

## HDC insert HDC HA 16 MC

**Weidmüller Interface GmbH & Co. KG**  
 Klingenbergstraße 16  
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 Germany  
 Fon: +49 5231 14-0  
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The small and slim HA series can be used wherever space is limited.

The wire connection level is designed for crimp contacts. The proven crimp connection method has been in standard use for decades.

Crimp contacts are not included in the scope of delivery of inserts.

Crimp connection

### General ordering data

Type	HDC HA 16 MC
Order No.	<a href="#">1873890000</a>
Version	HDC insert, Male, 250 V, 16 A, No. of poles: 16, Crimp connection, Size: 5
GTIN (EAN)	4032248458400
Qty.	1 pc(s).

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

Length	73 mm	Length (inches)	2.874 inch
Width	23 mm	Width (inches)	0.906 inch
Height	29 mm	Height (inches)	1.142 inch
Net weight	35 g		

**Temperatures**

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

Height of plug	29 mm	Total length base	73 mm
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**General data**

Conductor cross-section	2.5 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	16
Plugging cycles, gold	≥ 500	Plugging cycles, silver	≥ 500
Pollution severity	3	Rated current (DIN EN 61984)	16 A
Rated impulse voltage (DIN EN 61984)	4 kV	Rated voltage (DIN EN 61984)	250 V
Rated voltage according to UL/CSA	600 V AC/DC	Series	HA
Size	5	Surface finish	Silver passivated, gold
Type	Male	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	Screw connection	Fixing screw	M 4
Rated cross-section	2.5 mm <sup>2</sup>	Stripping length PE connection	10 mm
Tightening torque, max. PE connection	1.5 Nm	Tightening torque, min. PE connection	1.2 Nm
Wire connection cross section, finely stranded, max.	2.5 mm <sup>2</sup>	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm <sup>2</sup>	Wire connection cross-section, finely stranded, min.	0.5 mm <sup>2</sup>
Wire cross section, AWG (PE), max.	AWG 14	Wire cross section, AWG (PE), min.	AWG 20
Wire cross-section, solid, max.	2.5 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>
Material	Copper alloy	Size	5
Stripping length, rated connection	8 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.	2.5 mm <sup>2</sup>	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm <sup>2</sup>
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm <sup>2</sup>	Wire connection cross-section, finely stranded, min.	0.5 mm <sup>2</sup>
Wire cross-section, solid, max.	2.5 mm <sup>2</sup>	Wire cross-section, solid, min.	0.5 mm <sup>2</sup>

**Classifications**

ETIM 3.0	EC000796	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 320 V / 4 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="#">1873890000 HDC_HA_16_MC_STP_Blatt_1.pdf</a>

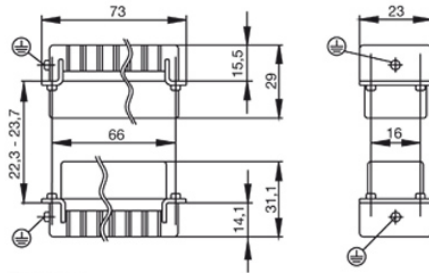
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**Drawings**

## Abmessungen

Steil



Buchse

# 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.