

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 CH20M45 modular electronics housings come in an integrated extra-large assortment. It is suited for those electronics applications that require more 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 CH20M Graphite grey, Width: 45 mm
Order No.	<u>1413770000</u>
Туре	CH20M45 B BUS GGY/BK
GTIN (EAN)	4050118214567
Qty.	6 pc(s).



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Technical data

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Height	109.3 mm	Height (inches)	4.303 inch
Length	107.4 mm	Length (inches)	4.228 inch
Net weight	38 g	Width	45 mm
Width (inches)	1.772 inch		

Temperatures

Operating temperature range	-40 °C120 °C	Installation temperature	-25 °C85 °C
Humidity	5 - 93% rel. humidity, Tu =		
	40°C, no condensation		

Component Properties

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

Mechanical tests

According to Standard	DIN EN 61373:1999 (shock and vibra	tion)
Test conditions	five housings installed in a row, 200g a	additional weight per PCB, two 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 duration	5 hours per axle
	Effective acceleration	7.9 m/s ²
	Test category	1B

Thermal tests

Thermal tests	Test conditions	seven housings installed in a row - no spacing, two connection level - eight connectors per housing
	Test axles	horizontal, More on request
	Ambient temperature	55 °C
	Power dissapation, max.	4.2 W
	Ambient temperature	50 °C
	Power dissapation, max.	4.8 W
	Ambient temperature	40 °C
	Power dissapation, max.	5.9 W
	Ambient temperature	20 °C
	Power dissapation, max.	8.25 W

Assembly properties

Number of PCB boards, max.	2	Number of connection levels	3 max.	
Number of poles, max.	48			

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

Indi	ıvıdu	alızat	ion o	ptions

Customer specific labelling possible	Yes	Customer specific order process	See guideline under downloads
Processing possibilities	Laser processing		
General data			
Colour	Graphite grey	Colour chart (similar)	RAL 7024
Encapsulation option	No	Rail	TS 35
Material data			
Comparative Tracking Index (CTI)	≤ 600	Insulating material	PA 66 GF 30
Insulating material group	I	UL 94 flammability rating	V-0
Classifications			
ETIM 6.0	EC001031	ETIM 7.0	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		icted zones, and other information for the design technology under the corresponding male head	
Approvals			
ROHS	Conform		
Downloads			
Engineering Data	STEP PCB position 50882 L Pin header pin length	P-POSITION_45MM CH20M_A_OV_PCB-SHL_70315	
User Documentation	Guideline customerspecific housings Guideline kundenspezifische Gehäuse		



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Drawings

Product image



Product benefits



Base element including BUS cut-out