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HEAVYCON female insert, DD72 series, 72-pos., crimp connection

#### 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.



# **Key Commercial Data**

Packing unit	1 pc
GTIN	4 046356 133401
GTIN	4046356133401
Weight per Piece (excluding packing)	80.480 g
Custom tariff number	85389099
Country of origin	China

#### Technical data

#### General

Note	For HEAVYCON ADVANCE and HEAVYCON housing of type B16, crimp contacts: CK 1,6-ED (not included in scope of supply)
	Connectors may be operated only when there is no load/voltage.
	It is imperative that guide pins (HC-CST) and sockets (HC-CBU) are used to prevent tip collision due to misalignment.
Connection method	Crimp connection
Torque	0.8 Nm 1.2 Nm (PE connection)
	0.5 Nm 0.8 Nm (Mounting screws for mounting in the HEAVYCON housing)



# Technical data

# General

Number of connections per position	1
Degree of pollution	3
Overvoltage category	III
Number of positions	72+PE
Insertion/withdrawal cycles	≥ 500
Size	B16
	B32
Contact numbering	1 - 72
Conductor cross section	0.14 mm <sup>2</sup> 2.5 mm <sup>2</sup>
Connection cross section AWG	26 14
Stripping length of the individual wire	8 mm (0.14 1.5 mm²)
	6 mm (2.5 mm²)
Minimum housing height	72 mm
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)
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# Material data

Contact material	Copper alloy
Contact surface material	Ag (alternatively Au)
Contact carrier material	PC
Standards/regulations	PC: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)

# Electrical characteristics

Rated voltage (III/3)	250 V
Rated surge voltage	4 kV
Rated current	10 A

# Standards and Regulations

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



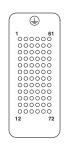
# Technical data

# **Environmental Product Compliance**

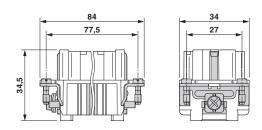
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

# Drawings

# Schematic diagram



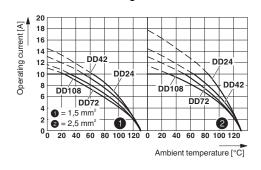
# Dimensional drawing



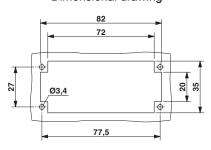
Connector pin assignment, connection side

Female insert

# Diagram



Dimensional drawing



Mounting cutout when used without housing

Derating diagram

# Classifications

# eCl@ss

eCl@ss 10.0.1	27440205
eCl@ss 11.0	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



# Classifications

# eCl@ss

eCl@ss 8.0	27440205
eCl@ss 9.0	27440205

# **ETIM**

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

# UNSPSC

UNSPSC 6.01	30211923
UNSPSC 7.0901	39121522
UNSPSC 11	39121522
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

 ${\sf CSA} \ / \ {\sf UL} \ {\sf Recognized} \ / \ {\sf EAC} \ / \ {\sf DNV} \ {\sf GL} \ / \ {\sf EAC} \ / \ {\sf cULus} \ {\sf Recognized}$ 

Ex Approvals

# Approval details

CSA	http://www.csagroup.org/services-industries/product-listing/		013631_6233_01
Nominal voltage UN		250 V	



# Approvals

Nominal current IN	7 A
mm²/AWG/kcmil	26-14

UL Recognized	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 118976
Nominal voltage UN		250 V	
Nominal current IN		10 A	
mm²/AWG/kcmil		14	

cUL Recognized	<b>.511</b>	http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm		FILE E 118976
Nominal voltage UN			250 V	
Nominal current IN			7 A	
mm²/AWG/kcmil			14	

EAC [A[	RU C- DE.Al30.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	c <b>71</b> 1 us			
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# Accessories

Accessories

Assembly tool



#### Accessories

Assembly tool - UNIFOX MT-CK 1.6/2.5 - 1089092



Assembly tool, for CK 1.6... crimp contacts for small conductor cross sections

# Coding element

Coding element - HC-CBU - 1676860



Coding socket for coding up to 16 connectors

Coding element - HC-CST - 1676857



Coding peg for coding up to 16 connectors

Coding element - HC-CP-CK1.6-PL - 1095422



Coding element for HC-D and HC-DD contact inserts with pole loss. Installed in the socket contact chamber.

# Crimp contact

Crimp contact - CK1,6-ED-0,37BU AG - 1663394



Turned 1.6 crimp contact, individual female contact, core diameter 0.14 to 0.37 mm², silver-plated



#### Accessories

Crimp contact - CK1,6-ED-0,50BU AG - 1663404



Crimp contact, contact diameter: 1.6 mm, turned, Socket, contact material: Cu alloy, nickel-plated, contact surface: silver-plated, connection cross section: 0.5 mm² ... 0.5 mm², AWG 20

Crimp contact - CK1,6-ED-0,75BU AG - 1663417



Crimp contact, contact diameter: 1.6 mm, turned, Socket, contact material: Copper alloy, contact surface: silver-plated, connection cross section: 0.75 mm² ... 0.75 mm², AWG 18

Crimp contact - CK1,6-ED-1,00BU AG - 1663420



Crimp contact, contact diameter: 1.6 mm, turned, Socket, contact material: Copper alloy, contact surface: silver-plated, connection cross section: 0.75 mm² ... 1 mm², AWG 18

Crimp contact - CK1,6-ED-1,50BU AG - 1663433



Turned 1.6 crimp contact, individual female contact, core diameter 1.5 mm², silver-plated

Crimp contact - CK1,6-ED-2,50BU AG - 1663446



Turned 1.6 crimp contact, individual female contact, core diameter 2.5  $\,$  mm $^2$ , silver-plated



#### Accessories

Crimp contact - CK1,6-ED-0,37BU AU - 1674969



Turned 1.6 crimp contact, individual female contact, core diameter 0.14 to 0.37 mm², gold-plated

Crimp contact - CK1,6-ED-0,50BU AU - 1674480



Crimp contact, contact diameter: 1.6 mm, turned, Socket, contact material: Copper alloy, contact surface: gold-plated, connection cross section: 0.5 mm² ... 0.5 mm², AWG 20

Crimp contact - CK1,6-ED-0,75BU AU - 1672440



Crimp contact, contact diameter: 1.6 mm, turned, Socket, contact material: Copper alloy, contact surface: gold-plated, connection cross section: 0.75 mm² ... 0.75 mm², AWG 18

Crimp contact - CK1,6-ED-1,00BU AU - 1674943



Crimp contact, contact diameter: 1.6 mm, turned, Socket, contact material: Copper alloy, contact surface: gold-plated, connection cross section: 0.75 mm² ... 1 mm², AWG 18

Crimp contact - CK1,6-ED-1,50BU AU - 1674930



Crimp contact, contact diameter: 1.6 mm, turned, Socket, contact material: Copper alloy, contact surface: gold-plated, connection cross section: 1.5 mm² ... 1.5 mm², AWG 16



#### Accessories

Crimp contact - CK1,6-ED-2,50BU AU - 1674985



Turned 1.6 crimp contact, individual female contact, core diameter 2.5 mm², gold-plated

Crimp contact - CK1,6-ER-1,00BU OIC AG - 1004362



Crimp contact, contact diameter: 1.6 mm, rolled, Socket, contact material: Cu alloy, nickel-plated, contact surface: silver-plated, connection cross section: 0.34 mm² ... 1 mm², AWG 22 ... 17

Crimp contact - CK1,6-ER-2,50BU OIC AG - 1004366



Crimp contact, contact diameter: 1.6 mm, rolled, Socket, contact material: Cu alloy, nickel-plated, contact surface: silver-plated, connection cross section: 1.5 mm² ... 2.5 mm², AWG 16 ... 14

Crimp contact - CK1,6-BR-1,00BU OIC AG - 1004381



Crimp contact, contact diameter: 1.6 mm, rolled, Socket, contact material: Cu alloy, nickel-plated, contact surface: silver-plated, connection cross section: 0.34 mm² ... 1 mm², AWG 22 ... 17, Taped products

Crimp contact - CK1,6-BR-2,50BU OIC AG - 1004383



Crimp contact, contact diameter: 1.6 mm, rolled, Socket, contact material: Cu alloy, nickel-plated, contact surface: silver-plated, connection cross section: 1.5 mm $^2$  ... 2.5 mm $^2$ , AWG 16 ... 14, Taped products

Crimping tool



# Accessories

Crimping pliers - CRIMPFOX-TC 4 - 1212113



Crimping pliers, for CK 1,6-ED..., CK 2,5-ED..., CK 4,0-ED... turned contacts, 4 marked die stations, unlockable pressure lock, lateral entry, incl. positioning tool

# Docking frame

Docking frames - HC-B 16-ANDOCK - 1586138



Docking frame for racks, for contact inserts of B16 type, with four M5 flat headed screws, rack balance x/y axis ± 1.5 mm

# Fiber optics contact

Female contact - CK1,6-ED-BU-POF - 1885004



POF fiber optic socket contact, turned, for contact carriers (HC-DD...I-CT.../ HC-M-12-CT-F.../ HC-M-17-CT-F...) of CK1,6-ED... contacts

# Mounting material

Screw - HC-B-PES - 1604997



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



#### Accessories

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

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

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

#### Universal tools

Contact removal tool - UNIFOX RT-CK 1.6 - 1072069



Contact removal tool, for turned and rolled CK- 1.6-... contacts

Front plate - HC-DD72-FP-F - 1201498



Guide element/front plate for the easy and secure connection of HC-DD series high-position connectors. Snap onto the contact insert. During connection, the pin contact is guided into place first, preventing contact with the socket contact.



# Accessories

Additional products

Contact insert - HC-DD72-I-CT-M - 1584075



HEAVYCON male insert, DD72 series, 72-pos., crimp connection

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