

HDC S6 6 SAS**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

The MixMate series of connectors can simultaneously transmit high rated currents and voltages as well as signals. An axial screw can be used to secure the wire.
Axial screw connection TOP connection

General ordering data

Version	HDC insert, Pin, 690 V, 100 A, Number of poles: 12, Axial screw connection, Size: 8
Order No.	1790030000
Type	HDC S6 6 SAS
GTIN (EAN)	4032248212095
Qty.	1 pc(s).

Creation date September 22, 2022 9:51:51 PM CEST

Catalogue status 09.09.2022 / We reserve the right to make technical changes.

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Technical data

Dimensions and weights

Depth	111 mm	Depth (inches)	4.37 inch
Height	47.8 mm	Height (inches)	1.882 inch
Width	34 mm	Width (inches)	1.339 inch
Net weight	286 g		

Temperatures

Limit temperature	-40 °C ... 125 °C
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Environmental Product Compliance

REACH SVHC	Lead 7439-92-1	
SCIP	d447edfa-0214-4f34-b5ba-82eae491b46a	
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 plug	47.8 mm	Total length base	111 mm
Width	34 mm		

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Technical data

General data

BG		Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)
	8		
Insulating material group	IIIa	Insulation strength	10 ¹⁰ Ω
Material	Copper alloy	Number of poles	12
Number of power contacts	6	Number of signal contacts	6
Plugging cycles, silver	≥ 500	Pollution severity	3
Rated current (DIN EN 61984)	100 A	Rated impulse voltage (DIN EN 61984)	8 kV
Rated voltage (DIN EN 61984)	690 V	Rated voltage according to UL/CSA	600 V AC/DC
Series	MixMate	Size	8
Surface finish	Silver passivated	Type	Pin
UL 94 flammability rating	V-0	Volume resistance	≤1 mΩ

Connection data PE

Connection type PE	Screw connection	Rated cross-section	35 mm ²
Stripping length PE connection	8 mm	Tightening torque, max. PE connection	8 Nm
Tightening torque, min. PE connection	6 Nm	Wire cross section, AWG (PE), max.	AWG 2
Wire cross section, AWG (PE), min.	AWG 6		

Power contact

Clamping range, power contact, max.	35 mm ²	Clamping range, power contact, min.	16 mm ²
Hexagon socket	4 mm	Number of poles, performance contact	6
Rated current (DIN EN 61984), power contact	100 A	Rated impulse voltage (DIN EN 61984), power contact	8 kV
Rated voltage (DIN EN 61984), power contact	690 V	Stripping length, performance contact	13 mm
Tightening torque, max.	0.9 Nm	Tightening torque, min.	0.45 Nm
Tightening torque, power contact, max.	8 Nm	Tightening torque, power contact, min.	6 Nm
Type of connection, power contact	Axial screw connection		

Signal contact

AF size	SD 0.6 x 3.5	Clamping range, signal contact, max.	2.5 mm ²
Clamping range, signal contact, min.	0.5 mm ²	Number of poles, signal	6
Rated current (DIN EN 61984), signal	16 A	Rated impulse voltage (DIN EN 61984), signal	6 kV
Rated voltage (DIN EN 61984), signal contact	400 V	Stripping length, signal	12 mm
Tightening torque, max.	0.9 Nm	Tightening torque, min.	0.45 Nm
Tightening torque, signal contact, max.	0.8 Nm	Tightening torque, signal contact, min.	0.4 Nm
Type of connection, signal	Screw connection		

Version

BG	8	Clamping screw	M 7 x 0.75 mm
Conductor cross-section, max.	35 mm ²	Conductor cross-section, min.	16 mm ²
Material	Copper alloy	Size	8
Stripping length, rated connection	13 mm	Surface finish	Silver passivated
Type of connection	Axial screw connection	Volume resistance	≤1 mΩ
Wire connection cross section AWG, max.	AWG 2	Wire connection cross section AWG, min.	AWG 6
Wire connection cross section, finely stranded, max.	35 mm ²	Wire connection cross section, finely stranded, min.	16 mm ²

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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

Approvals

Approvals



ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E92202

Downloads

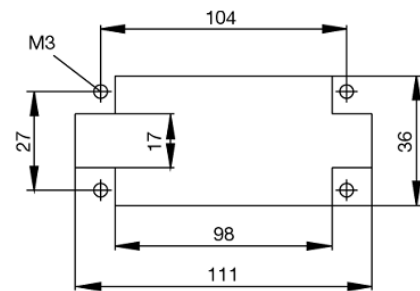
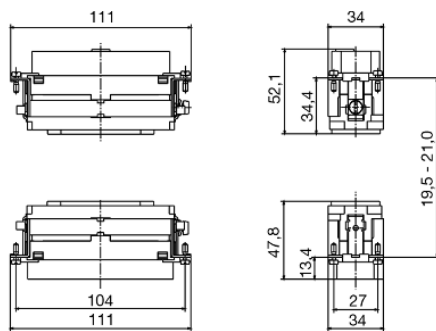
Engineering Data	CAD data – STEP
Engineering Data	EPLAN, WSCAD, Zuken E3.S
Catalogues	Catalogues in PDF-format
Brochures	FL FIELDWIRING EN FL FIELDWIRING EN

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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 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.