

CH20M45 B RD/BK

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 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	Modular housing, OMNIMATE Housing - series CH20M red, Width: 45 mm
Order No.	1206910000
Type	CH20M45 B RD/BK
GTIN (EAN)	4032248988655
Qty.	6 pc(s).

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Technical data**Dimensions and weights**

Height	109.3 mm	Height (inches)	4.303 inch
Length	107.4 mm	Length (inches)	4.228 inch
Net weight	39.33 g	Width	45 mm
Width (inches)	1.772 inch		

Temperatures

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

Component Properties

Color of clip-on foot	black
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Mechanical tests

According to Standard	DIN EN 61373:1999 (shock and vibration)		
Test conditions	five housings installed in a row, 200g additional weight per PCB, two PCB mounted		
Proved axes	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 axes	horizontal, More on request	
	Ambient temperature	55 °C	
	Power dissipation, max.	4.2 W	
	Ambient temperature	50 °C	
	Power dissipation, max.	4.8 W	
	Ambient temperature	40 °C	
	Power dissipation, max.	5.9 W	
	Ambient temperature	20 °C	
	Power dissipation, 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		

Creation date March 23, 2021 8:51:28 AM CET

Catalogue status 12.03.2021 / We reserve the right to make technical changes.

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Technical data**Individualization options**

Customer specific labelling possible	Yes	Customer specific order process	See guideline under downloads
Processing possibilities	Laser processing		

General data

Colour	red	Colour chart (similar)	RAL 3020
Encapsulation option	No	Protection degree	IP20

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	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	STEP PCB_position_50882_LP-POSITION_45MM Pin_header_pin_length_CH20M_A_OV_PCB-SHL_70315
Engineering Data	EPLAN
User Documentation	Guideline customerspecific housings Guideline kundenspezifische Gehäuse

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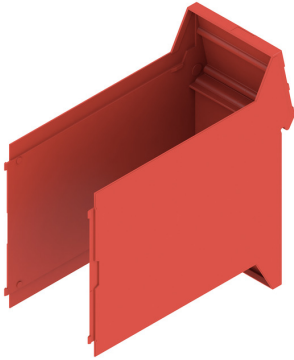
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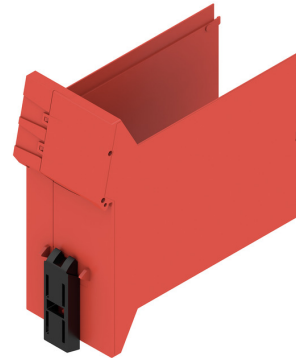
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Drawings

Product image



Product image



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