

HDC HVE 3+2 FS**Weidmüller Interfaces GmbH & Co. KG**

Postfach 3030

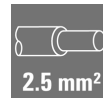
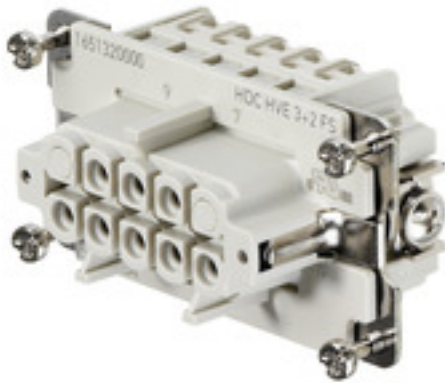
32760 Detmold

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The HVE-series high-voltage inserts are equipped with two lagging contacts.

The wire connection level is designed as a screw element. All screw connections are equipped with a wire protection spring.

Number of poles: **5 - 12**

Rated current: **24 A**

Rated voltage: **830 V**

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

Screw connection

General ordering data

Version	HDC insert, Female, 830 V, 20 A, Number of poles: 5, Screw connection, Size: 4
Order No.	1651320000
Type	HDC HVE 3+2 FS
GTIN (EAN)	4008190299927
Qty.	1 pc(s).

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Technical data

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Dimensions and weights

Depth	64 mm	Depth (inches)	2.52 inch
Height	35.2 mm	Height (inches)	1.386 inch
Width	34 mm	Width (inches)	1.339 inch
Net weight	56 g		

Temperatures

Limit temperature -40 °C ... 125 °C

Environmental Product Compliance

REACH SVHC Lead 7439-92-1, Potassium perfluorobutane sulfonate 29420-49-3

SCIP b67daa31-7dca-434d-8290-da7fb52f83a2

Chemical resistance	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

Dimensions

Height of socket	35.2 mm	Total length base	64 mm
Width	34 mm		

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Technical data

General data

BG	4
Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)
Insulation strength	10 ¹⁰ Ω
Max. torque for main contact	0.55 Nm
Number of poles	5
Number of signal contacts	2
Pollution severity	3
Rated impulse voltage (DIN EN 61984)	8 kV
Rated voltage according to UL/CSA	600 V AC/DC
Size	4
Type	Female
Volume resistance	≤2 mΩ

Conductor cross-section	2.5 mm ²
Insulating material group	IIIa
Material	Copper alloy
Min. torque for main contact	0.5 Nm
Number of power contacts	3
Plugging cycles, silver	≥ 500
Rated current (DIN EN 61984)	20 A
Rated voltage (DIN EN 61984)	830 V
Series	HVE
Surface finish	Silver passivated
UL 94 flammability rating	V-0

Connection data PE

Blade size, crosshead	size PH 1	Blade size, slotted (PE connection)	SD 0.8 x 4.0
Connection type PE	Screw connection	Fixing screw	M 4
Rated cross-section	4 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 12	Wire cross section, AWG (PE), min.	AWG 20

Version

BG	4	Blade size	size PZ0
Blade size, slotted (screw connection)	SD 0.6 x 3.5	Clamping screw	M 3
Conductor cross-section, max.	2.5 mm ²	Conductor cross-section, min.	0.5 mm ²
Material	Copper alloy	Max. torque for main contact	0.55 Nm
Min. torque for main contact	0.5 Nm	Size	4
Stripping length, rated connection	9 mm	Surface finish	Silver passivated
Type of connection	Screw connection	Volume resistance	≤2 mΩ
Wire connection cross section AWG, max.	AWG 14	Wire connection cross section AWG, min.	AWG 20
Wire connection cross section, finely stranded, max.	4 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.	4 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.	4 mm ²	Wire cross-section, solid, min.	0.5 mm ²

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

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Approvals



ROHS

Conform

DownloadsApproval/Certificate/Document of
Conformity[Manufacturer's declaration](#)

Engineering Data

[CAD data – STEP](#)

Engineering Data

[EPLAN, WSCAD](#)

Technical Documentation

[1651320000 HDC HVE 3+2 FS STP Blatt _1.pdf](#)

Catalogues

[Catalogues in PDF-format](#)

Brochures

[FL FIELDWIRING EN](#)[FL FIELDWIRING EN](#)

HDC HVE 3+2 FS

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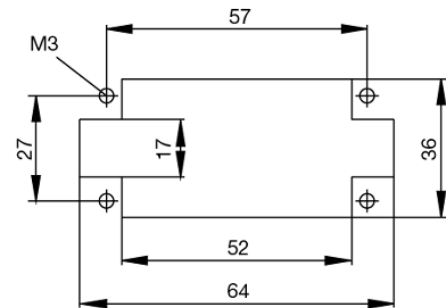
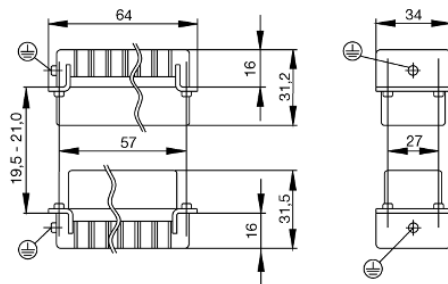
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Drawings



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.