

1417407

<https://www.phoenixcontact.com/us/products/1417407>

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Contact insert module, number of positions: 2, power contacts: 2, control contacts: 0, Socket, Crimp connection, 2900 V/5000 V, 16 A, 0.5 mm² ... 4 mm², application: High-voltage

Commercial data

Item number	1417407
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	BF62
Product key	BF7ACE
Catalog page	Page 579 (C-2-2019)
GTIN	4055626112725
Weight per piece (including packing)	59.6 g
Weight per piece (excluding packing)	55.2 g
Customs tariff number	85389099
Country of origin	PL

Technical data

Notes

General	For HEAVYCON housing type B6 to B48, HC-M-B...MF-... hinged module carrier frame required, CK2,5-ED... imp contacts, crimp contacts not supplied as standard.
General	Connectors may be operated only when there is no load/voltage.

Mounting

Assembly note	To ensure correct use, installation in housing with IP54 protection or better is required Assembly procedure: - Strip wire 9.5 mm, - connect the stripped part of the wire through the locking sleeve (for wire diameter > 3.2 mm), - crimp wire (with protracted locking sleeve) with CK2.5...ED crimp contact, - lock the locking sleeve with the crimp contact together with the module's insulating body.
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Product properties

Product type	Modular contact insert
Series	HC-M-HV
Application	High-voltage
Number of positions	2
Connection profile	2
Contact numbering	I, II
Number of module slots	2
No. of power contacts	2
No. of control contacts	0
Contact material type	turned

Insulation characteristics

Overvoltage category	III
Degree of pollution	3

Connection data

Connection technology

Connection technology	Crimp connection
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Conductor connection

Conductor cross section	0.5 mm² ... 4 mm²
Connection cross section AWG	20 ... 12
Stripping length of the individual wire	9.5 mm

Dimensions

HC-M-02-CT-F-HV-16 - Contact insert module



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Dimensional drawing



Width	34.1 mm
Height	64.3 mm
Length	29.3 mm

Mechanical characteristics

Minimum housing height	72 mm
Contact diameter	2.5 mm

Electrical properties

Rated voltage (III/3)	2900 V (Conductor-PE)
	5000 V (Conductor-Conductor)
Rated voltage for power contacts	2900/5000 V
Rated surge voltage	15 kV
Rated current	16 A

Mechanical properties

Mechanical data

Insertion/withdrawal cycles	≥ 500
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Material specifications

Flammability rating according to UL 94	V0
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)

Environmental and real-life conditions

Ambient conditions

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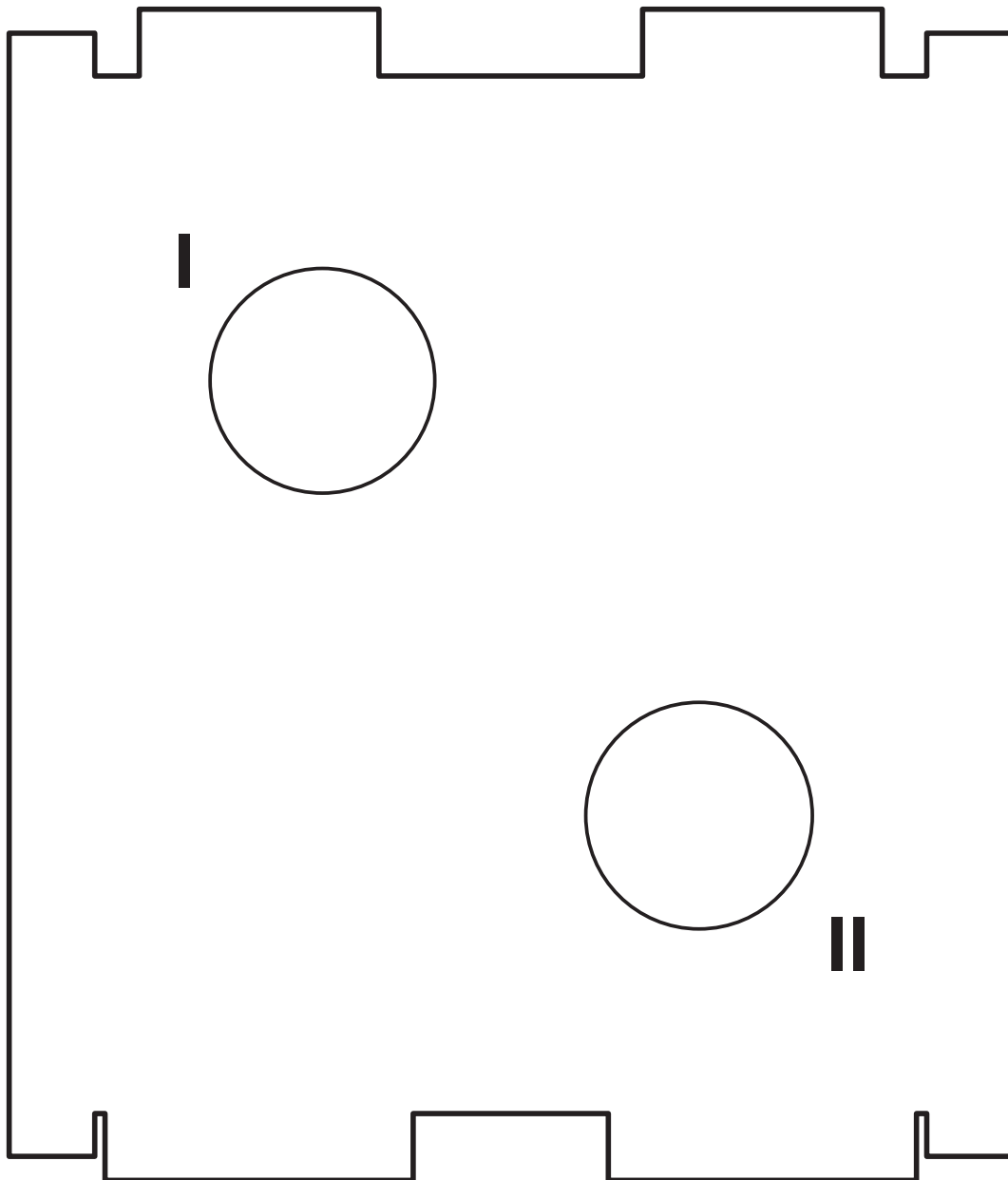
Standards and regulations

Testing

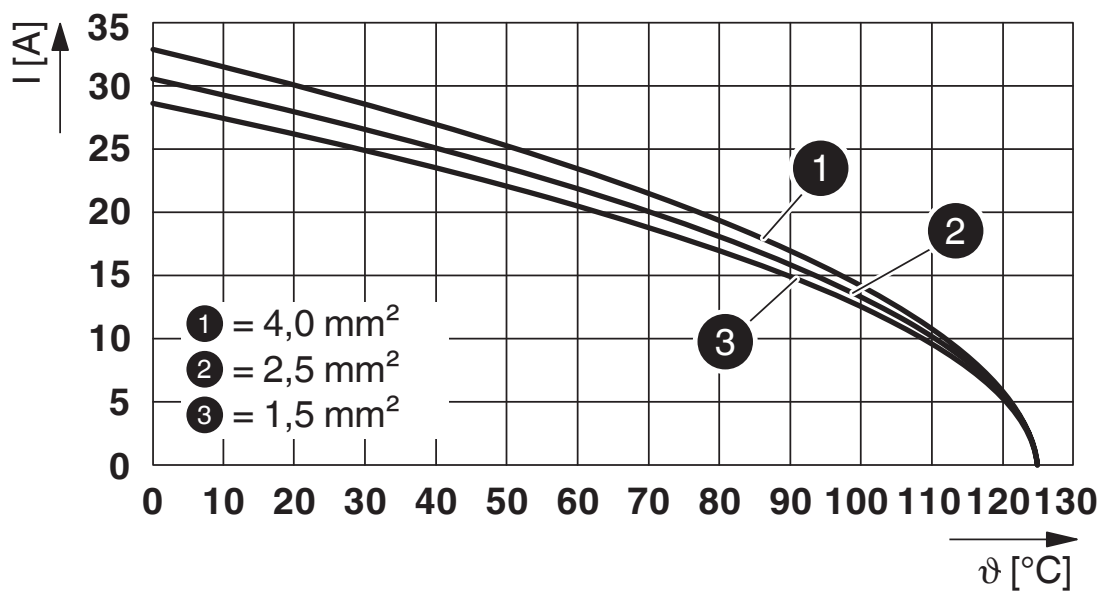
Standards/regulations	PC: Fire protection in rail vehicles - requirement sets R22, R23, and R24 acc. to DIN EN 45545-2 (Risk level HL1 - HL3)
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Drawings

Schematic diagram

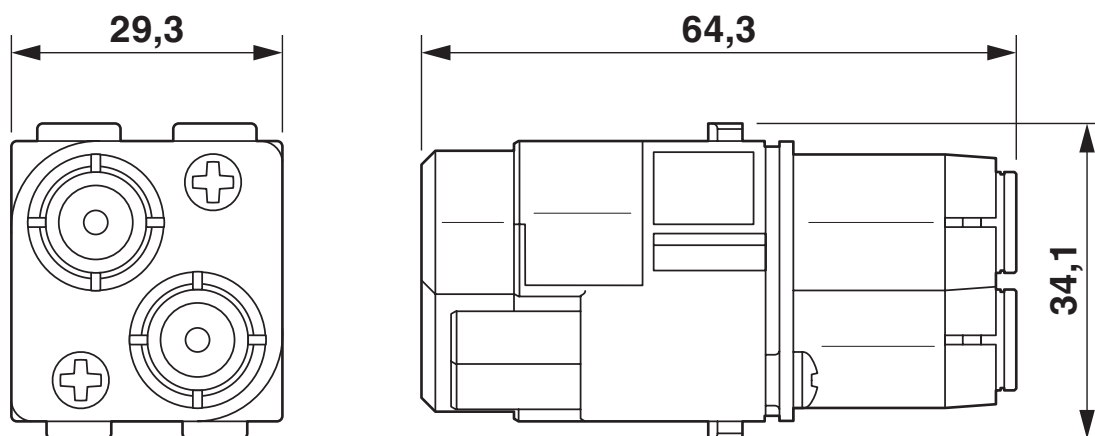


Diagram



Derating diagram

Dimensional drawing



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Approvals

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DNV

Approval ID: TAE000037S



CSA

Approval ID: 13631

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	600 V	24 A	- 12	-



UL Recognized

Approval ID: E118976

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	600 V	28 A	- 12	-



UL Recognized

Approval ID: E468743

	Nominal voltage U_N	Nominal current I_N	Cross section AWG	Cross section mm^2
	600 V	28 A	-	-

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Classifications

ECLASS

ECLASS-11.0	27440217
ECLASS-12.0	27440217
ECLASS-13.0	27440217

ETIM

ETIM 9.0	EC000438
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UNSPSC

UNSPSC 21.0	39121400
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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%

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Accessories

HC-CBU-MOD - Coding element

1636130

<https://www.phoenixcontact.com/us/products/1636130>



Coding socket for coding up to 16 connectors, for HC Modular

HC-CST-MOD - Coding element

1636127

<https://www.phoenixcontact.com/us/products/1636127>



Coding peg for coding up to 16 connectors, for HC Modular

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HC-CP-CK2.5-PL - Coding element

1095419

<https://www.phoenixcontact.com/us/products/1095419>

Dummy socket for contact carrier with turned CK 2,5-ED... socket contacts. For HC-A../HC-BB../HC-M... series contact inserts.



CK2,5-ED-0,50BU AG - Crimp contact

1663640

<https://www.phoenixcontact.com/us/products/1663640>

Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, contact surface: silver-plated, connection cross section: 0.5 mm² ... 0.5 mm², AWG 20



HC-M-02-CT-F-HV-16 - Contact insert module



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CK2,5-ED-0,75BU AG - Crimp contact

1663653

<https://www.phoenixcontact.com/us/products/1663653>



Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, contact surface: silver-plated, connection cross section: 0.75 mm² ... 0.75 mm², AWG 18

CK2,5-ED-1,00BU AG - Crimp contact

1663666

<https://www.phoenixcontact.com/us/products/1663666>



Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, contact surface: silver-plated, connection cross section: 0.75 mm² ... 1 mm², AWG 18

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CK2,5-ED-1,50BU AG - Crimp contact

1663679

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Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, contact surface: silver-plated, connection cross section: 1.5 mm² ... 1.5 mm², AWG 16

CK2,5-ED-2,50BU AG - Crimp contact

1663682

<https://www.phoenixcontact.com/us/products/1663682>



Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, contact surface: silver-plated, connection cross section: 2.5 mm² ... 2.5 mm², AWG 14

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CK2,5-ED-3,00BU AG - Crimp contact

1663695

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Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, contact surface: silver-plated, connection cross section: 3 mm² ... 3 mm², AWG 12

CK2,5-ED-4,00BU AG - Crimp contact

1663705

<https://www.phoenixcontact.com/us/products/1663705>



Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, contact surface: silver-plated, connection cross section: 4 mm² ... 4 mm², AWG 12

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CK2,5-ED-0,50F AG - Crimp contact

1273612

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Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, lead-free, contact surface: silver-plated, connection cross section: 0.5 mm² ... 0.5 mm², AWG 20

CK2,5-ED-0,75F AG - Crimp contact

1273611

<https://www.phoenixcontact.com/us/products/1273611>



Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, lead-free, contact surface: silver-plated, connection cross section: 0.75 mm² ... 0.75 mm², AWG 18

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CK2,5-ED-1,00F AG - Crimp contact

1273610

<https://www.phoenixcontact.com/us/products/1273610>



Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, lead-free, contact surface: silver-plated, connection cross section: 1 mm² ... 1 mm², AWG 18

CK2,5-ED-1,50F AG - Crimp contact

1273609

<https://www.phoenixcontact.com/us/products/1273609>



Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, lead-free, contact surface: silver-plated, connection cross section: 1.5 mm² ... 1.5 mm², AWG 16

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CK2,5-ED-2,50F AG - Crimp contact

1273607

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Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, lead-free, contact surface: silver-plated, connection cross section: 2.5 mm² ... 2.5 mm², AWG 14

CK2,5-ED-3,00F AG - Crimp contact

1273606

<https://www.phoenixcontact.com/us/products/1273606>



Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, lead-free, contact surface: silver-plated, connection cross section: 3 mm² ... 3 mm², AWG 12

HC-M-02-CT-F-HV-16 - Contact insert module



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CK2,5-ED-4,00F AG - Crimp contact

1273604

<https://www.phoenixcontact.com/us/products/1273604>



Crimp contact, contact diameter: 2.5 mm, turned, Socket, contact material: Copper alloy, lead-free, contact surface: silver-plated, connection cross section: 4 mm² ... 4 mm², AWG 12

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

1674969

<https://www.phoenixcontact.com/us/products/1674969>



Crimp contact, contact diameter: 1.6 mm, turned, Socket, contact material: Copper alloy, contact surface: gold-plated, connection cross section: 0.14 mm² ... 0.37 mm², AWG 26 ... 22

HC-M-02-CT-F-HV-16 - Contact insert module



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

1674480

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

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

1672440

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

HC-M-02-CT-F-HV-16 - Contact insert module



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

1674943

<https://www.phoenixcontact.com/us/products/1674943>



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

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

1674930

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

HC-M-02-CT-F-HV-16 - Contact insert module



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

1674985

<https://www.phoenixcontact.com/us/products/1674985>



Crimp contact, contact diameter: 1.6 mm, turned, Socket, contact material: Copper alloy, contact surface: gold-plated, connection cross section: 2.5 mm² ... 2.5 mm², AWG 14

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

1885004

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

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HC-M-B06-MFH-B - Module carrier frame

1182085

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Module carrier frame, size: B6, type : for the panel mounting side (a, b, c, ...), 4 mm² ... 6 mm², application: Module carrier frame

HC-M-B10-MFH-B - Module carrier frame

1182088

<https://www.phoenixcontact.com/us/products/1182088>



Module carrier frame, size: B10, type : for the panel mounting side (a, b, c, ...), 4 mm² ... 6 mm², application: Module carrier frame

HC-M-02-CT-F-HV-16 - Contact insert module

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HC-M-B16-MFH-B - Module carrier frame

1182090

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Module carrier frame, size: B16, type : for the panel mounting side (a, b, c, ...), 4 mm² ... 6 mm², application: Module carrier frame



HC-M-B24-MFH-B - Module carrier frame

1182094

<https://www.phoenixcontact.com/us/products/1182094>

Module carrier frame, size: B24, type : for the panel mounting side (a, b, c, ...), 4 mm² ... 6 mm², application: Module carrier frame



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HC-M-B06-MFH-H - Module carrier frame

1182087

<https://www.phoenixcontact.com/us/products/1182087>



Module carrier frame, size: B6, type : for the sleeve side (A, B, C, ...), 4 mm² ... 6 mm², application: Module carrier frame

HC-M-B10-MFH-H - Module carrier frame

1182089

<https://www.phoenixcontact.com/us/products/1182089>



Module carrier frame, size: B10, type : for the sleeve side (A, B, C, ...), 4 mm² ... 6 mm², application: Module carrier frame

HC-M-02-CT-F-HV-16 - Contact insert module



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HC-M-B16-MFH-H - Module carrier frame

1182093

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Module carrier frame, size: B16, type : for the sleeve side (A, B, C, ...), 4 mm² ...
6 mm², application: Module carrier frame



HC-M-B24-MFH-H - Module carrier frame

1182095

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Module carrier frame, size: B24, type : for the sleeve side (A, B, C, ...), 4 mm² ...
6 mm², application: Module carrier frame



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HC-M-02-CT-M-HV-16 - Contact insert module

1417408

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Contact insert module, number of positions: 2, power contacts: 2, control contacts: 0, Pin, Crimp connection, 2900 V/5000 V, 16 A, 0.5 mm² ... 4 mm², application: High-voltage

UNIFOX RT-CK 2.5 - Contact removal tool

1072067

<https://www.phoenixcontact.com/us/products/1072067>



Contact removal tool, for turned CK 2,5... contacts

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UNIFOX MT-CK 1.6/2.5 - Assembly tool

1089092

<https://www.phoenixcontact.com/us/products/1089092>

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



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