

Contact insert - HC-B 24-ESTQ-2,5 - 1605640

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HEAVYCON male insert, B24 series, 24-pos., QUICKON connection


Product Description

Contact insert

With QUICKON connection technology, the wires are connected with just a turn of the screwdriver. The wires do not have to be stripped first. This reduces connection time by at least 60%.



Key Commercial Data

Packing unit	10 pc
GTIN	 4 017918 940737
GTIN	4017918940737

Technical data

General

Note	Connectors may be operated only when there is no load/voltage.
Connection method	QUICKON connection
Torque	0.8 Nm ... 1.2 Nm (PE connection) 0.5 Nm ... 0.8 Nm (Mounting screws for mounting in the HEAVYCON housing)
Number of connections per position	1
Degree of pollution	3
Overvoltage category	III
Number of positions	24+PE
Insertion/withdrawal cycles	≥ 500
Size	B24 B48
Contact numbering	1 - 24
Conductor cross section	0.34 mm ² ... 2.5 mm ² (Litz wire structure VDE 0295, Class 1 - 5/litz wire diameter ≥ 0.2 mm)

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Technical data

General

Connection cross section AWG	22 ... 14
Wire diameter including insulation	1 mm ... 3.5 mm
Frequency of connections between conductors of the same cross section	10
Assembly instructions	To ensure correct use, installation in housing with IP54 protection or better is required

Ambient conditions

Ambient temperature (operation)	-40 °C ... 125 °C (including heating up of contacts)
Ambient temperature (assembly)	-25 °C ... 50 °C

Material data

Contact material	Copper alloy
Contact surface material	Ag
Contact carrier material	PA
Material wire insulation	PVC / PE
Standards/regulations	PA: Fire protection in rail vehicles - requirement sets R22 and R23 acc. to DIN EN 45545-2 (Risk level HL1 - HL2)
	PA: Fire protection in rail vehicles - requirement set R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)

Electrical characteristics

Rated voltage (III/3)	500 V
Rated surge voltage	6 kV
	6 kV
Rated current	16 A
	16 A

Standards and Regulations

Connection in acc. with standard	CSA
Flammability rating according to UL 94	V0
Standards/regulations	acc. to DIN EN 45545-2

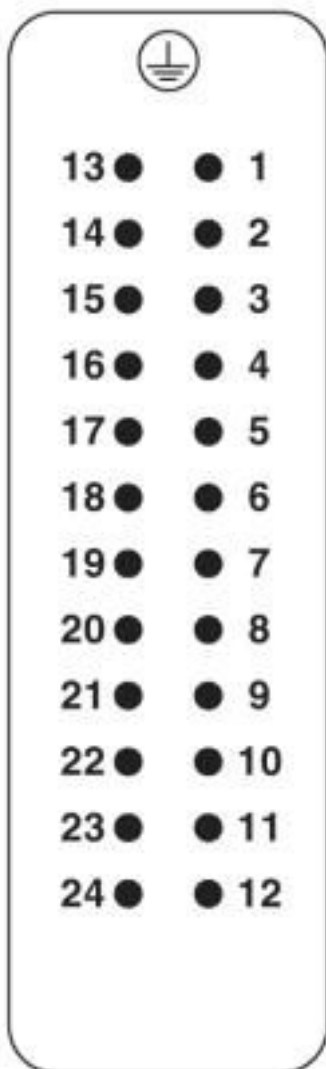
Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Contact insert - HC-B 24-ESTQ-2,5 - 1605640

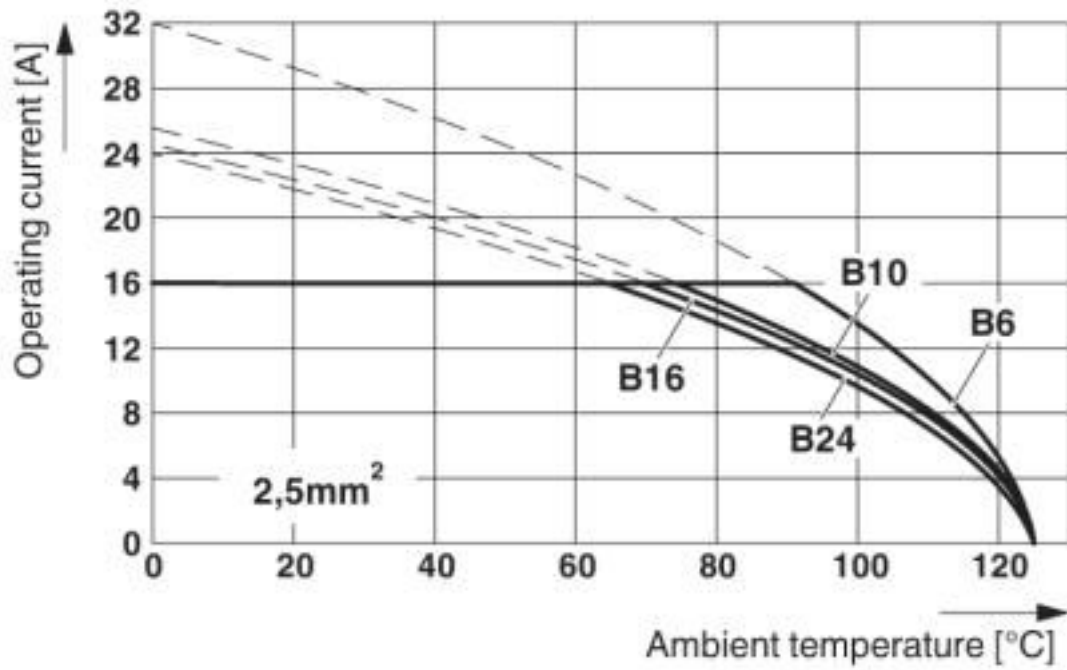
Schematic diagram



Connector pin assignment, connection side

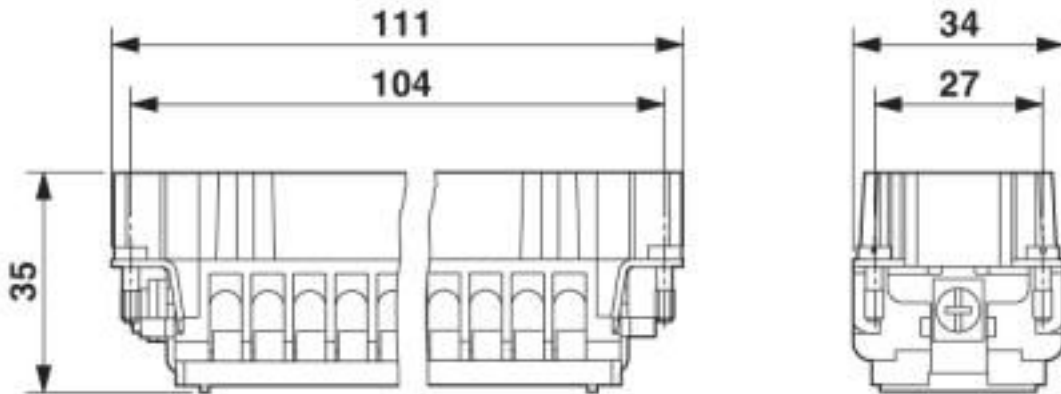
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Diagram



The figure shows the derating diagram of various series B contact inserts (B6 to B24), conductor cross section 2.5 mm²

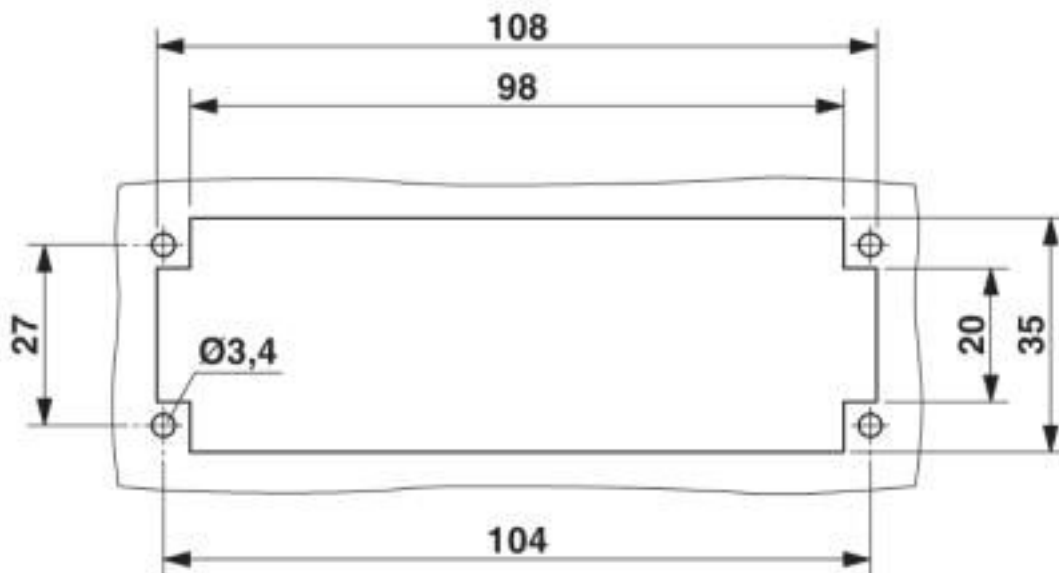
Dimensional drawing



Male insert

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Dimensional drawing



Mounting cutout when used without housing

Classifications

eCl@ss

eCl@ss 10.0.1	27440205
eCl@ss 4.0	27140800
eCl@ss 4.1	27140800
eCl@ss 5.0	27143400
eCl@ss 5.1	27261200
eCl@ss 6.0	27261200
eCl@ss 7.0	27440205
eCl@ss 8.0	27440205
eCl@ss 9.0	27440205

ETIM

ETIM 2.0	EC000437
ETIM 3.0	EC000437
ETIM 4.0	EC000438
ETIM 5.0	EC000438
ETIM 6.0	EC000438
ETIM 7.0	EC000438

UNSPSC

UNSPSC 6.01	30211923
UNSPSC 7.0901	39121522
UNSPSC 11	39121522

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Classifications

UNSPSC

UNSPSC 12.01	39121522
UNSPSC 13.2	39121522
UNSPSC 18.0	39121522
UNSPSC 19.0	39121522
UNSPSC 20.0	39121522
UNSPSC 21.0	39121522

Approvals


Approvals


Approvals


CSA / UL Recognized / cUL Recognized / EAC / DNV GL / EAC / cULus Recognized

Ex Approvals

Approval details

CSA		http://www.csagroup.org/services-industries/product-listing/	013631_6233_01
Nominal voltage UN		600 V	
Nominal current IN		10 A	
mm ² /AWG/kcmil		16	

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 118976
Nominal voltage UN		600 V	
Nominal current IN		10 A	
mm ² /AWG/kcmil		14	

cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 118976
Nominal voltage UN		600 V	
Nominal current IN		10 A	

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Approvals

mm ² /AWG/kcmil	14
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EAC		RU C- DE.AI30.B.01102
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DNV GL		https://approvalfinder.dnvgl.com/	TAE000037S
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EAC		RU C- DE.BL08.B.00511
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cULus Recognized	
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Accessories

Accessories

Coding element

Coding profile - CP-HC - 1686478



Coding profile, 4 coding profiles per strip, for insertion in coding keyways

Coding element - HC-CST - 1676857



Coding peg for coding up to 16 connectors

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Accessories

Coding element - HC-CBU - 1676860



Coding socket for coding up to 16 connectors

Coding bolt - HC-CB - 1772722



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

Mounting material

Screw - HC-B-PES - 1604997



PE screw, for contact inserts HC-B / HC-BB / HC-DD / HC-D40 / HC-D64

PE multiplier - HC-B-3PE - 1644326



PE multiplier, for three PE connections, for HC-B (besides HC-B..E..ZZ) / HC-BB / HC-DD / HC-D40 / HC-D64 contact inserts

Strain relief clamp - HC-B-ZG - 1685327



Strain relief clamps contact inserts of series: B-, BB-, D 40, D 64, DD and HV, straight cable exit

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Accessories

Strain relief clamp - HC-B-ZS - 1685330



Strain relief clamps contact inserts of series: B-, BB-, D 40, D 64, DD and HV, lateral cable exit

Additional products

Contact insert - HC-B 24-EBUQ-2,5 - 1605585



HEAVYCON female insert, B24 series, 24-pos., QUICKON-connection

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