

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)	4008190022006
Qty.	1 pc(s).

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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	
Colour	beige	
Conductor cross-section	2.5 mm²	
Free from halogens	true	
Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)	
Insulating material group	IIIa	
Insulation strength	10 ¹⁰ Ω	
Low smoke acc. DIN EN 45545-2	Yes	
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 current (UR)	Wire connection cross section AWG	AWG 14
	Rated current	10 A
	Wire connection cross section AWG	AWG 16
	Rated current	7 A
	Wire connection cross section AWG	AWG 18
	Rated current	7 A
	Wire connection cross section AWG	AWG 20
	Rated current	2.75 A
	Wire connection cross section AWG	AWG 22
	Rated current	2.75 A
	Wire connection cross section AWG	AWG 24
	Rated current	2.75 A
Rated current (cUR)	Wire connection cross section AWG	AWG 14
	Rated current	10 A
	Wire connection cross section AWG	AWG 16
	Rated current	7 A
	Wire connection cross section AWG	AWG 18
	Rated current	7 A
	Wire connection cross section AWG	AWG 20
	Rated current	2.75 A
	Wire connection cross section AWG	AWG 22
	Rated current	2.75 A
	Wire connection cross section AWG	AWG 24
	Rated current	2.75 A

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Technical data

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
Type of connection	Crimp connection
UL 94 flammability rating	V-0
Volume resistance	≤4 mΩ

Connection data PE

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 cross-section, solid, max.	2.5 mm ²	Wire cross-section, solid, min.	0.5 mm ²

Classifications

ETIM 6.0	EC000438	ETIM 7.0	EC000438
ETIM 8.0	EC000438	ETIM 9.0	EC000438
ETIM 10.0	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
ECLASS 13.0	27-44-02-05	ECLASS 14.0	27-44-02-05
ECLASS 15.0	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

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Technical data

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

RoHS Compliance Status	Compliant without exemption
REACH SVHC	Potassium perfluorobutane sulfonate 29420-49-3
SCIP	1609748e-c278-4c9b-b3d1-e6215d2988cd
Chemical resistance	de.myview.objectmodel.impl.BlockImpl@2c8b78a de.myview.objectmodel.impl.BlockImpl@231538e0 de.myview.objectmodel.impl.BlockImpl@5dbd067d de.myview.objectmodel.impl.BlockImpl@60ccdef8 de.myview.objectmodel.impl.BlockImpl@27ff418c de.myview.objectmodel.impl.BlockImpl@2d27afab de.myview.objectmodel.impl.BlockImpl@181cca9c de.myview.objectmodel.impl.BlockImpl@1e21fc79 de.myview.objectmodel.impl.BlockImpl@430f3d10 de.myview.objectmodel.impl.BlockImpl@5345982d de.myview.objectmodel.impl.BlockImpl@2d73f0f3 de.myview.objectmodel.impl.BlockImpl@3c200310

Approvals

Approvals



Approvals MAMID	https://mdcop.weidmueller.com/mediadelivery/rendition/900_319226/-T1z1mm-S800/ https://mdcop.weidmueller.com/mediadelivery/rendition/900_319230/-T1z1mm-S800/
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E92202

Downloads

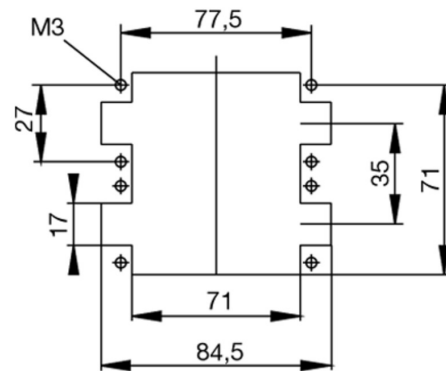
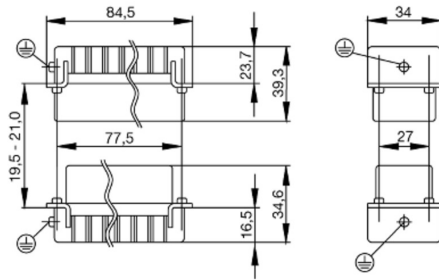
Approval/Certificate/Document of Conformity	Manufacturer's declaration
Engineering Data	CAD data – STEP
Catalogues	Catalogues in PDF-format
Brochures	FL FIELDWIRING EN FL FIELDWIRING EN

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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 PZ0
	S 6/12	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
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 PZ0
	HVE	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	Signal contacts:		
	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
	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 PZ0
	Guide pin	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	Guide bush	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
	Coding pins	0.5 - 0.55	SD 0.6 x 3.5 mm or PZ0
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.