

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 CH20M67 modular electronics housings come in XXL size and are an integrated range. It is suited for those electronics applications that require lots of space, such as compact controllers and power supplies.

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 EMCcompliant 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 CH2OM black, Width: 67.5 mm
Order No.	1247240000
Туре	CH20M67 B BUS BK/OR
GTIN (EAN)	4050118038118
Qty.	4 pc(s).



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Technical data

-			
Dim	ensions	and	weights

Height	109.3 mm	Height (inches)	4.303 inch
Width	67.5 mm	Width (inches)	2.657 inch
Net weight	61.25 g		

Temperatures

Operating temperature range	Humidity	5 - 93% rel. humidity, Tu =
-40 °C1	120 °C	40°C, no condensation

Component Properties

Color of clip-on foot		Cut out in clip-on foot area as	BUS-contact, contact not
	orange	preperation for	included!

Mechanical tests

According to Standard	DIN EN 61373:1999 (shock and vibra	tion)
Test conditions	three housings installed in a row, 200g	g additional weight per PCB, three PCB mounted
Proved axles	X, Y, Z	
Shock test	Test category	1
	Number of shocks per axle	3 in positive and negative direction
	Shock duration	30 ms
	Acceleration horizontal	30 m/s ²
	Acceleration vertical	30 m/s ²
	Acceleration longitudinal	50 m/s ²
Vibration test	Test category	1B
	Effective acceleration	7.9 m/s ²
	Test duration	5 hours per axle

Thermal tests

Thermal tests	Test conditions	seven housings installed in a row - no spacing, three PCB per housing, two connection level - twelve connectors per housing
	Test axles	horizontal, More on request
	Ambient temperature	80 °C
	Power dissapation, max.	5.7 W
	Ambient temperature	60 °C
	Power dissapation, max.	8.1 W
	Ambient temperature	40 °C
	Power dissapation, max.	10.8 W
	Ambient temperature	20 °C
	Power dissapation, max.	13.6 W

Assembly properties

Number of PCBs, max.	3	Number of connection levels, max.	3
Number of poles, max.	72	Height of components on the PCB (usage of 1 PCB), max.	61.1 mm
Height of components on the PCB (usage of 2 PCB), max.	57.2 mm	Height of components on the PCB (usage of 3 PCB), max.	34.7 mm
Type of assembly of the PCB	double-sided		



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Design - IN requirements

PCB thickness	1.6 mm	Tolerance for the PCB shape	±0.1 mm
Tolerance of circuit board thickness	±0.15 mm		
Individualization options			
Customer specific labelling possible		Customer specific order process	See guideline under
Customer specific labelling possible	Yes	customer specific order process	downloads
Processing possibilities	Laser processing		
General data			
Colour	black	Colour chart (similar)	RAL 9011
Encapsulation option	No	Protection degree	IP20
Rail	TS 35		
Material data			
Comparative Tracking Index (CTI)	600 ≤ CTI	Insulating material	PA 66 GF 30
Insulating material group		UL 94 flammability rating	V-0
Classifications			
ETIM 6.0	EC001031	ETIM 7.0	EC001031
ETIM 8.0	EC001031	ECLASS 9.0	27-18-27-90
ECLASS 10.0	27-18-27-92	ECLASS 11.0	27-18-27-92
Important note			
Product information		cted zones, and other information for the design technology under the corresponding male heade	
Approvals	3 ,	J, 1 J	
ROHS	Conform		
Downloads			
Engineering Data	STEP		
Engineering Data	PCB position 70144 LF	P-POSITION_67MM CH20M_A_OV_PCB-SHL_70315	
Engineering Data	<u>EPLAN</u>		
User Documentation	Guideline customerspeci Guideline kundenspezifis	fic housings sche Gehäuse	
Catalogues	Catalogues in PDF-forma	<u>t</u>	
Brochures	FL ANALO.SIGN.CONV. E MB DEVICE MANUF. EN FL MACHINE SAFETY EN FL 72H SAMPLE SER EN PO OMNIMATE EN PO OMNIMATE EN	<u> </u>	



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Drawings

Product image

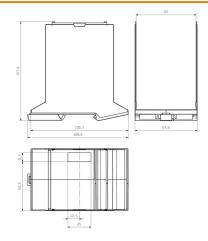


Product benefits



Base element including BUS cut-out

Dimensioned drawing





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Accessories

Bus contact block - Middle 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

Туре	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	UL:	Tape
GTIN (EAN)	4032248942305	solder flange, THT/THR solder connection, Number of poles: 5, 180° ,		
Qty.	300 pc(s).	Solder pin length (I): 3.2 mm, Gold-plated, black		
Туре	SR-SMD 4.50/05/90LFM 3	Version	Product data	Packaging
Type Order No.	SR-SMD 4.50/05/90LFM 3 1155870000	Version PCB plug-in connector, Bus-contact block for CH20M12-67, Middle	Product data UL:	Packaging Box
			UL:	0 0



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Accessories

Bus contact block - Solder flange



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General ordering data

Туре	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:	Box
GTIN (EAN)	4032248942527	flange, THT/THR solder connection, Number of poles: 5, 180°, Solder	r	
Qty.	78 pc(s).	pin length (I): 1.5 mm, Gold-plated, black		
Туре	SR-SMD 4.50/05/90LF 1.5	Version	Product data	Packaging
Type Order No.	SR-SMD 4.50/05/90LF 1.5 1155900000	Version PCB plug-in connector, Bus-contact block for CH20M12-67, Solder	Product data UL:	Packaging Tape
	, ,		UL:	0 0

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

<u>Weidmuller</u>: 1247240000