HDC insert
HDC HQ 7 FC

Weidmüller Interface GmbH & Co. KG
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The HQ series - big features in a compact design The electrical values speak for themselves. The standard HE crimp contacts can also be used here.
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.
Pole count: **7 (+PE)**
Rated current: **10 A**
Rated voltage: **400 V**
Nominal voltage acc. to UL/CSA: **600 V AC/DC**
Crimp connection

General ordering data

Type	HDC HQ 7 FC
Order No.	1003180000
Version	HDC insert, Female, 400 V, 10 A, No. of poles: 7, Crimp connection, Size: 1
GTIN (EAN)	4032248698172
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Width	21 mm	Width (inches)	0.827 inch
Height	40.2 mm	Height (inches)	1.583 inch
Depth	21 mm	Depth (inches)	0.827 inch
Net weight	16 g		

Temperatures

Limit temperature	-40 °C ... 125 °C

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1

Dimensions

Height of socket	40.2 mm	Total length base	21 mm

General data

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	7	Plugging cycles, gold	≥ 500
Plugging cycles, silver	≥ 500	Pollution severity	3
Rated current (DIN EN 61984)	10 A	Rated impulse voltage (DIN EN 61984)	6 kV
Rated voltage (DIN EN 61984)	400 V	Rated voltage according to UL/CSA	600 V AC/DC
Series	HQ	Size	1
Surface finish	Silver passivated, gold	Type	Female
UL 94 flammability rating	V-0	Volume resistance	≤ 4mΩ

Connection data PE

Blade size, slotted (PE connection)	SD 0.6 x 3.5	Connection type PE	Screw connection
Fixing screw	M 3	Rated cross-section	2.5 mm²
Stripping length PE connection	5 mm	Tightening torque, max. PE connection	0.55 Nm
Tightening torque, min. PE connection	0.5 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.	0.14 mm²
Wire connection cross-section, finely stranded, min.	0.14 mm²	Wire cross section, AWG (PE), max.	AWG 14
Wire cross section, AWG (PE), min.	AWG 26		

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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	1
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.	0.14 mm²	Wire connection cross-section, finely stranded, min.	0.14 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

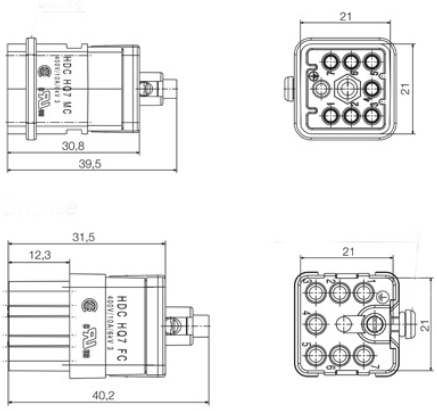
Downloads

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