

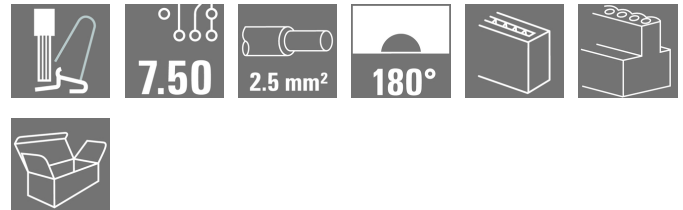
MPS 7S/05 S TN B B**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image**SNAP IN** **OMNIMATE® 4.0 - the next evolution step**

OMNIMATE® 4.0 follows the trend of One Cable Technology (OCT). The modular concept enables the fast configuration of hybrid interfaces, which transmit data, signals and energy in a single connector. As a result, you can reduce the cabling effort in a wide variety of applications, simplify maintenance and accelerate automation processes. The unique SNAP IN connection is the backbone and speeds up the wiring process.

The fastest connection yet

- Fast, safe, and tool-free wiring due to unique SNAP IN connection
- Ready for Robot through "wire ready" delivery with open clamping point
- Optical and acoustic feedback indicates proper wiring

Create your own configuration

- Flexible configuration and ordering via the Weidmüller Configurator (WMC)
- Dispatch within three days – even for individually configured products
- Automatic offer preparation for the configured product

Simply configuration of modular hybrid connectors

- Flexible combination options for power, signal and data transmission
- Future-proof Single-Pair Ethernet technology

General ordering data

Version	PCB plug-in connector, female plug, Pitch in mm (P): 7.50 mm, Number of poles: 5, Box
Order No.	8000078331
Type	MPS 7S/05 S TN B B
GTIN (EAN)	4064675622604
Qty.	48 pc(s).
Product data	IEC: 1000 V / 34.6 A / 0.5 - 4 mm² UL: 600 V / 18.5 A / AWG 20 - AWG 12
Packaging	Box

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Technical data

Dimensions and weights

Depth	34.95 mm	Depth (inches)	1.376 inch
Height	15.5 mm	Height (inches)	0.61 inch
Width	35.8 mm	Width (inches)	1.409 inch
Net weight	13.749 g		

System Parameters

Product family	OMNIMATE 4.0
Type of connection	Field connection
Wire connection method	SNAP IN
Pitch in mm (P)	7.5 mm
Pitch in inches (P)	0.295 "
Conductor outlet direction	180°
Number of poles	5
L1 in mm	30 mm
L1 in inches	1.181 "
Number of rows	1
Pin series quantity	1
Touch-safe protection acc. to DIN VDE 57 106	Safe from finger touch
Touch-safe protection acc. to DIN VDE 0470	IP 20
Protection degree	IP20
Stripping length	9 mm
Stripping length tolerance	min. 8 mm max. 10 mm
Plugging cycles	25
Plugging force/pole, max.	9 N
Pulling force/pole, max.	8 N

Material data

Insulating material	PBT GF	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	I
Comparative Tracking Index (CTI)	≥ 600	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Storage temperature, min.	-25 °C	Storage temperature, max.	55 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	125 °C

Conductors suitable for connection

Clamping range, min.	0.34 mm ²
Clamping range, max.	4 mm ²
Wire connection cross section AWG, min.	AWG 20
Wire connection cross section AWG, max.	AWG 12
Solid, min. H05(07) V-U	0.5 mm ²
Solid, max. H05(07) V-U	2.5 mm ²
Flexible, min. H05(07) V-K	0.5 mm ²
Flexible, max. H05(07) V-K	4 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, 0.34 mm ² min.	
w. plastic collar ferrule, DIN 46228 pt 4, 2.5 mm ² max.	

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Technical data

w. wire end ferrule, DIN 46228 pt 1, min. 0.34 mm²w. wire end ferrule, DIN 46228 pt 1, max. 2.5 mm²

Outer diameter of insulation, max. 4 mm

Clampable conductor	Cross-section for conductor connection		nominal	0.34 mm ²
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.34/12 TK	
	Cross-section for conductor connection		nominal	0.5 mm ²
	wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H0.5/16 OR	
		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.5/10	
	Cross-section for conductor connection		nominal	0.75 mm ²
	wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H0.75/16 W	
		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H0.75/10	
	Cross-section for conductor connection		nominal	1 mm ²
	wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H1.0/16 GE	
		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H1.0/10	
	Cross-section for conductor connection		nominal	1.5 mm ²
	wire end ferrule	Stripping length	nominal	12 mm
		Recommended wire-end ferrule	H1.5/16 R	
		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H1.5/10	
	Cross-section for conductor connection		nominal	2.5 mm ²
	wire end ferrule	Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H2.5/15D BL	
		Stripping length	nominal	10 mm
		Recommended wire-end ferrule	H2.5/10	

Reference text The outside diameter of the plastic collar should not be larger than the pitch (P)

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current, min. number of poles (Tu=20°C)	34.6 A
Rated current, max. number of poles (Tu=20°C)	29.1 A	Rated current, min. number of poles (Tu=40°C)	30.7 A
Rated current, max. number of poles (Tu=40°C)	25.9 A	Rated voltage for surge voltage class / pollution degree II/2	1,000 V
Rated voltage for surge voltage class / pollution degree III/2	1,000 V	Rated voltage for surge voltage class / pollution degree III/3	630 V
Rated impulse voltage for surge voltage class/ pollution degree II/2	6 kV	Rated impulse voltage for surge voltage class/ pollution degree III/2	8 kV

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Technical data

Rated data acc. to UL 1059

Institute (cURus)



Certificate No. (cURus)

E60693

Rated voltage (Use group B / UL 1059) 600 V

Rated voltage (Use group D / UL 1059) 600 V

Rated current (Use group B / UL 1059) 18.5 A

Rated current (Use group D / UL 1059) 10 A

Wire cross-section, AWG, min. AWG 20

Reference to approval values Specifications are maximum values, details - see approval certificate.

Rated voltage (Use group C / UL 1059) 600 V

Rated voltage (Use group F / UL 1059) 1,000 V

Rated current (Use group C / UL 1059) 18.5 A

Rated current (Use group F / UL 1059) 18.5 A

Wire cross-section, AWG, max. AWG 12

Classifications

ETIM 6.0

EC002638

ETIM 7.0

EC002638

ETIM 8.0

EC002638

ETIM 9.0

EC002638

ECLASS 9.0

27-44-03-09

ECLASS 9.1

27-44-03-09

ECLASS 10.0

27-44-03-09

ECLASS 11.0

27-46-02-02

ECLASS 12.0

27-46-02-02

ECLASS 13.0

27-46-02-02

Important note

IPC conformity

Conformity: The products are developed, manufactured and delivered according international recognized standards and norms and comply with the assured properties in the data sheet resp. fulfill decorative properties in accordance with IPC-A-610 "Class 2". Further claims on the products can be evaluated on request.

Notes

- Rated current related to rated cross-section & min. No. of poles.
- P on drawing = pitch
- Rated data refer only to the component itself. Clearance and creepage distances to other components are to be designed in accordance with the relevant application standards.
- Wire end ferrule without plastic collar to DIN 46228/1
- In accordance with IEC 61984, OMNIMATE-connectors are connectors without breaking capacity (COC). During designated use, connectors are not allowed to be engaged or disengaged when live or under load
- Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Approvals

Approvals



UL File Number Search

UL Website

Certificate No. (cURus)

E60693

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Technical data

Downloads

Approval/Certificate/Document of Con-	CoC_cURus_E60693_MPS_MHS_202207.pdf
formity	Declaration of the Manufacturer
Engineering Data	CAD data – STEP
User Documentation	Assembly instructions MPS 7S/5 EN DE
Catalogues	Catalogues in PDF-format

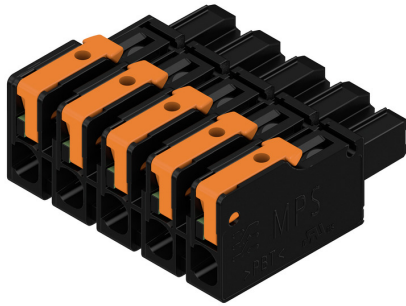
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Drawings

Product image



Dimensional drawing



Derating curve



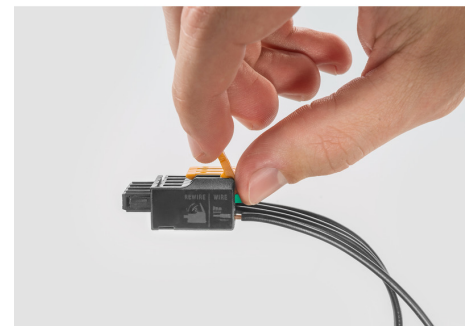
Derating curve



Product benefits



Product benefits



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Drawings

Product benefits



Fastest connection technology SNAP IN

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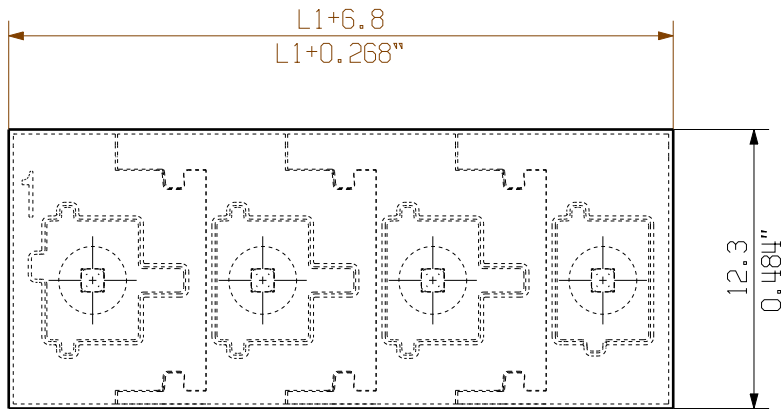
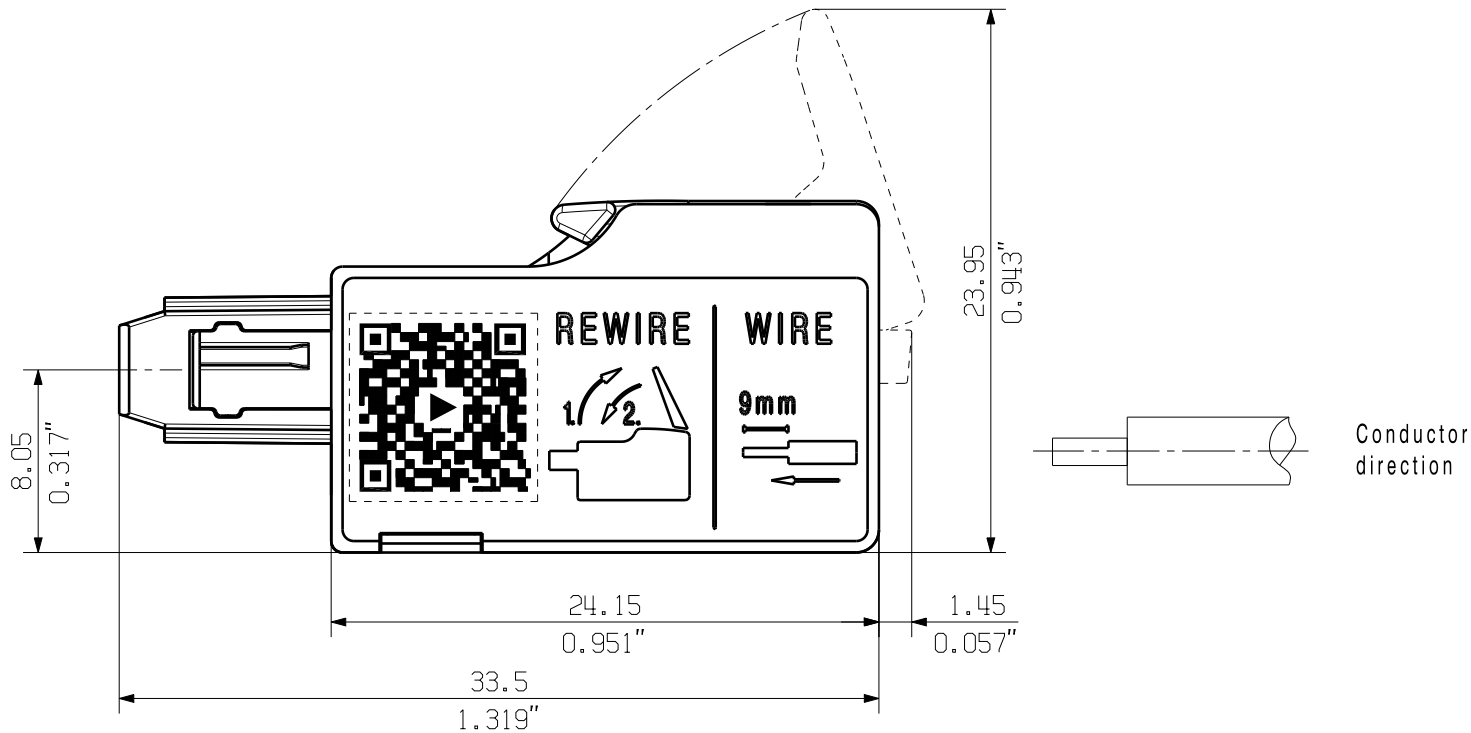
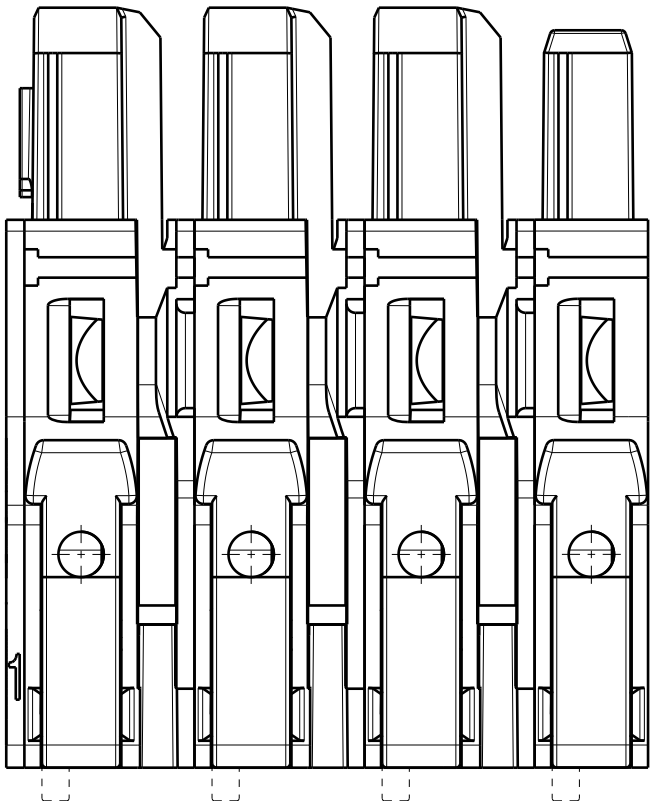
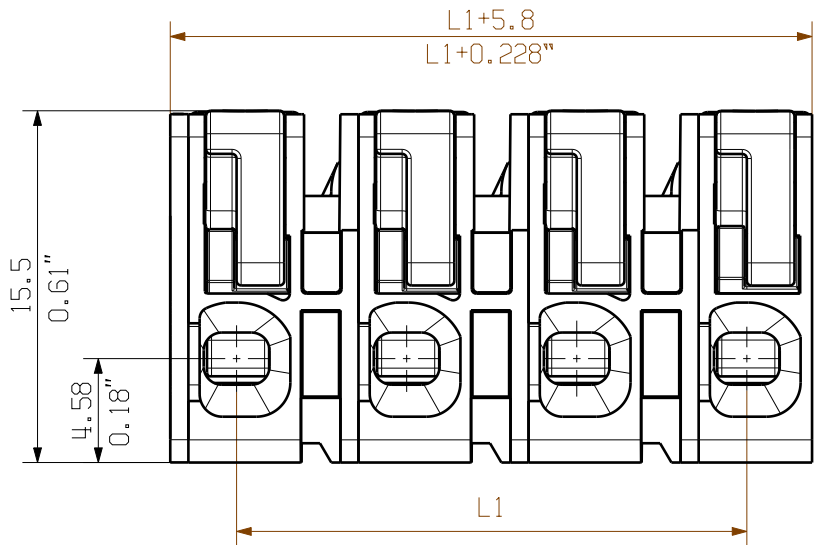
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Dimensions without tolerances are no check dimensions

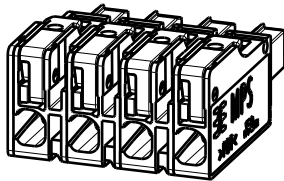
The English version is binding

Allgemeinguetliche Kundenzeichnung, aktueller Stand nur auf Anfrage
General customer drawing, topical version only if required

Shown: MPS 7.5/4 S



Min. front plate cut-out



M 1/1

Further dim. & info. see data sheet

RoHS COMPLIANT		First Issue Date 17.08.2020		Max. nos. Modification		Prim PLM Part No.: .		Prim ERP Part No.: .	
Scale: 3/1		Size: A3		Drawn Responsible		Date 17.08.2020		Name Tauber-Reglin,	
Approved		06.05.2021		Sapina, Svetos		MPS 7S/... S ...		Product file:	
Drawings Assembly									

8	52.50	2.067
7	45.00	1.772
6	37.50	1.476
5	30.00	1.181
4	22.50	0.886
3	15.00	0.591
2	7.50	0.295
n Poles	L1 [mm]	L1 [inch]

Drawing no.		Issue no.	
Sheet 3		of 4 sheets	

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