding element

1676860

https://www.phoenixcontact.com/us/products/1676860



Coding socket for coding up to 16 connectors

C-RC 16/M5 DIN - Ring cable lug

3240094

https://www.phoenixcontact.com/us/products/3240094



Ring cable lug, non-insulated, 16 mm², M5



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HC-K 4/2-EBUS - Contact insert

1686876

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Contact insert, number of positions: 4+2+PE, size: B16, power contacts: 4, control contacts: 2, Socket, Screw connection, 830 V, 80 A, 1.5 mm^2 ... 16 mm^2

SZF 2-0,8X4,0 - Screwdriver

1204520

https://www.phoenixcontact.com/us/products/1204520



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: $0.8 \times 4.0 \times 100$ mm, 2-component grip, with non-slip grip



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SF-SL 0,6X3,5-100 S-VDE - Screwdriver

1212587

https://www.phoenixcontact.com/us/products/1212587



Actuation tool, for ST terminal blocks, VDE insulated, with slimmer insulation integrated in the blade, also suitable for use as a bladed screwdriver, size: $0.6 \times 3.5 \times 100$ mm, 2-component grip, with non-slip grip

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