

CH20M6 BP 4P-4P BUS TGY LF 1 1293806**Weidmüller Interface GmbH & Co. KG**

Klingenbergstraße 26

D-32758 Detmold

Germany

www.weidmueller.com

Product image**The electronics world in a single slice**

With a width of only 6.1 mm, a wide range of compact applications originates from this electronic development expertise.

The modular housing design supports the engineering with many intelligent features:

- **Maximum freedom of design** with large total surface area (6800 mm²) on the PCB – enabling the maximum component assembly with the space-saving form of the reflow-compatible THR terminals.
- **Customised design opportunities** with laser printing and housing colours, individual processing options, variable printing, and easily labelled hinged cover
- **Maximum processing efficiency** with reflow-compatible connection elements for reflow soldering in machine-ready tape packaging.
- **Error-free assembly and solder processes** with optimised frame and connecting adapter shapes on the PCB resulting in a perfect fit and positioning of the connection elements
- **Quick installation** with features such as "Wire Ready" or the all-purpose Multi-Tool screw head

The combination of extensive knowledge from electronics developers and Weidmüller competence - creating innovative synergy for electronics applications.

General ordering data

Version	Modular housing, OMNIMATE Housing - series CH20M Traffic grey (RAL), Housing base, Recess in detent foot area for BUS contact, Width: 6.1 mm
Order No.	277140000
Type	CH20M6 BP 4P-4P BUS TGY LF 1 1293806
GTIN (EAN)	4064675032137
Qty.	50 pc(s).

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Technical data

Dimensions and weights

Depth	114.3 mm	Depth (inches)	4.5 inch
Height	110.7 mm	Height (inches)	4.358 inch
Width	6.1 mm	Width (inches)	0.24 inch
Net weight	9.06 g		

Material data

Comparative Tracking Index (CTI)	400 ≤ CTI <600	Insulating material	PBT
Insulating material group	II	UL 94 flammability rating	V-0

General data

Colour	Traffic grey (RAL)	Colour chart (similar)	RAL 7042
Encapsulation option	No	Protection degree	IP20 in installed state
Rail	TS 35		

Assembly properties

Number of PCBs, max.	1	Number of connection levels, max.	8
Number of poles, max.	8	Height of components on the PCB, max.	3.5 mm
Type of assembly of the PCB	one-sided		

Mechanical tests

According to Standard	DIN EN 61373:1999 (shock and vibration)		
Test conditions	50g additional weight on the PCB, with endbrackets WEW 35/1 (1059000000), four housings installed in a row		
Proved axles	X, Y, Z		
Shock test	General test advices	All mechanical tests were tested on exemplary 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	50 m/s ²	
	Acceleration vertical	50 m/s ²	
Vibration test	Acceleration longitudinal	50 m/s ²	
	Test category	1B	
	Effective acceleration	7.9 m/s ²	
	Test duration	5 hours per axle	

Component properties

Cut out in clip-on foot area as preparation for	BUS-contact, contact not included!	Number of connection levels, max.	8
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Design - IN requirements

PCB thickness	0.8 mm	Tolerance for the PCB shape	±0.1 mm
Tolerance of circuit board thickness	±0.1 mm		

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Technical data

Individualization options

Alternative colours	More on request	Customer specific cutouts possible	Yes
Customer specific labelling possible	Yes	Customer specific order process	See guideline under downloads

Classifications

ETIM 7.0	EC001031	ETIM 8.0	EC001031
ETIM 9.0	EC001031	ECLASS 11.0	27-18-27-92
ECLASS 12.0	27-18-27-92	ECLASS 13.0	27-19-06-01

Downloads

Engineering Data	CAD data – PCB Reference Layout CAD data – STEP
Catalogues	Catalogues in PDF-format

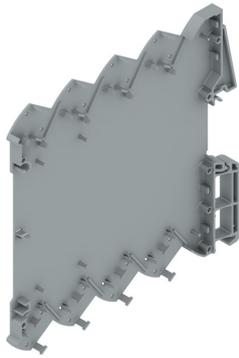
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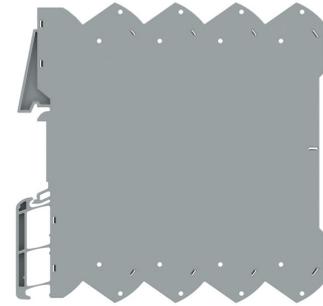
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Drawings

Product image



Product image

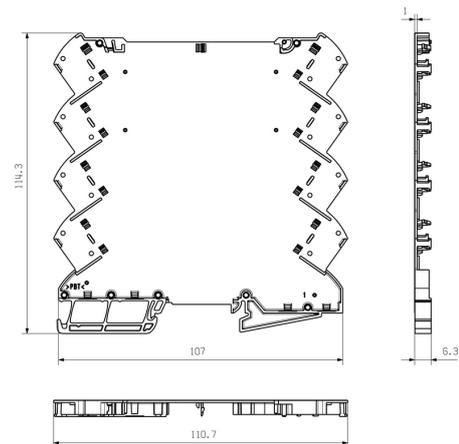


Product benefits



Base element including BUS cut-out

Dimensioned drawing



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Accessories

CH20M6 C - Tilt cover



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General ordering data

Type	CH20M6 C BK 1819	Version
Order No.	2418620000	Modular housing, OMNIMATE Housing - series CH20M black,
GTIN (EAN)	4032248899142	Transparent, Flip cover, Width: 6.1 mm
Qty.	50 pc(s).	
Type	CH20M6 C TP 8089	Version
Order No.	1073410000	Modular housing, OMNIMATE Housing - series CH20M Transparent,
GTIN (EAN)	4032248831203	Flip cover, Width: 6.1 mm
Qty.	50 pc(s).	

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Accessories

SR-SMD - Bus contact block CH20M6



The integrated rail bus for the modular electronics housing system

When supplying, connecting or distributing within modular applications, the rail bus can replace the tedious individual wiring process with a flexible and uninterrupted system-wide solution.

The system bus is securely integrated within the 35-mm standard mounting rail. The SMD-bus contact block can be reflow-soldered so that it can be completely automatically processed during the component assembly. The resistant, gold-plated contact surfaces ensure a permanent and reliable contact for all housing widths.

- **Unlimited scalability** The integrated connection solution covers all system widths: from the 6-mm slice to the 67-mm large-area housing.
- **Easy to service during installation** It's easy to replace a module, even in existing modules groups – without any influence on the neighbouring modules.
- **Universal integration** The uninterrupted system bus is securely integrated within the 35-mm standard mounting rail.
- **Maximum availability** Five fully-galvanized and partially gold-plated twin-arched contacts are used to establish a permanent contact to the rail bus. THR solder flanges ensure that the connection to the circuit board is stable.

General ordering data

Type	SR-SMD 4.50/05/90 AU BK ...	Version	Product data	Packaging
Order No.	1155840000	PCB plug-in connector, Bus-contact block for CH20M6, THT/THR	IEC: 160 V	Box
GTIN (EAN)	4032248942534	solder connection, Number of poles: 5, 180°, Gold-plated, black	UL: 300 V / 5 A	
Qty.	78 pc(s).			
Type	SR-SMD 4.50/05/90 AU BK ...	Version	Product data	Packaging
Order No.	1155850000	PCB plug-in connector, Bus-contact block for CH20M6, THT/THR	IEC: 160 V	Tape
GTIN (EAN)	4032248942374	solder connection, Number of poles: 5, 180°, Gold-plated, black	UL: 300 V / 5 A	
Qty.	300 pc(s).			