HDC insert
HDC HD 40 FC

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 16
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Germany
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The HD series features high-density contacts and is thus ideally suited to signal processing.
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 HD 40 FC
Order No.	1601730000
Version	HDC insert, Female, 250 V, 10 A, No. of poles: 40, Crimp connection, Size: 6
GTIN (EAN)	4008190022006
Qty.	1 pc(s).

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Technical data

Dimensions and weights

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

Temperatures

Limit temperature	-40 °C ... 125 °C

Dimensions

Height of socket	35 mm	Total length base	84.5 mm

General data

Conductor cross-section	2.5 mm²	Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)
Insulating material group	IIIa	Insulation strength	10^{10} Ω
Material	Copper alloy	No. 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	Surface finish	Silver passivated, gold
Type	Female	UL 94 flammability rating	V-0
Volume resistance	≤ 4mΩ		

Connection data PE

Blade size, crosshead	size PZ1	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 mm²	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 mm²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm²	Wire connection cross-section, finely stranded, min.	0.5 mm²
Wire cross section, AWG (PE), max.	AWG 14	Wire cross section, AWG (PE), min.	AWG 20
Wire cross-section, solid, max.	2.5 mm²	Wire cross-section, solid, min.	0.5 mm²

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Technical data

Version

Conductor cross-section, max.	2.5 mm²	Conductor cross-section, min.	0.14 mm²
Material	Copper alloy	Size	6
Stripping length, rated connection	8 mm	Surface finish	Silver passivated, gold
Type of connection	Crimp connection	Volume resistance	≤ 4mΩ
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 mm²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	2.5 mm²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm²	Wire connection cross-section, finely stranded, min.	0.5 mm²
Wire cross-section, solid, max.	2.5 mm²	Wire cross-section, solid, min.	0.5 mm²

Classifications

ETIM 3.0	EC001121	ETIM 4.0	EC001121
ETIM 5.0	EC001121	ETIM 6.0	EC000438
UNSPSC	30-21-18-01	eClass 5.1	27-14-34-19
eClass 6.2	27-14-34-19	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		

Approvals

Approvals	
ROHS	Conform

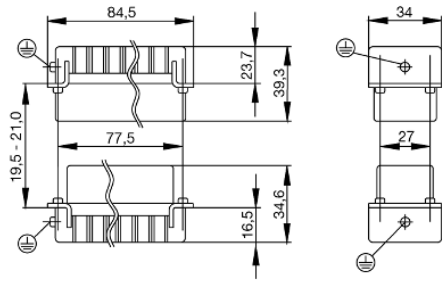
Downloads

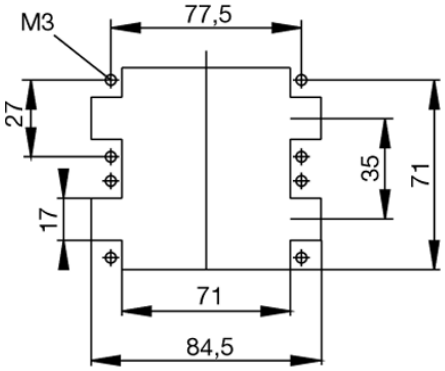
Brochure/Catalogue	CAT 3 HDC 17/18 EN FL FIELDWIRING EN
Engineering Data	EPLAN, WSCAD, Zuken E3.S
Engineering Data	STEP

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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.