HDC S4/0 FS

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.
The wire connection level is designed for screw connections.
Screw connection.

General ordering data

Version	HDC insert, Female, 830 V, 80 A, Number of poles: 4, Screw connection, Size: 6
Order No.	1023210000
Type	HDC S4/0 FS
GTIN (EAN)	4032248739288
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Depth	84.5 mm	Depth (inches)	3.327 inch
Height	46.2 mm	Height (inches)	1.819 inch
Width	34 mm	Width (inches)	1.339 inch
Net weight	105 g		

Temperatures

Limit temperature	-40 °C ... 125 °C

Dimensions

Height of socket	46.2 mm	Total length base	84.5 mm
Width	34 mm		

General data

BG	6	Conductor cross-section	16 mm²
Insulating material	PC glass-fibre reinforced (UL-listed and railway-certified)	Insulating material group	IIIa
Insulation strength	10^{10} Ω	Material	Copper alloy
Max. torque for main contact	3 Nm	Min. torque for main contact	1.5 Nm
Number of poles	4	Number of power contacts	4
Plugging cycles, silver	≥ 500	Pollution severity	3
Rated current (DIN EN 61984)	80 A	Rated impulse voltage (DIN EN 61984)	8 kV
Rated voltage (DIN EN 61984)	830 V	Rated voltage according to UL/CSA	600 V AC/DC
Series	MixMate	Size	6
Surface finish	Silver passivated	Type	Female
UL 94 flammability rating	V-0	Volume resistance	≤1 mΩ

Connection data PE

Blade size, crosshead	Gr. PH2	Blade size, slotted (PE connection)	SD 1.2 x 6.5
Connection type PE	Screw connection	Fixing screw	M 5
Rated cross-section	16 mm²	Stripping length PE connection	13 mm
Tightening torque, max. PE connection	2.5 Nm	Tightening torque, min. PE connection	2 Nm
Wire cross section, AWG (PE), max.	AWG 6	Wire cross section, AWG (PE), min.	AWG 20

Power contact

Clamping range, power contact, max.	16 mm²	Clamping range, power contact, min.	1.5 mm²
Number of poles, performance contact	4	Rated current (DIN EN 61984), power contact	80 A
Rated impulse voltage (DIN EN 61984), power contact	8 kV	Rated voltage (DIN EN 61984), power contact	830 V
Stripping length, performance contact	15 mm	Type of connection, power contact	Screw connection

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Technical data

Version

BG	6	Blade size, slotted (screw connection)	1.0 x 5.5 mm
Clamping screw	M 6	Conductor cross-section, max.	16 mm²
Conductor cross-section, min.	1.5 mm²	Material	Copper alloy
Max. torque for main contact	3 Nm	Min. torque for main contact	1.5 Nm
Size	6	Stripping length, rated connection	15 mm
Surface finish	Silver passivated	Type of connection	Screw connection
Volume resistance	≤1 mΩ	Wire connection cross section AWG, max.	AWG 6
Wire connection cross section AWG, min.	AWG 16	Wire connection cross section, finely stranded, max.	16 mm²
Wire connection cross section, finely stranded, min.	0.5 mm²	Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, max.	16 mm²
Wire connection cross-section, finely stranded with wire-end ferrules DIN 46228/4, min.	0.5 mm²	Wire cross-section, solid, max.	16 mm²
Wire cross-section, solid, min.	0.5 mm²		

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

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

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Technical data

Chemical resistance	Conditionally resistant
Substance	Outdoor use
Chemical resistance	Conditionally resistant

Environmental Product Compliance

REACH SVHC	Lead 7439-92-1 Potassium perfluorobutane sulfonate 29420-49-3
SCIP	b67daa31-7dca-434d-8290-da7fb52f83a2
Chemical resistance	de.myview.objectmodel.impl.BlockImpl@4d06c5b2 de.myview.objectmodel.impl.BlockImpl@12ad7f9a de.myview.objectmodel.impl.BlockImpl@77b418bc de.myview.objectmodel.impl.BlockImpl@82a729c de.myview.objectmodel.impl.BlockImpl@73fa1d7e de.myview.objectmodel.impl.BlockImpl@a52ed34 de.myview.objectmodel.impl.BlockImpl@5df4753a de.myview.objectmodel.impl.BlockImpl@691528a de.myview.objectmodel.impl.BlockImpl@2523becb de.myview.objectmodel.impl.BlockImpl@3805cc16 de.myview.objectmodel.impl.BlockImpl@46a63389 de.myview.objectmodel.impl.BlockImpl@4aaf2cd5

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E310075

Downloads

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

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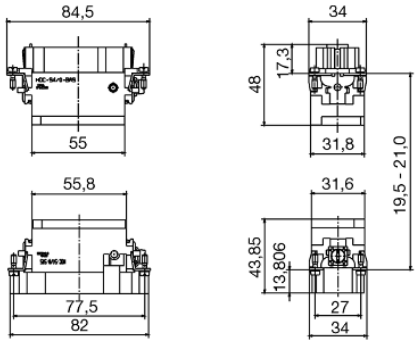
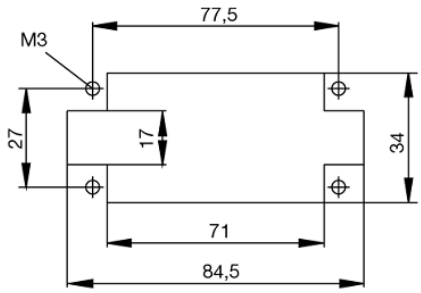
Drawings





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.