

HDC HD 40 FC**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com



The HD range features a high density of contacts. It is thus optimally suited for signal processing.
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: **40**

Rated current: **10 A**

Rated voltage: **250 V**

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

Crimp connection

General ordering data

Version	HDC insert, Female, 250 V, 10 A, Number of poles: 40, Crimp connection, Size: 6
Order No.	1601730000
Type	HDC HD 40 FC
GTIN (EAN)	4008 190022006
Qty.	1 pc(s).

Creation date March 1, 2023 12:33:01 PM CET

Catalogue status 18.02.2023 / We reserve the right to make technical changes.

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Technical data

Dimensions and weights

Depth	84.5 mm	Depth (inches)	3.327 inch
Height	35 mm	Height (inches)	1.378 inch
Width	34 mm	Width (inches)	1.339 inch
Net weight	63 g		

Temperatures

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

Height of socket	35 mm	Total length base	84.5 mm
Width	34 mm		

General data

BG	6	Conductor cross-section	2.5 mm ²
Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)	Insulating material group	IIIa
Insulation strength	10 ¹⁰ Ω	Material	Copper alloy
Number of poles	40	Plugging cycles, gold	≥ 500
Plugging cycles, silver	≥ 500	Pollution severity	3
Rated current (DIN EN 61984)	10 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	HD	Size	6
Type	Female	UL 94 flammability rating	V-0
Volume resistance	≤4 mΩ		

Connection data PE

Blade size, crosshead	size PZ 1	Blade size, slotted (PE connection)	SD 0.6 x 3.5, SD 0.8 x 4.0
Connection type PE	Screw connection	Fixing screw	M 4
Rated cross-section	2.5 mm ²	Stripping length PE connection	10 mm
Tightening torque, max. PE connection	1.5 Nm	Tightening torque, min. PE connection	1.2 Nm
Wire cross section, AWG (PE), max.	AWG 14	Wire cross section, AWG (PE), min.	AWG 20

Version

BG	6	Conductor cross-section, max.	2.5 mm ²
Conductor cross-section, min.	0.14 mm ²	Material	Copper alloy
Size	6	Stripping length, rated connection	8 mm
Type of connection	Crimp connection	Volume resistance	≤4 mΩ
Wire connection cross section AWG, max.	AWG 14	Wire connection cross section AWG, min.	AWG 26
Wire connection cross section, finely stranded, max.	2.5 mm ²	Wire connection cross section, finely stranded, min.	0.5 mm ²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm ²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm ²
Wire cross-section, solid, max.	2.5 mm ²	Wire cross-section, solid, min.	0.5 mm ²

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Classifications

ETIM 6.0	EC000438	ETIM 7.0	EC000438
ETIM 8.0	EC000438	ECLASS 9.0	27-44-02-05
ECLASS 9.1	27-44-02-05	ECLASS 10.0	27-44-02-05
ECLASS 11.0	27-44-02-05	ECLASS 12.0	27-44-02-05

Substance	Acetone
Chemical resistance	Resistant
Substance	Ammonia, watery
Chemical resistance	Conditionally resistant
Substance	Petrol
Chemical resistance	Resistant
Substance	Benzene
Chemical resistance	Resistant
Substance	Diesel oil
Chemical resistance	Conditionally resistant
Substance	Acetic acid, concentrated
Chemical resistance	Resistant
Substance	Potassium hydroxide
Chemical resistance	Conditionally resistant
Substance	Methanol
Chemical resistance	Conditionally resistant
Substance	Motor oil
Chemical resistance	Conditionally resistant
Substance	Lye, diluted
Chemical resistance	Resistant
Substance	Hydrochlorofluorocarbons
Chemical resistance	Conditionally resistant
Substance	Outdoor use
Chemical resistance	Conditionally resistant

Environmental Product Compliance

REACH SVHC	Potassium perfluorobutane sulfonate 29420-49-3
SCIP	1609748e-c278-4c9b-b3d1-e6215d2988cd
Chemical resistance	de.myview.objectmodel.impl.BlockImpl@36c0cbce de.myview.objectmodel.impl.BlockImpl@63814651 de.myview.objectmodel.impl.BlockImpl@5a3494e de.myview.objectmodel.impl.BlockImpl@23868479 de.myview.objectmodel.impl.BlockImpl@1328b57c de.myview.objectmodel.impl.BlockImpl@7a72da86 de.myview.objectmodel.impl.BlockImpl@650405bf de.myview.objectmodel.impl.BlockImpl@7236f02a de.myview.objectmodel.impl.BlockImpl@24632845 de.myview.objectmodel.impl.BlockImpl@482970a5 de.myview.objectmodel.impl.BlockImpl@dc5ade2 de.myview.objectmodel.impl.BlockImpl@48b7abd0

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Technical data**Approvals**

Approvals



ROHS

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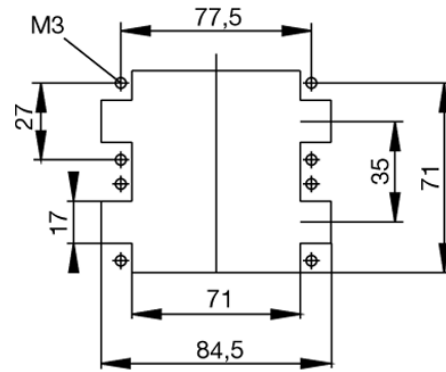
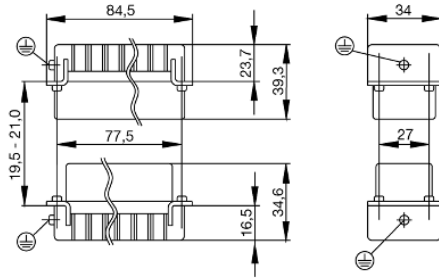
Approval/Certificate/Document of Conformity	Manufacturer's declaration
Engineering Data	CAD data – STEP
Engineering Data	WSCAD, Zuken E3.S
Catalogues	Catalogues in PDF-format
Brochures	FL FIELDWIRING EN FL FIELDWIRING EN

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Drawings



Tightening torques and screwing tools

Screw size	Connector type	Dia. tightening torque in Nm	Recommended blade inserts and AF size for hexagon socket
M 2.5	Signal contacts		
	S 6/6	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	S 6/12	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
M 2.9 x 0.5	Fastening screws		
	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
M 3	Contact screws		
	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 PZO
	HVE	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	Signal contacts:		
	S 4/2	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	S 4/8	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	PE connection via female contact		
	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
	PE terminal		
	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
	Fastening screws	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	Guide pin	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	Guide bush	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	Coding pins	0.5 - 0.55	SD 0.6 x 3.5 mm or PZO
	M 4	Contact screws	
HSB		1.2 - 1.5	SD 0.6 x 3.5 or 0.8 x 4 mm or PZ1
PE connection via male contact			
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
PE terminal			
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
M 5		PE terminal	
	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
	M 6	Power contacts	
S 4/0 (Screw connection)		1.2 (1.5 mm ²) / 2 (2.5 mm ²) / 3 (4-16 mm ²)	SD 0.8 x 4 mm
S 4/2		1.2 (1.5 mm ²) / 2 (2.5 mm ²) / 3 (4-16 mm ²)	SD 0.8 x 4 mm
S 4/8		1.2 (1.5 mm ²) / 2 (2.5 mm ²) / 3 (4-16 mm ²)	SD 0.8 x 4 mm
M 7 x 0.75	Power contacts		
	S 4	1.1 - 1.7	SW 2
	S 6/6 (+ PE)	6 - 8	SW 4
M 8 x 0.75	Power contacts		
	S 6/12	1.1 - 1.7	SW 2
	S 8/0 (+ PE)	6 (10-16 mm ²) - 7 (25 mm ²)	SW 4
M10 x 1	Power contacts		
	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.