CH20M17 B BUS BK/BK 2010

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

www.weidmueller.com

Product image

Superior efficiency, flexibility and design - the "standard tailor-made fit"
When selecting a housing design, flexibility is a key factor. Other important criteria are: scalability, customised design, innovative functionality and cost efficiency. You need a choice which offers the maximum performance with the minimum overhead.
The CH20M17 modular electronics housing is the ideal housing solution for compact standard electronics applications.
The entire system is characterized by excellence: outstanding scalability and flexibility, a high security level, innovative application functionality and a variety of practical details.

- **Quicker installation** with features such as "Wire ready" the universal multi-tool screw head
- **User-friendly operations:** with clear and permanent labelling and extra marking possibilities, integrated release clip or transparent cover
- **Maximum interference immunity** with EMC-compliant construction featuring deeply overlapping module joint edges made from high-performance plastic
- **High operational reliability** with the unique Auto-Set coding system and featuring double-sided touch protection on the pin header and socket blocks

CH20M - a compact name for the most flexible system available on the market. It doesn't just stand for "Component Housing IP20 Modular".
CH20M also stands for efficiency and innovation throughout design, production and use.

General ordering data

Version	Modular housing, OMNIMATE Housing - series CH20M black, Base element, Recess in detent foot area for BUS contact, Width: 17.5 mm
Order No.	1366280000
Type	CH20M17 B BUS BK/BK 2010
GTIN (EAN)	4050118167726
Qty.	12 pc(s).

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Technical data

Dimensions and weights

Depth	107.4 mm	Depth (inches)	4.228 inch
Height	109.3 mm	Height (inches)	4.303 inch
Width	17.5 mm	Width (inches)	0.689 inch
Net weight	29.858 g		

Temperatures

Operating temperature range	-40 °C...120 °C	Humidity	5 - 93% rel. humidity, Tu = 40°C, no condensation

Material data

Comparative Tracking Index (CTI)	600 ≤ CTI	Insulating material	PA 66 GF 30
Insulating material group	I	UL 94 flammability rating	V-0

General data

Colour	black	Colour chart (similar)	RAL 9011
Encapsulation option	No	Protection degree	IP20 in installed state
Rail	TS 35		

Assembly properties

Number of slots for female connectors of the mounted assembly, max.	6	Number of PCBs, max.	1
Number of connection levels, max.	3	Number of poles, max.	18
Height of components on the PCB, max.	11.1 mm	Type of assembly of the PCB	double-sided

Thermal tests

Thermal tests	Test conditions	three housings installed in a row - no spacing, three connection level - six connectors per housing
	Test axles	horizontal, More on request
	Ambient temperature	80 °C
	Power dissapation, max.	0.9 W
	Ambient temperature	60 °C
	Power dissapation, max.	1.7 W
	Ambient temperature	40 °C
	Power dissapation, max.	2.45 W
	Ambient temperature	20 °C
	Power dissapation, max.	3.2 W

Component properties

Color of clip-on foot	black	Cut out in clip-on foot area as preperation for	BUS-contact, contact not included!
Number of connection levels, max.	3		

Design - IN requirements

PCB thickness	1.6 mm	Tolerance for the PCB shape	±0.1 mm
Tolerance of circuit board thickness	±0.15 mm		

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Technical data

Individualization options

Customer specific labelling possible	Yes	Customer specific order process	See guideline under downloads
Processing possibilities	Laser processing		

Classifications

ETIM 6.0	EC001031	ETIM 7.0	EC001031
ETIM 8.0	EC001031	ETIM 9.0	EC001031
ECLASS 9.0	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	27182792		

Important note

Product information	Circuit board contour, restricted zones, and other information for the design in of the circuit board can be found in the category connection technology under the corresponding male headers in the downloads.

Approvals

ROHS	Conform

Downloads

Engineering Data	CAD data – STEP CAD data – PCB_position_70149_LP-POSITION_17MM CAD data – Pin_header_pin_length_CH20M_A_OV_PCB-SHL_70315
User Documentation	Guideline customerspecific housings Guideline kundenspezifische Gehäuse
Catalogues	Catalogues in PDF-format
Brochures	FL ANALO.SIGN.CONV. EN MB DEVICE MANUF. EN FL MACHINE SAFETY EN FL 72H SAMPLE SER EN PO OMNIMATE EN

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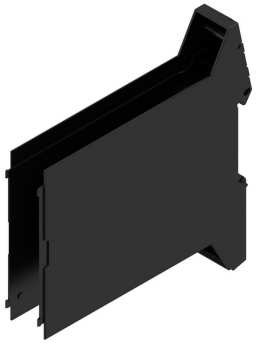
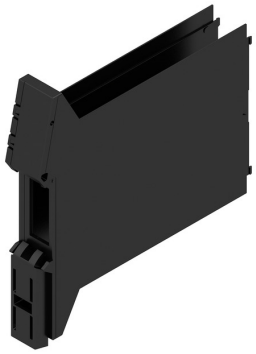
Drawings

Product image

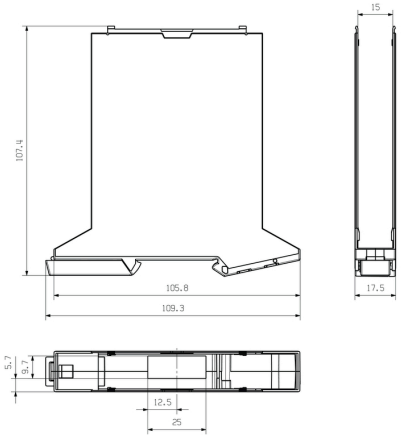


Product benefits



Base element including BUS cut-out

Dimensioned drawing



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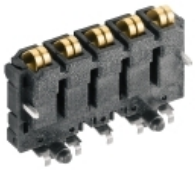
Accessories

Bus contact block - Solder flange



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

Type	SR-SMD 4.50/05/90LF 1.5 ...	Version	Product data	Packaging
Order No.	1155900000	PCB plug-in connector, Bus-contact block for CH20M12-67, Solder	IEC: 160 V	Tape
GTIN (EAN)	4032248942381	flange, THT/THR solder connection, Number of poles: 5, 180°, Solder	UL: 300 V / 5 A	
Qty.	300 pc(s).	pin length (l): 1.5 mm, Gold-plated, black		
Type	SR-SMD 4.50/05/90LF 1.5 ...	Version	Product data	Packaging
Order No.	1155890000	PCB plug-in connector, Bus-contact block for CH20M12-67, Solder	UL: 300 V / 5 A	Box
GTIN (EAN)	4032248942527	flange, THT/THR solder connection, Number of poles: 5, 180°, Solder		
Qty.	78 pc(s).	pin length (l): 1.5 mm, Gold-plated, black		

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Accessories

Bus contact block - Middle solder flange

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General ordering data

Type	SR-SMD 4.50/05/90LFM 3. ...	Version	Product data	Packaging
Order No.	1155870000	PCB plug-in connector, Bus-contact block for CH20M12-67, Middle	UL: 300 V / 5 A	Box
GTIN (EAN)	4032248942510	solder flange, THT/THR solder connection, Number of poles: 5, 180°,		
Qty.	78 pc(s).	Solder pin length (l): 3.2 mm, Gold-plated, black		

Type	SR-SMD 4.50/05/90LFM 3. ...	Version	Product data	Packaging
Order No.	1155880000	PCB plug-in connector, Bus-contact block for CH20M12-67, Middle	IEC: 160 V	Tape
GTIN (EAN)	4032248942305	solder flange, THT/THR solder connection, Number of poles: 5, 180°,	UL: 300 V / 5 A	
Qty.	300 pc(s).	Solder pin length (l): 3.2 mm, Gold-plated, black		