

Weidmüller Interface GmbH & Co. KG

Klingenbergstraße 26 D-32758 Detmold Germany

www.weidmueller.com

Product image

















The basic element of the modular CH20M housing offers a number of advantages that make it an excellent choice for your projects. With special cut-outs for bus and FE contacts, it is particularly flexible and adaptable.

Another plus point is the option of laser printing on the housing, which offers you high precision and individual design options. A wide range of colors is also available so that you can design the housing entirely according to your wishes.

The CH20M housing is also suitable for standard mounting rails, which makes installation and integration into existing systems easier.

General ordering data

Version	Modular housing, OMNIMATE Housing - series CH20M red, Base element, Width: 22.5 mm
Order No.	<u>1206870000</u>
Туре	CH20M22 B RD/BK 2014
GTIN (EAN)	4032248988761
Qty.	10 pc(s).



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Technical data

Dimensions and weights

Depth	108 mm	Depth (inches)	4.252 inch
Height	109.3 mm	Height (inches)	4.303 inch
Width	22.5 mm	Width (inches)	0.886 inch
Net weight	33.48 g		

Temperatures

Ambient temperature	-25 °C85 °C	Operating temperature range	-40120 °C
Humidity	5 - 93% rel. humidity, Tu =		
	40°C, no condensation		

Material data

Comparative Tracking Index (CTI)	600 ≤ CTI	Insulating material	PA 66 GF 30
Insulating material group	I	Material	Plastic
Surface finish	untreated	UL 94 flammability rating	V-0

General data

Colour	red	Colour chart (similar)	RAL 3020
Encapsulation option	No	Protection degree	IP20 in installed state
Rail	TS 35		

Assembly properties

Number of slots for female connectors of	Number of PCBs, max.	
the mounted assembly, max.		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 PCB	double-sided

Mechanical tests

According to Standard	DIN EN 61373:1999 (shock and vibration)			
Test conditions	five housings installed in a row, 200g a	five housings installed in a row, 200g 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		



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Thermal tests

Thermal tests	General test advices	All thermal tests were tested on examplary set- up, or in view of depending regulation. The spec fied results do not replace approval relevant tests They are just orientation values.
	Test conditions	three housings installed in a row - no spacing
	Test axles	horizontal
	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

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

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

Alternitive colours	More on request	Customer specific labelling possible	Yes
Customer specific order process	See guideline under down-	Processing possibilities	
	loads		Laser processing

Classifications

ETIM 8.0	EC001031	ETIM 9.0	EC001031
ETIM 10.0	EC001031	ECLASS 11.0	27-18-27-92
ECLASS 12.0	27-18-27-92	ECLASS 13.0	27-19-06-01
ECLASS 14.0	27-19-06-01	ECLASS 15.0	27-19-06-01

Environmental Product Compliance

RoHS Compliance Status	Compliant without exemption
REACH SVHC	No SVHC above 0.1 wt%

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



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Technical data

Downloads

Engineering Data	CAD data – STEP
	PCB Reference Layout
	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 CH20M12-67
	Guideline kundenspezifische Gehäuse CH20M12-67
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



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

Dimensioned drawing

