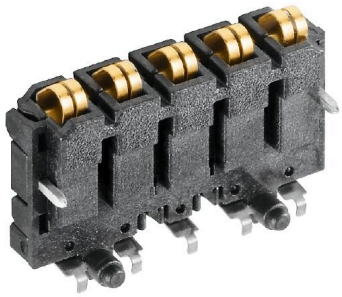
Data sheet

SR-SMD 4.50/05/90LF 1.5AU BK BX

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

www.weidmueller.com



The integrated rail bus for the modular electronics housing system
When supplying, connecting or distributing within modular applications, the rail bus can replace the tedious individual wiring process with a flexible and uninterrupted system-wide solution.
The system bus is securely integrated within the 35-mm standard mounting rail. The SMD-bus contact block can be reflow-soldered so that it can be completely automatically processed during the component assembly. The resistant, gold-plated contact surfaces ensure a permanent and reliable contact for all housing widths.

- Unlimited scalability The integrated connection solution covers all system widths: from the 6-mm slice to the 67-mm large-area housing.
- Easy to service during installation It's easy to replace a module, even in existing modules groups – without any influence on the neighbouring modules.
- Universal integration The uninterrupted system bus is securely integrated within the 35-mm standard mounting rail.
- Maximum availability Five fully-galvanized and partially gold-plated twin-arched contacts are used to establish a permanent contact to the rail bus. THR solder flanges ensure that the connection to the circuit board is stable.

General ordering data

Version	PCB plug-in connector, Bus-contact block for CH20M12-67, Solder flange, THT/THR solder connection, Number of poles: 5, 180°, Solder pin length (l): 1.5 mm, Gold-plated, black
Order No.	1155890000
Type	SR-SMD 4.50/05/90LF 1.5AU BK BX
GTIN (EAN)	4032248942527
Qty.	78 items
Product data	UL: 300 V / 5 A
Packaging	Box

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Technical data

Approvals

Approvals	
ROHS	Conform
UL File Number Search	UL Website
Certificate No. (cURus)	E60693

Dimensions and weights

Depth	16.3 mm	Depth (inches)	0.6417 inch
Height	24 mm	Height (inches)	0.9449 inch
Width	7.4 mm	Width (inches)	0.2913 inch
Length	0 mm	Net weight	2.78 g

Environmental Product Compliance

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

Material data

Insulating material	LCP	Colour	black
Colour chart (similar)	RAL 9011	Insulating material group	IIIa
Comparative Tracking Index (CTI)	175 ≤ CTI <400	Insulation resistance	≥ 108 Ω
Moisture Level (MSL)	1	Contact surface	Gold-plated
Storage temperature, min.	-40 °C	Storage temperature, max.	70 °C
Operating temperature, min.	-50 °C	Operating temperature, max.	100 °C
Temperature range, installation, min.	-30 °C	Temperature range, installation, max.	100 °C

Rated data acc. to IEC

tested acc. to standard	IEC 60664-1, IEC 61984	Rated voltage for surge voltage class / pollution degree III/3	63 V
Rated impulse voltage for surge voltage class/ pollution degree II/3	1.5 kV	Creepage distance, min.	3.2 mm
Clearance, min.	2.3 mm		

Rated data acc. to UL 1059

Institute (cURus)	CURUS	Certificate No. (cURus)	E60693
Rated voltage (Use group B / UL 1059)	300 V	Rated voltage (Use group C / UL 1059)	50 V
Rated voltage (Use group D / UL 1059)	50 V	Rated current (Use group B / UL 1059)	5 A
Rated current (Use group C / UL 1059)	5 A	Rated current (Use group D / UL 1059)	5 A
Reference to approval values	Specifications are maximum values, details - see approval certificate.		

Material data

Insulating material	LCP	Insulating material group	IIIa
Surface finish	gold	Basic material	Plastic
Comparative Tracking Index (CTI)	175 ≤ CTI <400		

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Technical data

General data

Colour	black	Protection degree	IP20 in installed state
Colour chart (similar)	RAL 9011		

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.

Classifications

ETIM 6.0	EC001031	ETIM 7.0	EC001031
ETIM 8.0	EC001031	ETIM 9.0	EC001031
ETIM 10.0	EC001031	ECLASS 9.0	27-18-27-90
ECLASS 9.1	27-18-27-90	ECLASS 10.0	27-18-27-92
ECLASS 11.0	27-18-27-92	ECLASS 12.0	27-18-27-92
ECLASS 13.0	27-18-27-92	ECLASS 14.0	27-18-27-92
ECLASS 15.0	27-18-27-92		

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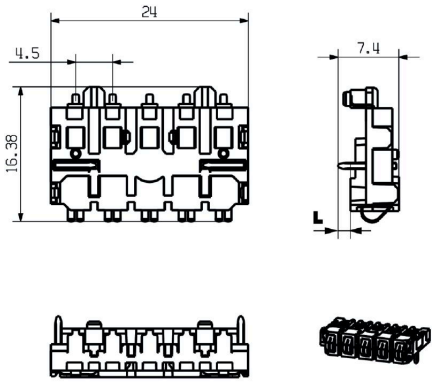
Drawings



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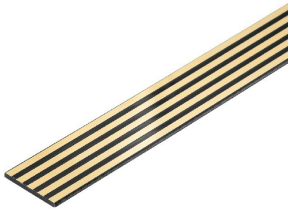
Accessories

CH20M BUS - Bus printed circuit board



The integrated rail bus for the modular electronics housing system
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- Unlimited scalability The integrated connection solution covers all system widths: from the 6-mm slice to the 67-mm large-area housing.
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General ordering data

Type	CH20M BUS 4.50/05 AU/250	Version
Order No.	1248220000	Mounting rail bus system, Bus circuit board, OMNIMATE Housing -
GTIN (EAN)	4050118053234	series CH20M, Width: 250 mm
Qty.	10 ST	
Type	CH20M BUS 4.50/05 AU/500	Version
Order No.	1248230000	Mounting rail bus system, Bus circuit board, OMNIMATE Housing -
GTIN (EAN)	4050118053227	series CH20M, Width: 500 mm
Qty.	10 ST	
Type	CH20M BUS 4.50/05 AU/750	Version
Order No.	1248240000	Mounting rail bus system, Bus circuit board, OMNIMATE Housing -
GTIN (EAN)	4050118053210	series CH20M, Width: 750 mm
Qty.	5 ST	

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Accessories

Bus insert profil - TS35x15

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General ordering data

Type	CH20M BUS-PROFIL TS 35X...	Version
Order No.	1248180000	Mounting rail bus system, Inlay profile, OMNIMATE Housing - series
GTIN (EAN)	4050118053265	CH20M, Width: 25.3 mm
Qty.	5 ST	
Type	CH20M BUS-PROFIL TS 35X...	Version
Order No.	1248190000	Mounting rail bus system, Inlay profile, OMNIMATE Housing - series
GTIN (EAN)	4050118053258	CH20M, Width: 500 mm
Qty.	5 ST	
Type	CH20M BUS-PROFIL TS 35X...	Version
Order No.	1248210000	Mounting rail bus system, Inlay profile, OMNIMATE Housing - series
GTIN (EAN)	4050118053241	CH20M, Width: 25.3 mm
Qty.	5 ST	

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Accessories

Bus insert profil - TS35x7.5

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General ordering data

Type	CH20M BUS-PROFIL TS 35X...	Version
Order No.	1248150000	Mounting rail bus system, Inlay profile, OMNIMATE Housing - series
GTIN (EAN)	4050118053296	CH20M, Width: 250 mm
Qty.	10 ST	
Type	CH20M BUS-PROFIL TS 35X...	Version
Order No.	1248160000	Mounting rail bus system, Inlay profile, OMNIMATE Housing - series
GTIN (EAN)	4050118053289	CH20M, Width: 25.3 mm
Qty.	10 ST	
Type	CH20M BUS-PROFIL TS 35X...	Version
Order No.	1248170000	Mounting rail bus system, Inlay profile, OMNIMATE Housing - series
GTIN (EAN)	4050118053272	CH20M, Width: 750 mm
Qty.	5 ST	

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Accessories

CH20M BUS-ADP - Bus insert profil cover

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General ordering data

Type	CH20M BUS-ADP TS 35/250	Version
Order No.	1248250000	Mounting rail bus system, Cover profile, OMNIMATE Housing - series
GTIN (EAN)	4050118053203	CH20M, Width: 250 mm
Qty.	10 ST	
Type	CH20M BUS-ADP TS 35/500	Version
Order No.	1248260000	Mounting rail bus system, Cover profile, OMNIMATE Housing - series
GTIN (EAN)	4050118052992	CH20M, Width: 500 mm
Qty.	10 ST	
Type	CH20M BUS-ADP TS 35/750	Version
Order No.	1248270000	Mounting rail bus system, Cover profile, OMNIMATE Housing - series
GTIN (EAN)	4050118052985	CH20M, Width: 750 mm
Qty.	5 ST	

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Accessories

CH20M BUS-AP - Bus insert profil endplates

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General ordering data

Type	CH20M BUS-AP LI TS 35X7...	Version
Order No.	1193160000	Mounting rail bus system, End plate, OMNIMATE Housing - series
GTIN (EAN)	4032248987771	CH20M, Width: 5.1 mm
Qty.	50 ST	
Type	CH20M BUS-AP RE TS 35X7...	Version
Order No.	1193170000	Mounting rail bus system, End plate, OMNIMATE Housing - series
GTIN (EAN)	4032248987924	CH20M, Width: 5.1 mm
Qty.	50 ST	