

Weidmüller Interfaces GmbH & Co. KG

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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 CH20M22 modular electronics housing is the standard format from amongst the different housing widths. It has the optimal width for most typical 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 ESDcompliant 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: 22.5 mm
Order No.	<u>1073350000</u>
Туре	CH20M22 B GGY/BK 2019
GTIN (EAN)	4032248831432
Qty.	10 pc(s).



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Technical data

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Dimensions and we	ignts	into@waidmwallar.com	
Depth	107.4 mm	Depth (inches)	www.weidmuelle2.28ninch
Height	109.3 mm	Height (inches)	4.303 inch
Width	22.5 mm	Width (inches)	0.886 inch
Net weight	40.5 g		

Temperatures

Operating temperature range	-40 °C120 °C	Operating temperature, min.	-40 °C
Operating temperature, max.		Humidity	5 - 93% rel. humidity, Tu =
	120 °C		40°C, no condensation

Component Properties

Color of clip-on foot	black	Number of connection levels, max.	3

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 on the PCB
Proved axles	X, Y, Z	
Shock test	General test advices	All mechanical tests were tested on examplary setup, or in view of depending regulation. The specified results do not replace approval relevant tests. They are just orientation values.
	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
	Test category	1B
	Effective acceleration	7.9 m/s ²

Thermal tests

Thermal tests	General test advices	All thermal tests were tested on examplary setup, or in view of depending regulation. The specified results do not replace approval relevant tests. They are just orientation values.
	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	70 °C
	Power dissapation, max.	1.9 W
	Ambient temperature	60 °C
	Power dissapation, max.	2.35 W
	Ambient temperature	40 °C
	Power dissapation, max.	3.4 W
	Ambient temperature	20 °C
	Power dissapation, max.	4.5 W



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Assembly	v pror	perties

Number of slots for female connectors of	of	Number of PCBs, max. W	ww.weidmueller.com
the mounted assembly, max.	6		1
Number of connection levels, max.	3	Number of poles, max.	24
Height of components on the PCB, max.	. 16.1 mm	Type of assembly of the PC	B double-sided

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
	Yes		downloads
Processing possibilities	Laser processing		

General data

Colour	Graphite grey	Colour chart (similar)	RAL 7024
Encapsulation option	No	Protection degree	IP20 in installed state
Rail	TS 35		

Material data

Comparative Tracking Index (CTI)	600 ≤ CTI	Insulating material	PA 66 GF 30	
Insulating material group	1	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 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

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 - Pin_header_pin_length_CH20M_A_OV_PCB-SHL_70315	
Technical Documentation	PCB_position_50881_LP-POSITION_22MM	
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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Product image

Drawings



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Base element without cut-out in snap-in foot area

Dimensioned drawing

