Data sheet

MPS 6/09 S TN B B

Weidmüller Interface GmbH & Co. KG
Klingenbergstraße 26
D-32758 Detmold
Germany

www.weidmueller.com

Product image

SNAP IN





General ordering data

Version	PCB plug-in connector, female plug, Pitch in mm (P): 6.35 mm, Number of poles: 9, 180°, Box
Order No.	3106850000
Type	MPS 6/09 S TN B B
GTIN (EAN)	4099987171120
Qty.	32 items
Product data	IEC: 1000 V / 47.2 A / 0.75 - 6 mm² UL: 600 V / 30 A / AWG 20 - AWG 10
Packaging	Box

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Technical data

Dimensions and weights

Depth	43 mm	Depth (inches)	1.6929 inch
Height	20.5 mm	Height (inches)	0.8071 inch
Width	59.95 mm	Width (inches)	2.3602 inch
Net weight	43 g		

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

System Parameters

Product family	OMNIMATE 4.0	Type of connection	Field connection
Wire connection method	SNAP IN with lever	Pitch in mm (P)	6.35 mm
Pitch in inches (P)	0.250 "	Conductor outlet direction	180°
Number of poles	9	L1 in mm	50.80 mm
L1 in inches	2.000 "	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
Volume resistance	≤5 mΩ	Stripping length	11 mm
Plugging cycles	≥ 25	Plugging force per pole, max.	11.25 N
Pulling force per pole, max.	10 N		

Material data

Insulating material	PA 9T	Colour	black
Colour of operational elements	orange	Colour chart (similar)	RAL 9011
Insulating material group	I	Comparative Tracking Index (CTI)	≥ 600
Moisture Level (MSL)	1	UL 94 flammability rating	V-0
Contact material	Cu-alloy	Contact surface	tinned
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	125 °C

Conductors suitable for connection

Conductor cross-section (rated connection), min.	0.5 mm²			
Conductor cross-section (rated connection), max.	6 mm²			
Solid, min. H05(07) V-U	0.75 mm²			
Solid, max. H05(07) V-U	4 mm²			
Flexible, min. H05(07) V-K	0.75 mm²			
Flexible, max. H05(07) V-K	6 mm²			
w. plastic collar ferrule, DIN 46228 pt 4, min.	0.5 mm²			
w. plastic collar ferrule, DIN 46228 pt 4, max.	4 mm²			
w. wire end ferrule, DIN 46228 pt 1, min.	0.75 mm²			
w. wire end ferrule, DIN 46228 pt 1, max.	4 mm²			
Clampable conductor	Cross-section for conductor connection	nominal	0.5 mm²	
	wire end ferrule	Stripping length	nominal	14 mm

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		Recommended wire-end ferrule	H0,5/18 OR
		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	H0,5/16 OR
Cross-section for conductor connection		nominal	0.75 mm²
wire end ferrule		Stripping length	nominal 14 mm
		Recommended wire-end ferrule	H0,75/18 W
		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	H0,75/16 W
Cross-section for conductor connection		nominal	1 mm²
wire end ferrule		Stripping length	nominal 15 mm
		Recommended wire-end ferrule	H1,0/18 GE
		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	H1,0/16 GE
Cross-section for conductor connection		nominal	1.5 mm²
wire end ferrule		Stripping length	nominal 15 mm
		Recommended wire-end ferrule	H1,5/18D SW
		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	H1,5/16 R
Cross-section for conductor connection		nominal	2.5 mm²
wire end ferrule		Stripping length	nominal 14 mm
		Recommended wire-end ferrule	H2,5/19T GR
		Stripping length	nominal 13 mm
		Recommended wire-end ferrule	H2,5/16DS BL
Cross-section for conductor connection		nominal	4 mm²
wire end ferrule		Stripping length	nominal 14 mm
		Recommended wire-end ferrule	H4,0/20T OR
		Stripping length	nominal 12 mm
		Recommended wire-end ferrule	H4,0/18T OR

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated current at min. number of poles (Tu = 20 °C)	47.2 A
Rated current, max. number of poles (Tu=20°C)	41 A	Rated current, min. number of poles (Tu=40°C)	42.5 A
Rated current at max. number of poles (Tu = 40 °C)	36.8 A	Rated voltage for surge voltage class (pollution degree II/2)	1000 V
Rated voltage for surge voltage class (pollution degree III/2)	1000 V	Rated voltage for surge voltage class (pollution degree III/3)	800 V
Rated impulse voltage for surge voltage class (pollution degree II/2)	8 V	Rated impulse voltage for surge voltage class (pollution degree III/2)	8 kV
Rated impulse voltage for surge voltage class (contamination degree III/3)	8 kV	Creepage distance, min.	11.2 mm
Clearance, min.	11.2 mm		

Rated data acc. to UL 1059

Rated voltage (Use group B / UL 1059)	600 V	Rated voltage (Use group C / UL 1059)	600 V
Rated voltage (Use group D / UL 1059)	600 V	Rated voltage (Use group F / UL 1059)	1000 V

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Rated current (Use group B / UL 1059)	30 A	Rated current (Use group C / UL 1059)	30 A
Rated current (Use group D / UL 1059)	5 A	Wire cross-section, AWG, min.	AWG 20
Wire cross-section, AWG, max.	AWG 10		

Important note

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. • Long term storage of the product with average temperature of 50 °C and maximum humidity 70%, 36 months

Classifications

ETIM 8.0	EC002638	ETIM 9.0	EC002638
ETIM 10.0	EC002638	ECLASS 14.0	27-46-02-02
ECLASS 15.0	27-46-02-02		

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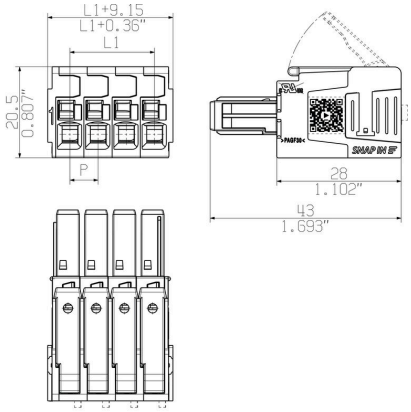
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Drawings

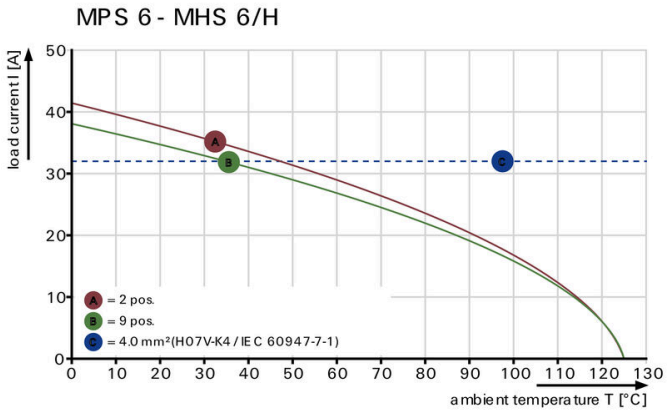
Product image



Dimensional drawing



Derating curve



Derating curve

