CH20M 12 & CH20M 45

Extension of the modular electronics housing system

CH20M (**C**omponent **H**ousing IP**20** **M**odular) **– the new housing standard from Weidmüller – perfectly fits to custom electronics applications.**

Like a “tailor-made suit straight off the rack”, the groundbreaking module concept combines freedom in design with the efficiency as well as the planning reliability of a standard system. Hence also available as 12.5 mm and 45 mm pitch the further completion of the product line is continued in order to cover the full range of established sizes from the 6 mm sliced variants, beyond 22.5 mm up to 67 mm wide-span electronics housings. In addition to scalability, a high level of safety as well as innovative functionality and applicability, the system also convinces with superior advantages in detail. The result: time-saving installation, user-friendly operation as well as high operational reliability and resistance to interference.

CH20M stands for efficiency, ranging from development to production and consistently satisfies all requirements placed on a future-proof platform for modern electronics.

Evident labelling

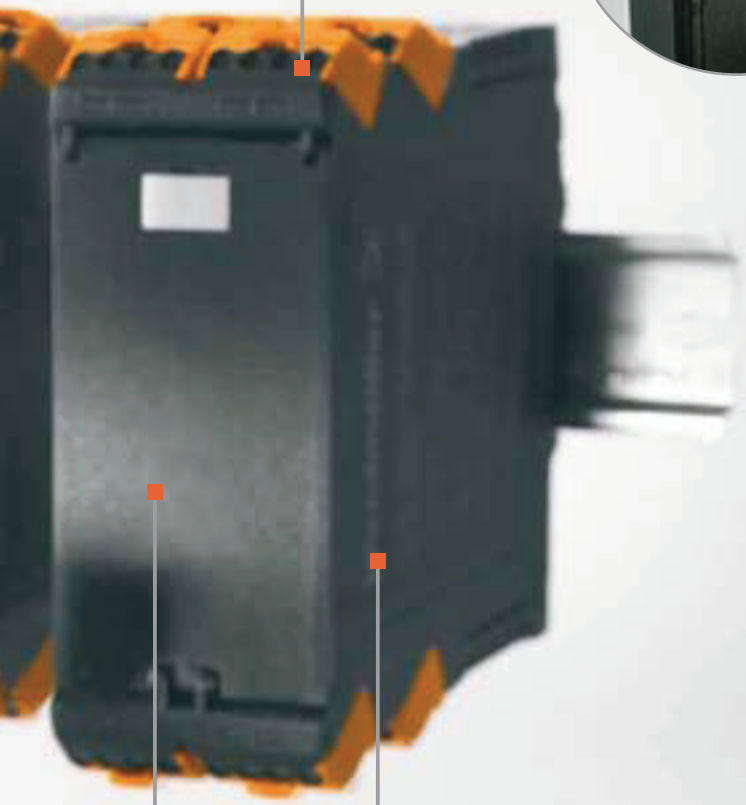
Combined with the captive, unique “AutoSet” encoding, the clearly detectable markers on the plug connection and in the front ensure proof against mismating of the connections.

Visibly locked

The operating and indicator elements can be protected standard by lead-sealing the cover to prevent unauthorised access.

Fast connection – intuitive ejection

Simple and fast operation, even in the most difficult installation conditions through integrated and colour-coded release yokes.



Efficient production – systematic assembly

1. Left or right oriented pin headers (SLH-SMT) are designed to be soldered with the printed circuit board in all common processes.
2. The side elements (SIDE) are simply attached and then pre-assembled with the head components (COVER & FRONT)
3. Finally inserted to the snap-on-foot bottom part (BASE), all components are joined into a unit, thereby securely and permanently protecting them against unintended disassembly.

Automatic coding

Extensive safety package included standard:

- integrated, captive coding with unique “Autoset” function
- Bi-directional finger safety, both on the plug’s AND the pin header’s side
- Personal and ESD safety by means of serially leading earth pins

Custom design

The suitability for laser labelling and the colour options of the housing modules further expand the design options. The swivelling cover can also be variably printed and easily marked.

Practically oriented operation – clear display

The transparent, swivelling cover engages when raised and locks into place or can be removed. Operating and indicator elements are legible in the closed state as well. The integrated release yoke enables the ejection of the socket plug in the most difficult installation conditions.

Technical data and ordering data can be found beginning on page C.2

CH20M component housing

CH20M12

Modular component housing for electronic components with widths of 12 mm, pluggable connections for max. 12 conductors

Available in second quarter 2009

For current technical data, see www.weidmueller.com!

Technical data

General data		
Dimensions W x L x H	mm	see drawing
Connection system		Pluggable screw-type connections
Number of connections		Max. 12 connections on three levels
Protection class		IP20
UL 94 flammability class		V0
Colour		black
Material		PA
Information		

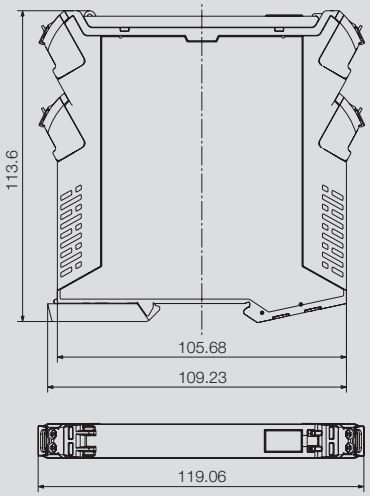
Ordering data

Individual parts		**Type**	**Qty.**	**Order No.**
CH20M BASE element	Base element black, foot orange	CH20M12 B BK/OR	10	**1104180000**
CH20M FRONT element	black	CH20M12 F BK	10	**1104190000**
CH20M SIDE element	2 connection levels, black	CH20M12 S PPSC BK	10	**1104200000**
CH20M COVER element	Swivelling cover, black-transparent	CH20M12 C BK	100	**1104240000**
Connection system				
Pin block, right	black	SHL-SMT 5.00/02GR 4.2BX	120	**1069550000**
Pin block, left	black	SHL-SMT 5.00/02GL 4.2BX	120	**1069620000**
Socket connector	Socket connector black / release lever orange	BHZ 5.00/02/90LH BK/BL	100	**1069360000**

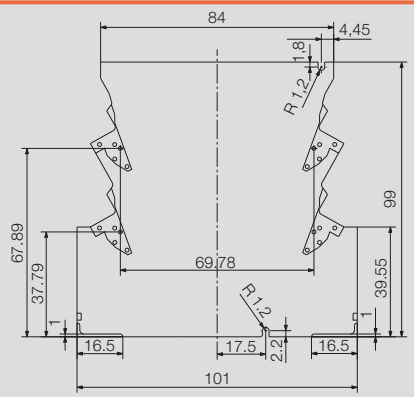
Accessories

ESG 24X13.5/sX43.3	SAI Active universal	ESG 8/13.5/43.3 SAI AU	5	**1912130000**

Dimensioned drawing of the housing



Dimensioned drawing of the PCB



CH20M component housing

CH20M22

Modular component housing for electronic components with widths of 22.5 mm, pluggable connections for max. 24 conductors

Available in second quarter 2009

For current technical data, see www.weidmueller.com!

Technical data

General data		
Dimensions W x L x H	mm	see drawing
Connection system		Pluggable screw-type connections
Number of connections		Max. 24 connections on three levels
Protection class		IP20
UL 94 flammability class		V0
Colour		black
Material		PA
Information		

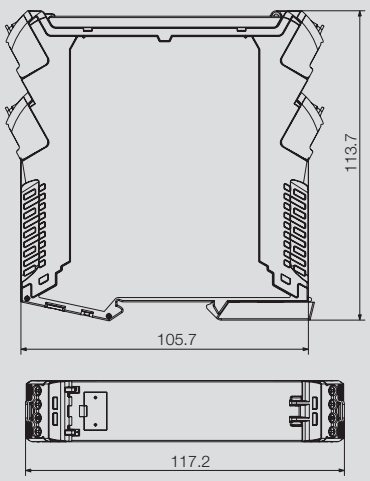
Ordering data

Individual parts		**Type**	**Qty.**	**Order No.**
CH20M BASE element	Base element black, foot orange	CH20M22 B BK/OR	10	**1104450000**
CH20M FRONT element	black	CH20M22 F BK	10	**2418640000**
CH20M SIDE element	2 connection levels, black	CH20M22 S PPSC BK	10	**2418650000**
CH20M COVER element	Swivelling cover, black-transparent	CH20M22 C BK	100	**2418670000**
Connection system				
Pin block, right	black	SHL-SMT 5.00/04GR 4.2BX	120	**1069570000**
Pin block, left	black	SHL-SMT 5.00/04GL 4.2BX	120	**1069640000**
Socket connector	Socket connector black / release lever orange	BHZ 5.00/04/90LH BK/BL	100	**1069380000**

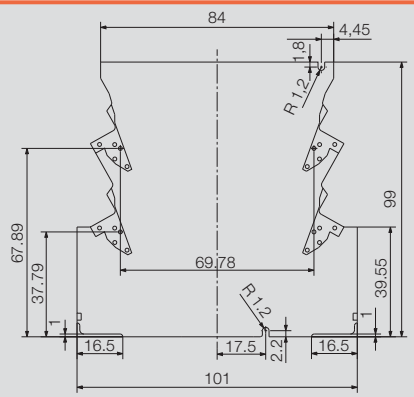
Accessories

	SAI Active universal	ESG 8/13.5/43.3 SAI AU	5	**1912130000**
	BHZ device marker, 4-poles; white; V-2	ESG 6.6/20 BHZ 5.00/04	200	**1082540000**

Dimensioned drawing of the housing



Dimensioned drawing of the PCB



CH20M component housing

CH20M45

Modular component housing for electronic components with widths of 45 mm, pluggable connections for max. 48 conductors

Available in second quarter 2009

For current technical data, see www.weidmueller.com!

Technical data

General data		
Dimensions W x L x H	mm	see drawing
Connection system		Pluggable screw-type connections
Number of connections		Max. 48 connections on three levels
Protection class		IP20
UL 94 flammability class		V0
Colour		black
Material		PA
Information		

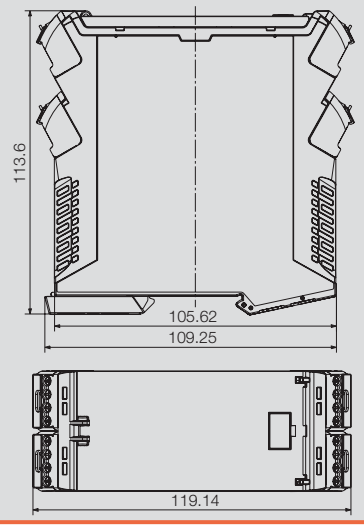
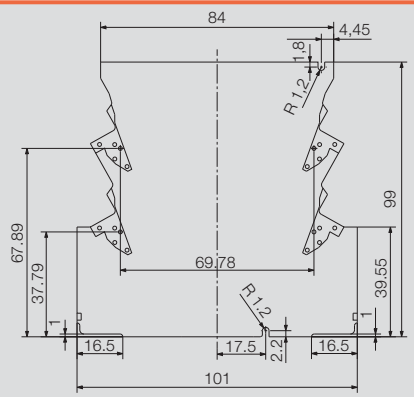
Ordering data

Individual parts		**Type**	**Qty.**	**Order No.**
CH20M BASE element	Base element black, foot orange	CH20M45 B BK/OR	10	**1104410000**
CH20M FRONT element	black	CH20M45 F BK	10	**1104420000**
CH20M SIDE element	2 connection levels, black	CH20M45 S PPSC BK	10	**1111720000**
CH20M COVER element	Swivelling cover, black-transparent	CH20M45 C BK	100	**1104430000**
Connection system				
Pin block, right	black	SHL-SMT 5.00/04GR 4.2BX	120	**1069570000**
Pin block, left	black	SHL-SMT 5.00/04GL 4.2BX	120	**1069640000**
Socket connector	Socket connector black / release lever orange	BHZ 5.00/04/90LH BK/BL	100	**1069380000**

Accessories

	SAI Active universal	ESG 8/13.5/43.3 SAI AU	5	**1912130000**
	BHZ device marker, 4-poles; white; V-2	ESG 6.6/20 BHZ 5.00/04	200	**1082540000**

Dimensioned drawing of the housing



Dimensioned drawing of the PCB