

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 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	Electronics housing sample, OMNIMATE Housing - series CH20M black, Sample kit for developers, consisting of individual parts incl. female plug, Complete enclosure, Connection technology, Width: 22.5 mm
Order No.	<u>1519370000</u>
Туре	CH20M22 SET 3/3 BK/OR 2010
GTIN (EAN)	4050118327045
Qty.	1 pc(s).



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# **Technical data**

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Dim	ensions	and	weights

Height	117.2 mm	Height (inches)	4.614 inch
Width	22.5 mm	Width (inches)	0.886 inch
Length	113.6 mm	Length (inches)	4.472 inch
Net weight	140 g		

## **Temperatures**

Installation temperature	Humidity	5 - 93% rel. humidity, Tu =
-2	5 °C85 °C	40°C, no condensation

#### Rated data acc. to IEC

Rated current, max. number of poles		Rated current, max. number of poles	
(Tu=20°C)	10 A	(Tu=40°C)	9 A
Rated voltage for surge voltage class / pollution degree II/2	400 V	Rated voltage for surge voltage class / pollution degree III/2	320 V
Rated voltage for surge voltage class / pollution degree III/3	250 V	Rated impulse voltage for surge voltage class/ pollution degree II/2	250 kV
Rated impulse voltage for surge voltage class/ pollution degree III/2	4 kV	Rated impulse voltage for surge voltage class/ contamination degree III/3	4 kV

#### **Material data**

Insulating material	PA 66 GF 30	Insulating material group	II	
UL 94 flammability rating	V-0			

## **General data**

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

## **Design - IN requirements**

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

## **Assembly properties**

Number of connection levels	3	Number of poles	4
Type of contact to PCB	Solder connection, direct	Type of connection	pluggable

## **Connectable coducteurs**

Stripping length	8 mm	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.5 Nm	Clamping range, min.	0.13 mm <sup>2</sup>
Clamping range, max.	0.5 NIII	Wire connection cross section A	
olamping range, max.	2.5 mm <sup>2</sup>	min.	AWG 26
Wire connection cross section Al	NG,	Solid, min. H05(07) V-U	
max.	AWG 14		0.2 mm <sup>2</sup>
Solid, max. H05(07) V-U	2.5 mm <sup>2</sup>	Stranded, max. H07V-R	2.5 mm <sup>2</sup>
Flexible, min. H05(07) V-K		w. plastic collar ferrule, DIN 462	28 pt 4,
	0.2 mm <sup>2</sup>	min.	0.25 mm <sup>2</sup>
w. plastic collar ferrule, DIN 4622	28 pt 4,	w. wire end ferrule, DIN 46228	pt 1,
max.	. 2.5 mm <sup>2</sup>	min.	0.25 mm <sup>2</sup>
w. wire end ferrule, DIN 46228 p	t 1,	Max. clamping range	
max.	2.5 mm <sup>2</sup>		2.5 mm <sup>2</sup>

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# **Technical data**

## Classifications

ETIM 6.0	EC001031	ETIM 7.0	EC001031
ETIM 8.0	EC001031	ETIM 9.0	EC001031
ECLASS 9.0	27-18-27-02	ECLASS 9.1	27-18-27-92
ECLASS 10.0	27-18-27-02	ECLASS 11.0	27-18-27-02
ECLASS 12.0	27-18-27-02	ECLASS 13.0	27190204

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**

Downloads			
ROHS	Conform		

Engineering Data	CAD data - Pin_header_pin_length_CH20M_A_OV_PCB-SHL_70315 CAD data - STEP	
Technical Documentation	PCB_position_50881_LP-POSITION_22MM	
Catalogues	Catalogues in PDF-format	



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# **Drawings**

## **Product image**



## **Product image**



## **Product image**



## **Dimensioned drawing**



