

**HDC insert**  
**HDC HE 24 FC**

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
 D-32758 Detmold  
 Germany  
 Fon: +49 5231 1429-0  
 Fax: +49 5231 14292083  
 www.weidmueller.com



For the crimp connection, the wire connection level is designed as a crimp contact. The established crimp connection has been used as a standard for decades. Crimp contacts are not delivered with the inserts.

Number of poles: **24**

Rated current: **16 A**

Rated voltage: **500 V**

Nominal voltage acc. to UL/CSA: **600 V AC/DC**

Crimp connection

**General ordering data**

Type	HDC HE 24 FC
Order No.	<a href="#">121160000</a>
Version	HDC insert, Female, 500 V, 16 A, No. of poles: 24, Crimp connection, Size: 8
GTIN (EAN)	4008190033200
Qty.	1 pc(s).

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**Technical data**
**Dimensions and weights**

Length	111 mm	Length (inches)	4.37 inch
Width	34 mm	Width (inches)	1.339 inch
Height	33.5 mm	Height (inches)	1.319 inch
Net weight	75 g		

**Temperatures**

Limit temperature	-40 °C ... 125 °C
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**Dimensions**

Height of socket	33.5 mm	Total length base	111 mm
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**General data**

Conductor cross-section	4 mm <sup>2</sup>	Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)
Insulating material group	IIIa	Insulation resistance	10 <sup>10</sup> Ω
Material	Copper alloy	No. of poles	24
Plugging cycles, gold	≥ 500	Plugging cycles, silver	≥ 500
Pollution severity	3	Rated current (DIN EN 61984)	16 A
Rated impulse voltage (DIN EN 61984)	6 kV	Rated voltage (DIN EN 61984)	500 V
Rated voltage according to UL/CSA	600 V AC/DC	Series	HE
Size	8	Surface finish	Silver passivated, gold
Type	Female	UL 94 flammability rating	V-0
Volume resistance	≤ 2mΩ		

**Connection data PE**

Blade size, crosshead	size PH1	Blade size, slotted (PE connection)	SD 0.8 x 4.0
Connection type PE		Cross-section for connected conductor, finely stranded with wire-end ferrules and plastic collars DIN 46228/4, rated connection, min.	0.5 mm <sup>2</sup>
	Screw connection	Rated cross-section	4 mm <sup>2</sup>
Fixing screw	M 4	Tightening torque, max. PE connection	1.5 Nm
Stripping length PE connection	10 mm	Wire connection cross section, finely stranded, max.	4 mm <sup>2</sup>
Tightening torque, min. PE connection	1.2 Nm	Wire connection cross-section, finely stranded, min.	
Wire connection cross-section, finely stranded with wire-end ferrules and plastic collars DIN 46228/4, rated connection, max.	4 mm <sup>2</sup>		0.5 mm <sup>2</sup>
Wire cross section, AWG (PE), max.	AWG 12	Wire cross section, AWG (PE), min.	AWG 20
Wire cross-section, solid, max.	4 mm <sup>2</sup>	Wire cross-section, solid, min.	0.5 mm <sup>2</sup>

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**Technical data****Version**

Conductor cross-section, max.	4 mm <sup>2</sup>	Conductor cross-section, min.	0.5 mm <sup>2</sup>
Cross-section for connected conductor, finely stranded with wire-end ferrules and plastic collars DIN 46228/4, rated connection, min.	0.5 mm <sup>2</sup>	Material	Copper alloy
Size	8	Stripping length, rated connection	7.5 mm
Surface finish	Silver passivated, gold	Type of connection	Crimp connection
Volume resistance	≤ 2mΩ	Wire connection cross section AWG, max.	AWG 12
Wire connection cross section AWG, min.	AWG 20	Wire connection cross section, finely stranded, max.	4 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules and plastic collars DIN 46228/4, rated connection, max.	4 mm <sup>2</sup>	Wire connection cross-section, finely stranded, min.	0.5 mm <sup>2</sup>
Wire cross-section, solid, max.	4 mm <sup>2</sup>	Wire cross-section, solid, min.	0.5 mm <sup>2</sup>

**Classifications**

ETIM 3.0	EC001121	ETIM 4.0	EC000438
ETIM 5.0	EC000438	ETIM 6.0	EC000438
UNSPSC	30-21-18-01	eClass 5.1	27-14-34-19
eClass 6.2	27-26-12-04	eClass 7.1	27-44-02-05
eClass 8.1	27-44-02-05	eClass 9.0	27-44-02-05
eClass 9.1	27-44-02-05		

**Product information**

Descriptive text technical data	Rated voltage 630 V / 6 kV at pollution degree 2
Descriptive text accessories	Accessories, see chapter J - Tools, see chapter K

**Approvals**

Approvals



ROHS Conform

**Downloads**

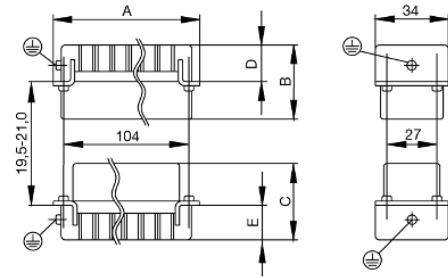
Brochure/Catalogue	<a href="#">CAT 3 HDC 17/18 EN</a> <a href="#">FL FIELDWIRING EN</a>
Engineering Data	<a href="#">EPLAN_WSCAD</a>
Technical Documentation	<a href="#">121160000_HDC_HE_24_FC_STP_Blatt_1.pdf</a>

**Data sheet**

**HDC insert  
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**Drawings**



**Data sheet**

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**Accessories**

**Slotted screwdriver**

Slotted screwdriver with rounded blade SD DIN 5265, ISO 2380/2, output to DIN 5264, ISO 2380/1. ChromTop tip, SoftFinish grip



**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.
SDS 0.8X4.0X100	<a href="#">9008340000</a>	Screwdriver, Blade width (B): 4 mm, Blade length: 100 mm, Blade thickness (A): 0.8 mm	4032248056293	1 pc(s).

**HE**

Various accessories are available for our inserts. This includes coding elements for the inserts.



**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.
HDC HE CP	<a href="#">1003240000</a>	Heavy Duty Connectors, Accessories, Coding System	4032248698233	100 pc(s).

**Data sheet**

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**Accessories**

**Crosshead screwdriver Phillips**

Crosshead screwdriver, Phillips, SDK PH DIN 5262, ISO 8764/2-PH, output to ISO 8764-PH, ChromTop tip, SoftFinish grip



**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.
SDK PH1	<a href="#">9008480000</a>	Screwdriver, Blade width (B): 4.5 mm, Blade length: 80 mm	4032248056477	1 pc(s).

**Non-contact tools**



Tools for dismantling Weidmüller crimp contacts

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.
Removal Tool HE	<a href="#">1866750000</a>	Tools, Contact removal tool	4032248437078	1 pc(s).

**Crosshead screwdriver Phillips**

VDE insulated crosshead screwdriver, for Phillips screws, SDIK PH DIN 7438, ISO 8764/2-PH, output to ISO 8764-PH, SoftFinish grip



**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.
SDIK PH1	<a href="#">9008570000</a>	Screwdriver, Blade length: 80 mm	4032248056569	1 pc(s).

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**Accessories**

**Slotted screwdriver**

VDE insulated slot-head screwdriver, SDI DIN 7437, ISO 2380/2, drive output acc. to DIN 5264, ISO 2380/1. SoftFinish grip



**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.
SDIS 0.6X3.5X100	<a href="#">9008390000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm	4032248056354	1 pc(s).
SDIS 0.8X4.0X100	<a href="#">9008400000</a>	Screwdriver, Blade width (B): 4 mm, Blade length: 100 mm, Blade thickness (A): 0.8 mm	4032248056361	1 pc(s).

**Tools**

Tools for removing the sheathing of uncut power cables and outgoing feeders, plus screwdrivers for installing FieldPower components.



**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.
SDS 0.6X3.5X100	<a href="#">9008330000</a>	Screwdriver, Blade width (B): 3.5 mm, Blade length: 100 mm, Blade thickness (A): 0.6 mm	4032248056286	1 pc(s).

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**Accessories**

**... for milled contacts**



**Crimping tools for turned contacts**

- Ratchet guarantees precise crimping
- Release option in the event of incorrect operation
- With stop for exact positioning of the contacts.

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.
CTIN CM 1.6/2.5	<a href="#">9205430000</a>	Crimping tool, Crimping tool for contacts, 0.14mm <sup>2</sup> , 6mm <sup>2</sup> , 4-indent crimp	4032248733446	1 pc(s).
CTX CM 1.6/2.5	<a href="#">9018490000</a>	Crimping tool, Crimping tool for contacts, 0.14mm <sup>2</sup> , 4mm <sup>2</sup> , W crimp	4008190884598	1 pc(s).

**Crimp contacts HE**



Crimps provide a electrical and mechanical connection between wire and contact that is both secure and reliable. The optimal crimp connection is gas-tight and corrosion-resistant.

**General ordering data**

Type	Order No.	Version	GTIN (EAN)	Qty.
HDC-C-HE- BM0.5AG	<a href="#">1201100000</a>	Heavy Duty Connectors, Crimp contact, HE, HEE, HQ, MixMate, Female, Conductor cross-section, max.: 0.5, turned, Copper alloy	4008190142698	100 pc(s).
HDC-C-HE- BM2.5AU	<a href="#">1651500000</a>	Heavy Duty Connectors, Crimp contact, HE, HEE, HQ, MixMate, Female, Conductor cross-section, max.: 2.5, turned, Copper alloy	4008190400170	100 pc(s).
HDC-C-HE- BM1.5AG	<a href="#">1201300000</a>	Heavy Duty Connectors, Crimp contact, HE, HEE, HQ, MixMate, Female, Conductor cross-section, max.: 1.5, turned, Copper alloy	4008190100346	100 pc(s).

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**Accessories**

HDC-C-HE- BM0.5AU	<a href="#">1651470000</a>	Heavy Duty Connectors, Crimp contact, HE, HEE, HQ, MixMate, Female, Conductor cross-section, max.: 0.5, turned, Copper alloy	4008190400149 100 pc(s).
HDC-C-HE- BM1.5AU	<a href="#">1651490000</a>	Heavy Duty Connectors, Crimp contact, HE, HEE, HQ, MixMate, Female, Conductor cross-section, max.: 1.5, turned, Copper alloy	4008190400163 100 pc(s).
HDC-C-HE- BM4.0AU	<a href="#">1651510000</a>	Heavy Duty Connectors, Crimp contact, HE, HEE, HQ, MixMate, Female, Conductor cross-section, max.: 4, turned, Copper alloy	4008190400187 100 pc(s).
HDC-C-HE- BM4.0AG	<a href="#">1201500000</a>	Heavy Duty Connectors, Crimp contact, HE, HEE, HQ, MixMate, Female, Conductor cross-section, max.: 4, turned, Copper alloy	4008190148096 100 pc(s).
HDC-C-HE- BM0.75-1.00AU	<a href="#">1651480000</a>	Heavy Duty Connectors, Crimp contact, HE, HEE, HQ, MixMate, Female, Conductor cross-section, max.: 1, turned, Copper alloy	4008190400156 100 pc(s).
HDC-C-HE- BM2.5AG	<a href="#">1201400000</a>	Heavy Duty Connectors, Crimp contact, HE, HEE, HQ, MixMate, Female, Conductor cross-section, max.: 2.5, turned, Copper alloy	4008190047078 100 pc(s).
HDC-C-HE- BM0.75-1.00AG	<a href="#">1201200000</a>	Heavy Duty Connectors, Crimp contact, HE, HEE, HQ, MixMate, Female, Conductor cross-section, max.: 1, turned, Copper alloy	4008190044480 100 pc(s).

# Tightening torques and screwing tools

Screw size	Connector type	Dia. tightening torque in Nm	Recommended blade inserts and AF size for hexagon socket
<b>M 2.5</b>	<b>Signal contacts</b>		
	S 6/6	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	S 6/12	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
<b>M 2.9 x 0.5</b>	<b>Fastening screws</b>		
	HQ 4/2	0.8 (plastic) / 1.1 (metal)	SD 0.6 x 3.5 mm or PH0
	HQ 8	0.8 (plastic) / 1.1 (metal)	SD 0.6 x 3.5 mm or PH0
	HQ 17	0.8 (plastic) / 1.1 (metal)	SD 0.6 x 3.5 mm or PH0
<b>M 3</b>	<b>Contact screws</b>		
	HA 3	0.5 - 0.55	SD 0.5 x 3.0 mm
	HA 4	0.5 - 0.55	SD 0.5 x 3.0 mm
	HA 10 bis HA 48	0.5 - 0.55	SD 0.6 x 3.5 mm or PH0
	HE	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	HVE	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	<b>Signal contacts:</b>		
	S 4/2	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	S 4/8	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	<b>PE connection via female contact</b>		
	S 4	0.5 - 0.8	SD 0.6 x 3.5 mm
	ConCept modular frame, metal	0.5 - 0.55	SD 0.6 x 3.5 mm
	<b>PE terminal</b>		
	HQ 5	0.5 - 0.55	SD 0.6 x 3.5 or 0.8 x 4 mm
	HQ 7	0.5 - 0.55	SD 0.6 x 3.5 or 0.8 x 4 mm
	<b>Fastening screws</b>	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	<b>Guide pin</b>	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	<b>Guide bush</b>	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	<b>Coding pins</b>	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	<b>M 4</b>	<b>Contact screws</b>	
HSB		1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1
<b>PE connection via male contact</b>			
S 4		0.5 - 0.8	SD 0.6 x 3.5 mm
ConCept modular frame, metal		1.2 - 1.5	SD 0.6 x 3.5 mm
<b>PE terminal</b>			
HA		1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PH1
HE		1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PH1
HEE		1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PH1
HVE		1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PH1
HD		1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1
HDD		1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1
S 6/6 (for signal contacts)		1.2 - 1.5	0.8 x 4 mm or PZ1
ConCept modular frame, plastic		1.2 - 1.5	0.8 x 4 mm or PZ1
<b>M 5</b>		<b>PE terminal</b>	
	HSB	2 - 2.5	SD 1 x 5.5 mm or PZ2
	S 4/0 (Screw connection)	2 - 2.5	SD 1.2 x 6.5 mm or PH2
	S 4/0 (Axial screw connection)	2 - 2.5	SD 0.8 x 4 mm or PZ 2
	S 4/2	2 - 2.5	SD 1.2 x 6.5 mm or PH2
	S 4/8	2 - 2.5	SD 1.2 x 6.5 mm or PH2
	S 6/12	2 - 2.5	SD 0.8 x 4 mm or PZ 2
	S 6/36	2 - 2.5	SD 1.2 x 6.5 mm or PH2
	S 8/24	2 - 2.5	SD 1.2 x 6.5 mm or PH2
	S 12/2	2 - 2.5	SD 1.2 x 6.5 mm or PH2
	<b>M 6</b>	<b>Power contacts</b>	
S 4/0 (Screw connection)		1.2 (1.5 mm <sup>2</sup> ) / 2 (2.5 mm <sup>2</sup> ) / 3 (4-16 mm <sup>2</sup> )	SD 0.8 x 4 mm
S 4/2		1.2 (1.5 mm <sup>2</sup> ) / 2 (2.5 mm <sup>2</sup> ) / 3 (4-16 mm <sup>2</sup> )	SD 0.8 x 4 mm
S 4/8		1.2 (1.5 mm <sup>2</sup> ) / 2 (2.5 mm <sup>2</sup> ) / 3 (4-16 mm <sup>2</sup> )	SD 0.8 x 4 mm
<b>M 7 x 0.75</b>	<b>Power contacts</b>		
	S 4	1.1 - 1.7	SW 2
	S 6/6 (+ PE)	6 - 8	SW 4
<b>M 8 x 0.75</b>	<b>Power contacts</b>		
	S 6/12	1.1 - 1.7	SW 2
	S 8/0 (+ PE)	6 (10-16 mm <sup>2</sup> ) - 7 (25 mm <sup>2</sup> )	SW 4
<b>M10 x 1</b>	<b>Power contacts</b>		
	S 4/0 (Axial connection)	2 - 3	SW 3

Increasing the tightening torque does not improve the contact resistance. The stated torque settings offer optimal mechanical, thermal and electrical conditions. Exceeding the recommended values may even damage the conductor and terminal.