

CH20M12 SET 2/3 BK/OR**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, customized design, innovative functionality and cost efficiency. You need a choice which offers the maximum performance with the minimum overhead.

The CH20M12 modular electronics housing is the "small" option amongst the "large" housing solutions for compact 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	Electronics housing sample, OMNIMATE Housing - series CH20M black, Sample kit for developers, consisting of individual parts incl. female plug, Width: 12.5 mm
Order No.	1519270000
Type	CH20M12 SET 2/3 BK/OR
GTIN (EAN)	4050118326888
Qty.	1 pc(s).

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Technical data

Dimensions and weights

Height	117.2 mm	Height (inches)	4.614 inch
Width	12.5 mm	Width (inches)	0.492 inch
Length	113.6 mm	Length (inches)	4.472 inch
Net weight	92 g		

Temperatures

Operating temperature, min.	-40 °C	Operating temperature, max.	120 °C
Installation temperature	-25 °C...85 °C	Humidity	5 - 93% rel. humidity, Tu = 40°C, no condensation

Rated data acc. to IEC

Rated current, max. number of poles (Tu=20°C)	10 A	Rated current, max. number of poles (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	4 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

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	2
Type of contact to PCB	Solder connection, direct	Type of connection	pluggable

Connectable conductors

Stripping length	8 mm	Tightening torque, min.	0.4 Nm
Tightening torque, max.	0.5 Nm	Clamping range, min.	0.13 mm ²
Clamping range, max.	2.5 mm ²	Wire connection cross section AWG, min.	AWG 26
Wire connection cross section AWG, max.	AWG 14	Solid, min. H05(07) V-U	0.2 mm ²
Solid, max. H05(07) V-U	2.5 mm ²	Stranded, max. H07V-R	2.5 mm ²
Flexible, min. H05(07) V-K	0.2 mm ²	w. plastic collar ferrule, DIN 46228 pt 4, min.	0.25 mm ²
w. plastic collar ferrule, DIN 46228 pt 4, max.	2.5 mm ²	w. wire end ferrule, DIN 46228 pt 1, min.	0.25 mm ²
w. wire end ferrule, DIN 46228 pt 1, max.	2.5 mm ²	Max. clamping range	2.5 mm ²

General data

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

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Material data

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

Classifications

ETIM 6.0	EC001031	ETIM 7.0	EC001031
ETIM 8.0	EC001031	ECLASS 9.0	27-18-27-02
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

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.
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Approvals

ROHS	Conform
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Downloads

Engineering Data	CAD data – PCB_position_50880_LP-POSITION_12MM CAD data – Pin_header_pin_length_CH20M_A_OV_PCB-SHL_70315 CAD data – STEP
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 image



Product image



Dimensioned drawing

