OMNIMATE Housings

Housings for electronics

Accessories

L

M

OMNIMATE – device connectivity

Weidmüller ϿϾ

OMNIMATE Housings
Housings for electronics

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OMNIMATE Housings
Housings for electronics

The perfect platform for form and function – including terminal layouts, bulk products and "tailor-made suits straight off the rack".

Weidmüller´s electronics provide a state-of-the-art platform for electronics applications: for all design types and usage areas. The application and its requirements are the foundation for the housing design:

Component housings using the standard pitch sizes are particularly well suited for standardised electrical cabinet applications.

Because of their excellent flexibility and variability, profile housings are the perfect solution for custom constructions and small-batch series.

The perfect blend of design, connection technology and functionality result in a design that is well tailored to market and application requirements.

Flexibility
Profile housing – the perfect solution for custom constructions and smallbatch series.
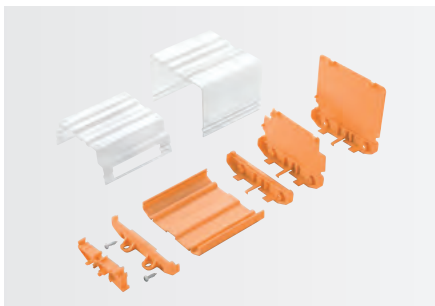
Innovation
Attention to detail: with the integrated, captive "AutoSet" coding function.

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Reliability
Weidmüller´s legendary quality and well established, proven connection technology guarantee maximum availability for your systems.

Component housing for mounting on rail
Component housing: function, form and processing all contribute to a single cohesive unit that offers safety, manufacturing efficiency and usability.


Assembly housing in profile shape
Assembly housing in profile shape - the flexible modular system of coloured and transparent plastic profiles and support modules provides the optimum balance between flexibility and efficiency.

Accessories
Comprehensive range of system accessories for integrating your assembled electronics "package" into the system environment - from attachment and connection to marking systems.
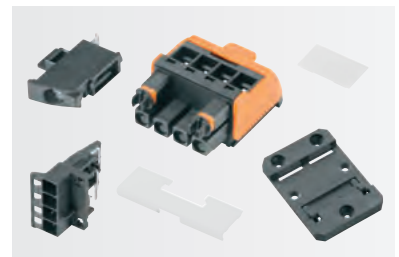
Efficiency
Reduce costs and increase productivity: SMT/SMD connectors packed suitably for fully automated production.

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**OMNIMATE Housings
Housings for electronics**

Electronics housings

With 6 housing systems, Weidmüller's electronics housing portfolio offers a platform for electronic applications in any design and for all application areas.

Detailed design information and the most important product-related data is available on the respective product pages. Data sheets and CAD models are available online for download.

CH20M – Modular component housing

Page L.6

System description (key points)	Component housing system IP 20
Scalability	• 7 housing widths from 6 to 67.5 mm:
Widths	• 6,1 / 12,5 / 17,5 / 22,5 / 35[1] / 45 / 67,5
Design	• Individually configurable
Production	• 100% reflow soldering compatible (automated)
Application	• Networked with mounting rail bus
Connection system	**Connectors (touch-safe both sides)**
Number of conductors that can be connected	• 4 – 72
Number of connection levels on each side	• 1 – 3
Design options	**Individually configurable**
Housing design	• Asymmetrical port configuration
	• Individual processing / modification
PCB layout	• Large net layout space of up to 9000 mm²
	• Up to 3 flexibly positioned PCBs
	• Both sides can be fitted with components (underside: + 5mm)
Labelling & marking	• Pad & laser printing
	• Device markers for female connector
	• Device markers for hinged cover
Standard housing colours (Other colours on request)	
Additional features	**Optional or standard**
optional (excerpt)	• Integrated mounting rail bus
	• FE mounting rail contac
standard (excerpt)	• Connection areas: lockable slots
	• Integrated, captive 16-fold "AutoSet" coding
	• Integrated ejector and plus / minus screws
	• "Wire ready" and "wire guard" (protection against mis-inserting)
	• Transparent hinged cover, sealable

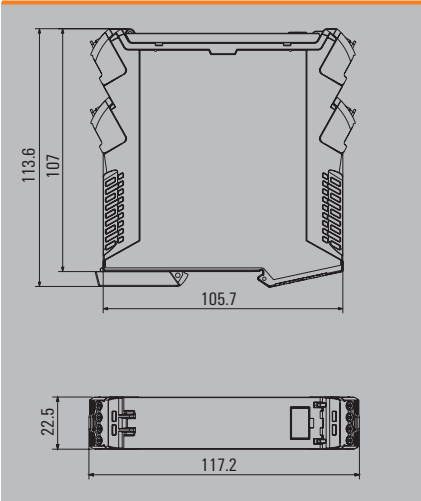## Legend of symbols

Clamping yoke screw connections

"PUSH IN" spring connection

Tension clamp connection

Housing dimensions (exemplary)

Note: 1) On request

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MICROBOX – Small housing
TERMINALBOX – Terminal housing
Page L.38

RS 45-122 – Profile housing variable
Page L.42

RS 70 – Profile housing modular
Page L.47

Small housing IP 20
- MICROBOX: 6.1 mm
- TERMINALBOX: 6.0 mm
- Miniature plate housing
- Compact enclosure in terminal format
- E.g. for I/O-plate applications

Connection terminals
- 4 – 6
- 2 – 3

2 versions
- MICROBOX: closed
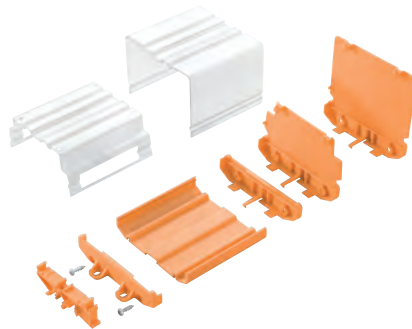- TERMINALBOX: optionally with cover plate

- Pad-print printing

Optional
- Cross-connector 32 A

Variable extruded profile case IP 20
- Standard length 2 m, optionally cut to size
- Circuit boards 45 to 122 mm
- Precisely cut lengths
- Modules protected with a clear cover

Female connectors or terminals
- As needed
- 1 – 3

Combinable and a perfect fit
- See-through covers in 2 sizes
- End plates in 3 sizes
- Standard circuit cards (EURO format)
- Up to 2 PCBs stackable
- Double-sided installation
- Pad-print printing
- Standard connector markings
- Marking strips for the cover hood

Optional
- Direct mounting

Modular profile case IP 00
- Individual elements, stackable modular
- Elements of 5 / 10 / 15 / 25 / 30 / 45 mm
- For 68 mm circuit boards
- Tool-free installation
- Sub-assembly accessible when opened

Female connectors or terminals
- As needed
- 1 – 3

tool-free installation
- 4 snap-on feet
- 5 different intermediate elements
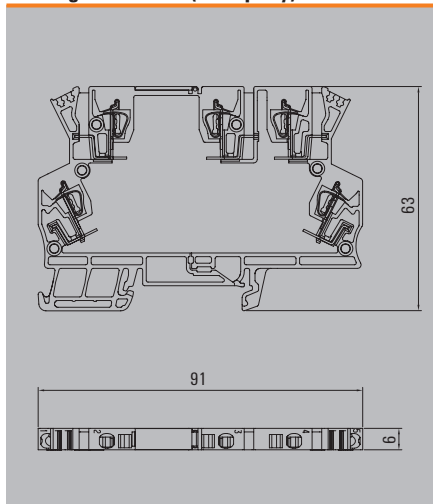- Standard circuit boards
- Double-sided installation
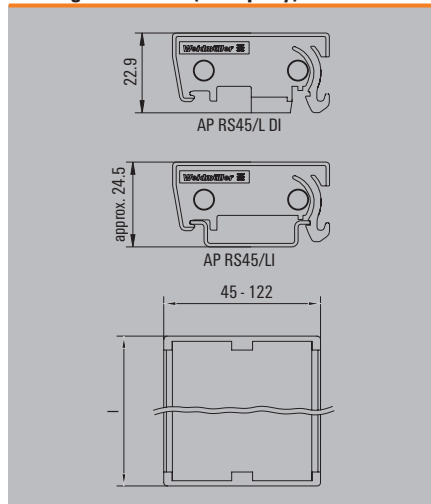
- Pad-print printing
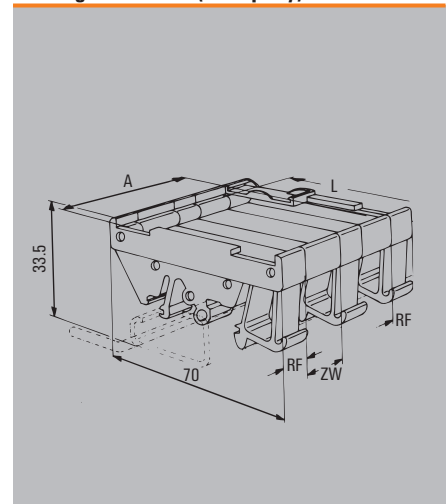- Standard connector markings

Optional
- Direct mounting

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Housing dimensions (exemplary)

Housing dimensions (exemplary)

AP RS45/L DI

approx. 24.5

AP RS45/LI

45 - 122

22.9

Housing dimensions (exemplary)

33.5

A

L

RF

RF   ZW

70

91

63

6

Individual design by combining form, function and appearance

CH20M (Component Housing IP 20 Modular) – Weidmüller's new housing standard – represents the ideal platform for basing customised electronic applications.

Like a "tailor-made suit straight off the rack", the ground breaking module concept combines freedom in design with the low cost and planning security of a standard system.

In addition to scalability, a high level of safety and innovative functionality in the application, the system also convinces with superior attention to detail.

The results are quicker installation, user-friendly operation, high operational reliability and resistance to interference. From development to production, the CH20M represents efficiency. It covers all of the requirements for a modern electronics platform built with the future in mind.

Designed configuration
As many connections as you require and as affordable as you need: scalable connection levels, up to 72 wire connections, individually configurable for each side with 1, 2 or 3 connection levels across all housing widths.

Designed basic colours
With a focus on the important elements: the unobtrusive housing colours (black graphite, grey graphite and light grey) make a competent impression without distracting from the key operational and display elements.

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Designed printing
Detailed symbols, data, graphics or text can be printed (with either laser or pad printing) on the large surface available on the housing element.

Designed optical appearance
The standard variants, with their modularity and variety, enable you to customise a wide range of designs to fit your application.

Designed functionality
Our comprehensive, standardised configuration variants can be further supplemented with modification and design changes to fit your custom needs.

Designed modifications
Modifying after the configuration: for example by integrating the pluggable 30-pole BL-I/O LED digital I/O connection level in the front or with the RJ45 socket on the side.

Designed functional colours
More operational confidence with functionally appropriate colour coding: three functional colours (red, yellow and blue coding) can be assigned to key industrial applications.

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Power, signals and data are provided, connected and distributed securely and consistently

This customer-friendly bus solution brings power, signals and data to the rail in a quick and reliable manner. When supplying, connecting or distributing within modular applications, the rail bus can replace the tedious individual wiring process with a flexible and uninterrupted system solution. As a result, the wiring overhead and the error rate are both reduced. Redundant functions within complex applications can be efficiently centralised or intelligently distributed.

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.

Scalability with no limits
Unique: The integrated connection solution covers all system widths: from the 6 mm slice to the 67 mm large-area housing.
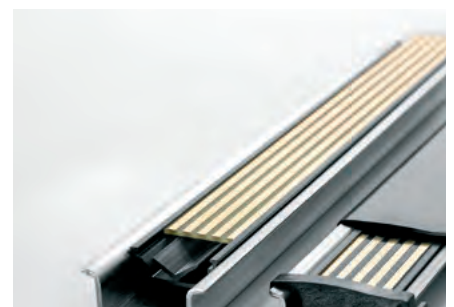
Easy to service during installation:
Quick: It's easy to replace a module, even in existing modules groups – without any influence on the neighbouring modules.
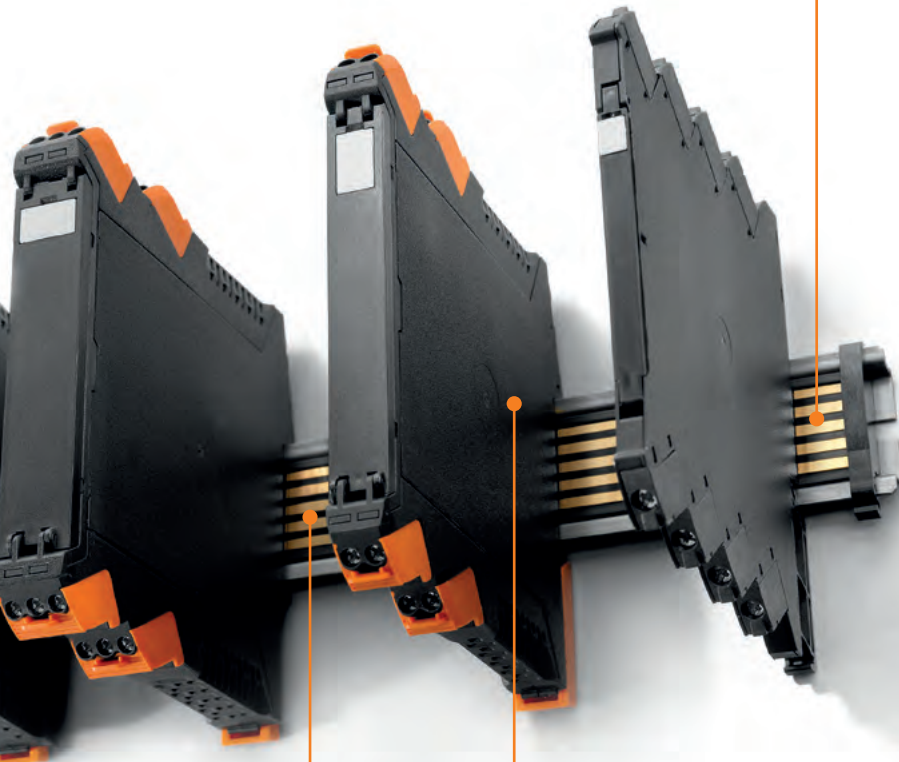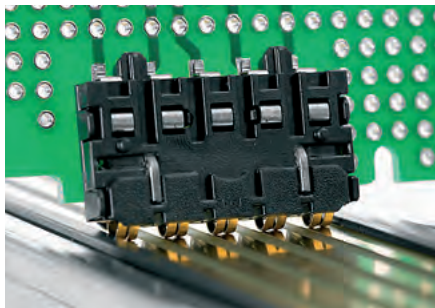
Unlimited configuration
Compatible: The individual modules can be positioned anywhere on any TS 35 standard top-hat rail. Unused areas are safely covered.
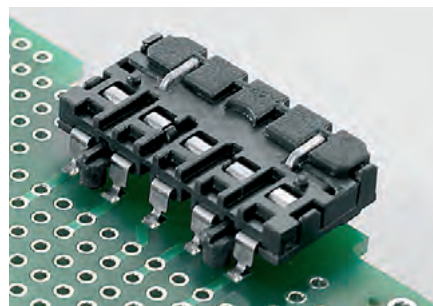
Maximum availability:
Reliable: Five fully-galvanised and partially gold-plated twin-arched contacts are used to establish a permanent contact to the rail bus. THR solder flanges ensure that the connection to the circuit board is stable.
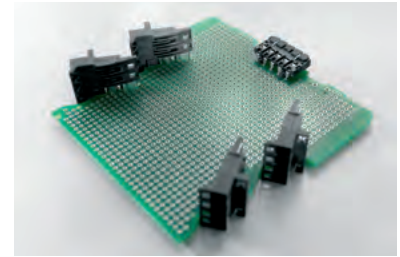
Affordable assembly
Fully automatic: No manual post processing is required for the bus contact block – it is processed with the assembly group in a single SMT assembly process.
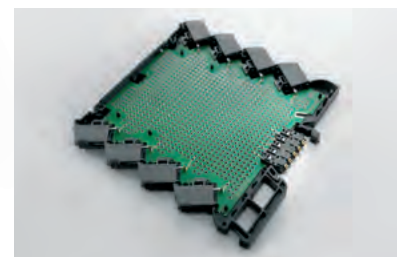
Safe installation
Low loss: You can safely avoid undesired bus interruptions and high contact resistances. Maximum facility availability ensured by the old-plated contact surfaces on the system bus and contact block, as well as the consistent system design.

More flexibility in design
From design through production to application - CH20M6 sets the market standard with maximal board space with minimal exterior dimensions as well as allowing fully automatic reflow processing or bus connections.

State-of-the-art processing
Efficient: The SMD-compatible bus contact block is made from high-temperature-resistant LCP. It is designed for the SMT reflow process and is delivered in machine-ready packaging.

OMNIMATE Housing – CH20M-67
The new housing offers new assembly dimensions in the 67.5 mm equipment class.

The CH20M-67 sets new standards on the market as a large-scale housing in terms of flexibility for integrating intricate electronic subassemblies. You can distribute the electronic functions over as many as three printed-circuit boards. The front surface of the housings also has a unique size that can be used for freely laying out the operator interface.

Like all housings of the CH20M family from Weidmüller, the CH20M-67 also supports the connection to the mounting rail bus. The system bus is reliably integrated into the 35-mm standard mounting rail and replaces painstaking and error-prone individual wiring.

More reliability when connecting the conductors
Series equipment: The built-in conductor wire guard underinsertion protection prevents the hazardous underinsertion of the conductor and protects it from concealed contact faults. Being wire ready ensures that all connecting points are completely open at delivery.

More speed at installation
Series equipment: Screwed connections with wiring, supported by plus-minus screws, with power tools just right for automatic equipment.
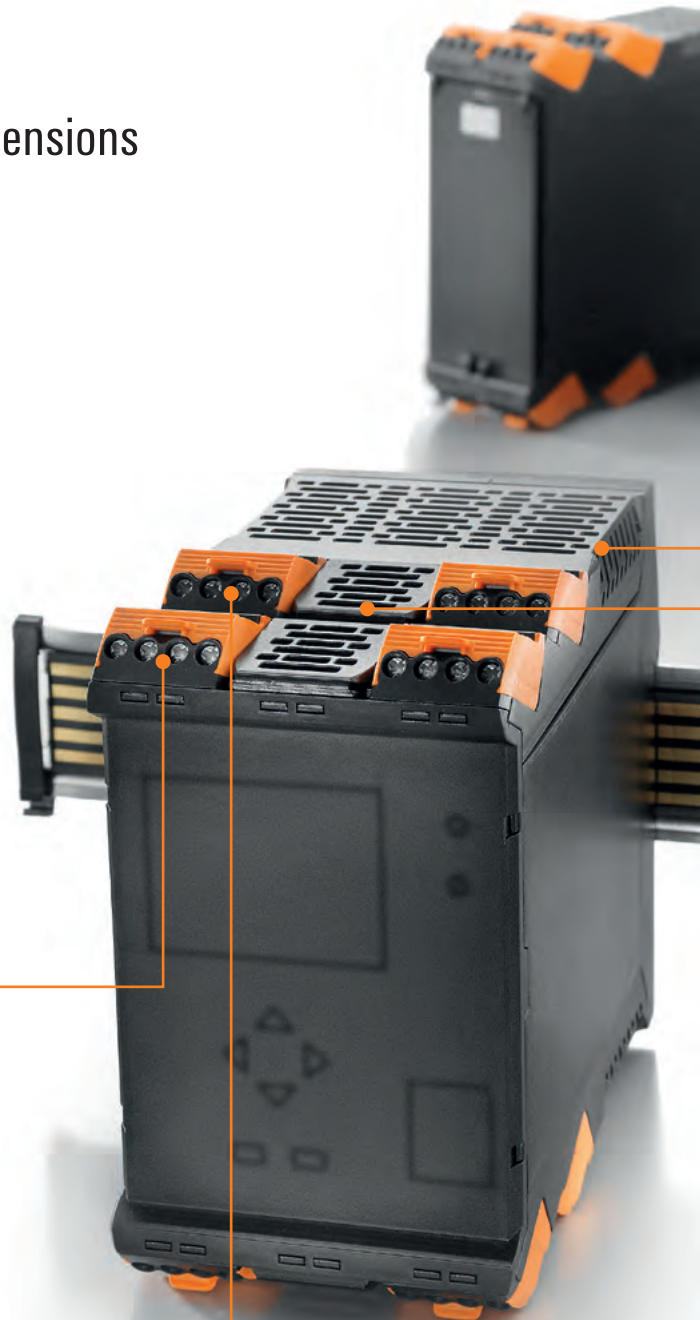
More layout area
The side ventilation openings are standard equipment in the semi-cooling design and provide sufficient convection for demanding electronics with the maximised layout area on the printed-circuit board.

More flexibility for interfaces
Unused plug-in stations or connections that are only accessible from the factory side can be reliably and permanently sealed with the optional AD-SHL-SMT cover.
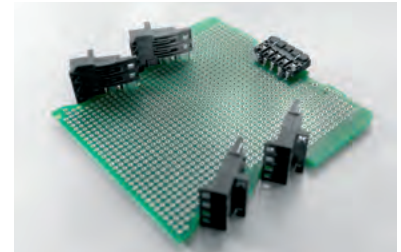
More design freedom
There is room for one to three printed-circuit boards placed on both sides CH20M-67. There is maximum design flexibility since each printed-circuit board can take four freely selectable positions in the housing.

More mounting space
The printed-circuit boards can be positioned at a distance of 2.3 mm (and also 5 mm to the housing wall). This gives you the free choice of single- or double-sided assembly.

More stability on the mounting rail
The built-in click-in base is premounted at the factory which guarantees easy, reliable and vibration-free fastening on the DIN mounting rail. A guide with four points of support provides a solid base.
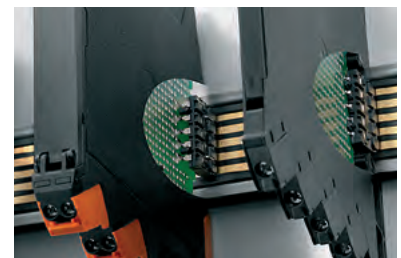
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OMNIMATE Housing – System CH20M
System overview

Hinged cover

BHZ female plug

BHZ female plug

FRONT element

SIDE element

SIDE element

SHL-SMT male
header, right version

SHL-SMT male
header, right version

BASE element,
optional with bus cut-out
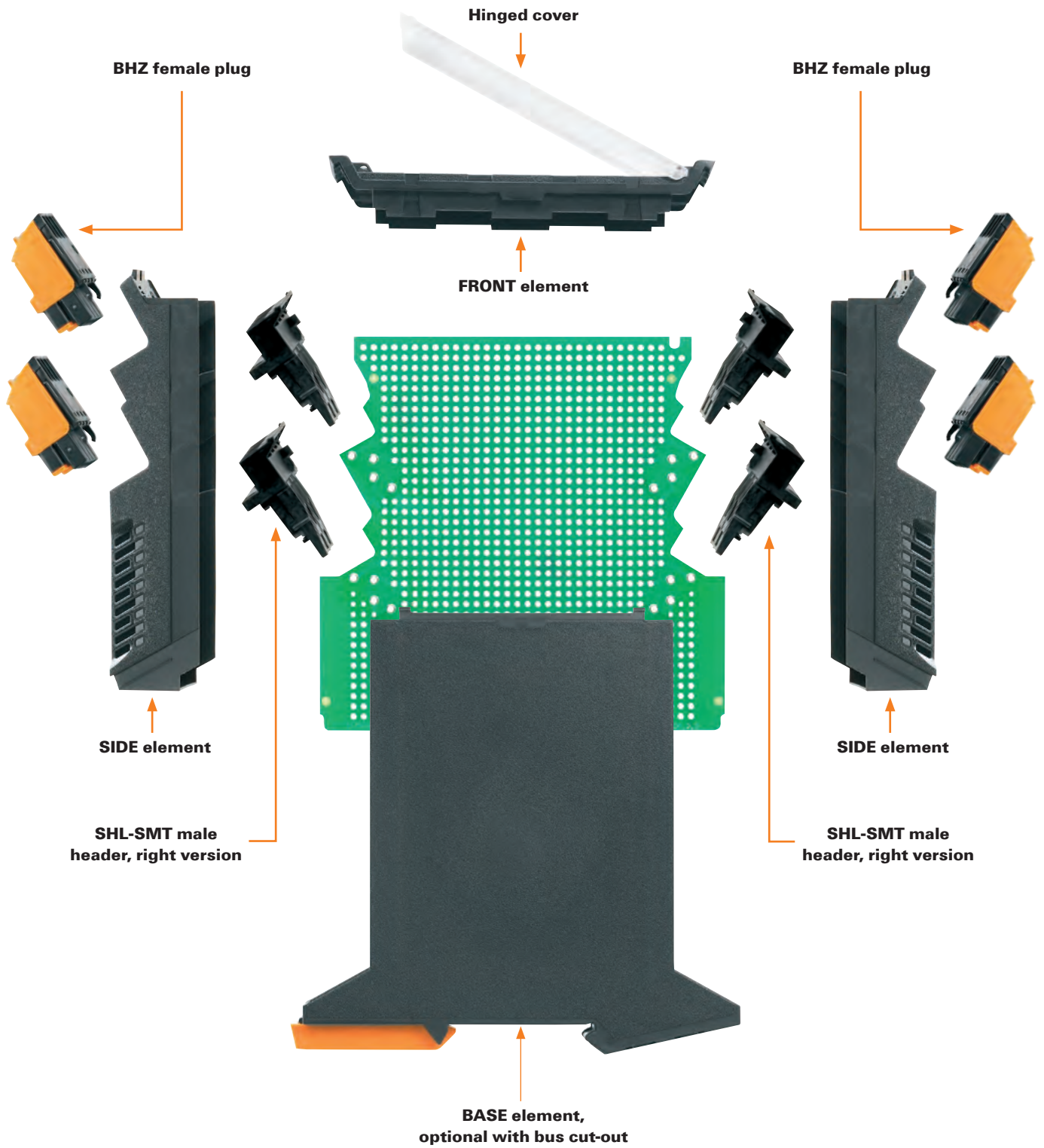
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Hinged cover, transparent
CH20M22 C TP
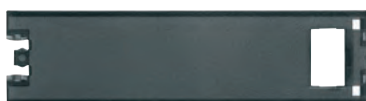on FRONT element, black
CH20M22 F BK

Hinged cover, black
CH20M22 C BK

FRONT element, black
CH20M22 F BK

FRONT element, black:
for use without hinged cover
CH20M22 FC BK

Connection area (SIDE) with 1 – 3 levels

Black SIDE element
3-row,
12 connections
**CH20M22 S
PPP BK**

Black SIDE element
3-row,
8 connections
+ RJ45
**CH20M22 S
RPP BK**

Black SIDE element
2-row,
8 connections
**CH20M22 S
PPSC BK**

Black SIDE element
1-row,
4 connections
**CH20M22 S
PSCSC BK**

Connection area (SIDE) with 1 – 3 levels and varying connection configurations

← AD-SHL

Black SIDE element
1-row 8 connections-
CH20M45 S P2SC/P2SC BK

Black SIDE element
2-row 16 connections
CH20M45 S 2PSC/2PSC BK
incl. Male header
CH20M AD-SHL

Black SIDE element
2-row 8 connections
CH20M45 S 2PSC/3SC BK

Black SIDE element
2-row 8 connections
CH20M45 S 3SC/2PSC BK

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OMNIMATE Housings
Component housing system CH20M

The module electronics housing system – CH20M (**C**omponent **H**ousings IP **20 M**odular) – is designed for seven widths.

Width	Type	Sample kit including wire connection mechanism	Catalogue pages
6.1 mm	CH20M6	1203290000 CH20M6 S-Kit	L.16
12.5 mm	CH20M12	1167190000 CH20M12 S-Kit	L.18
17.5 mm	CH20M17	1255820000 CH20M17 S-Kit	L.20
22.5 mm	CH20M22	1158390000 CH20M22 S-Kit	L.22
35.0 mm	CH20M35	On request	
45.0 mm	CH20M45	1203350000 CH20M45 S-Kit	L.24
67.0 mm	CH20M67	1275810000 CH20M67 S-Kit	L.26

Note: The sample kit contains all individual parts for setting up a housing, including the circuit board and wire connection mechanism.

Colour scale[1]	
■	Similar to RAL 9011
■	Similar to RAL 7024
■	Similar to RAL 7035
■	Similar to RAL 5012
■	Similar to RAL 1003
■	Similar to RAL 3000

Note 1) Other colours on request

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| Housing elements	Description/Type	Design options
Hinged cover	**COVER (CH20Mxx C xx)**	■ □ **Transparent**
	• Transparent (light or dark) • Holds itself in place when opened • Sealable	• Pad printing • Markable • Machinable 123
Housing front	**FRONT (CH20Mxx F xx)**	■ ▨ □ ▨ ▨ ■ [1]
	• Large usable surface for the operational and display elements • Can be customised	• Laser marking • With hinges for cover • Optionally closed (without hinged cover) 123
Connection area	**SIDE (CH20Mxx S xx)**	■ ▨ □ ▨ ▨ ■ [1]
	• 1 - 3 connection levels • Can be configured asymmetrically • For up to 3 circuit boards • Up to 72 wires can be connected	• Laser marking • 1 - 3 plugging levels • Up to 3 circuit boards, can be populated on both sides up to 5 mm on bottom of board • With or without bus cut-out
Housing base	**BASE (CH20Mxx B xx)**	■ ▨ □ ▨ ▨ ■ [1]
	• For TS 35 DIN rails • Pre-attached snap-on foot • ESD-protected (8kV acc. to EN 61000-4-2) • All elements are permanently snapped in	• Laser marking • With or without bus cut-out • Optional FE contact • Snap-on foot in 2 standard colours (orange + black) 123
Connection system	**BHZ female plug / SHL male header**	■ ▨ ▨ [1]
	• Reflow compatible • Integrated "AutoSet" coding • Release clip is standard • Plug can be removed in direction of operation • Can be automatically processed	• Headers packaged in box or on tape • Clamping yoke screw connection • PUSH IN spring connection (on request) 123
Rail bus	**Bus**	■
	• Integrated in TS 35 DIN rail • For power, signals and data • 5 conductor paths (max. 5 A / 63 V) • SMD-compatible bus contacts (2 A / 63 V)	7.5 x 35 15 x 35 • Can be shortened to length • For 7.5 and 15 mm with finger-safe hood • Pre-assembled on request
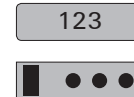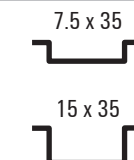
printable (pad printing / laser marking),   123 markable,   ■ ● ● ● machinable,   ▲------▼ variable circuit board position

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CH20M6

Modular component housing for electronic components
- 6.1mm wide
- Connection method: PCB terminals, clamping yoke screw connection
- Max. 8 wires

Technical data

Insulating material	PBT
Flammability rating (UL 94)	V0
Rated voltage	250 V AC
Rated current	13 A

Demo/Sample Kit

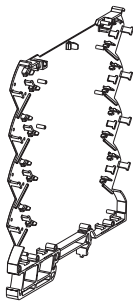| Type / Version	Qty.	Order No.
SK DEMO CH20M6	1	1203310000
SK S-KIT CH20	1	1203290000

Note: Demo kits are already assembled in final configuration (demonstration pieces), S-kits contain individual parts (e.g. for prototyping)

Dimensional drawing

114.3

107
107.6

left   right

6.1
112.5
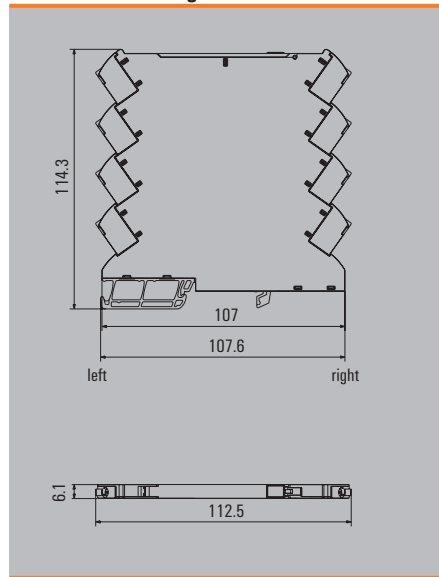
CH20M6 BP

Base shell

Base shell
- For mounting on rail
- Optionally with BUS cut-out

Ordering data

Type / Version	Qty.	Order No.
Base housing, black CH20M6 BP 4P-4P BK	50	2418600000
Base housing BUS black CH20M6 BP 4P-4P BUS BK	50	1164630000
Base housing FE black CH20M6 BP 4P-4P FE BK	50	1164650000

CH20M6 BC

Base lid

Base lid

Ordering data

Type / Version	Qty.	Order No.
black CH20M6 BC 4P-4P BK	50	2418610000
black CH20M6 BC 4P-4P BUS BK	50	1164640000

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CH20M6 C

Hinged cover

Hinged cover

Ordering data

Type / Version	Qty.	Order No.
dark transparent		
CH20M6 C BK	50	**2418620000**
transparent		
CH20M6 C TP	50	**1073410000**

Connection system

and accessories
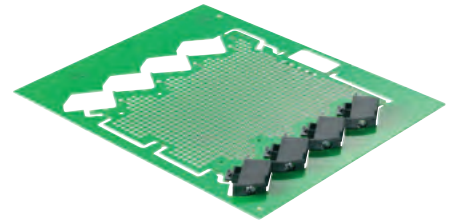
PCB terminal

Type / Version	Qty.	Order No.
Left, box packaging		
LHZ-SMT L 1.5SN BK BX	50	**1137870000**
Right, box packaging		
LHZ-SMT R 1.5SN BK BX	50	**1137880000**
Left, tape-on-reel		
LHZ-SMT L 1.5SN BK RL	432	**2418580000**
Right, tape-on-reel		
LHZ-SMT R 1.5SN BK RL	432	**2418590000**

Markers

Type / Version	Qty.	Order No.
Device marker hinged cover		
MF 5/7,5 MC NEUTRAL	50	**1877680000**

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CH20M6 C

CH20M12

Modular component housing for electronic components
- 12.5 mm wide
- Pluggable wire connection
- Max. 12 wires

CH20M6 BP

BASE element

BASE

Base element with pre-attached snap-on foot
- Optionally with BUS cut-out
- Optionally with FE cut-out

CH20M12 S

SIDE element

SIDE

Side element

Technical data

Insulating material	PA6.6
Flammability rating (UL 94)	V0
Rated voltage	250 V AC
Rated current	10 A

Demo/Sample Kit

Type / Version	Qty.	Order No.
SK DEMO CH20M12	1	1111630000
SK S-KIT CH20M12	1	1167190000

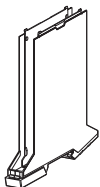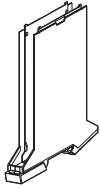**Note:** Demo kits are already assembled in final configuration (demonstration pieces), S-kits contain individual parts (e.g. for prototyping)

Dimensional drawing

113.6
107
105.7
12.5
117.2

Ordering data

Type / Version	Qty.	Order No.
Base element, black, Snap-on foot, black CH20M12 B BK/BK	14	1104170000
Base element, black, Snap-on foot, orange CH20M12 B BK/OR	14	1104180000
Base element, black, BUS, Snap-on foot, orange CH20M12 B BUS BK/OR	14	1176980000
Base element, black, FE (Version for functional earth), Snap-on foot, orange CH20M12 B FE BK/OR	14	1176990000

Ordering data
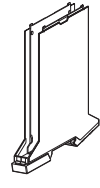
Type / Version	Qty.	Order No.
Side element, black, 1-row,, for 2 connections* CH20M12 S PSCSC BK	14	1104210000
Side element, black, 2-row,, for 4 connections CH20M12 S PPSC BK	14	1104200000
Side element, black, 3-row, for 6 connections CH20M12 S PPP BK	14	1174280000

*) The side itself does not have any connections

CH20M12 F

FRONT Element
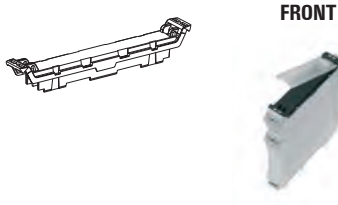
FRONT

Front element

CH20M12 C

COVER Element
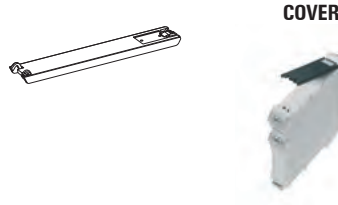
COVER

Hinged cover

Connection system

and accessories

Female plug 2-pole, black,
Male header 2-pole, black,
Left and right versions of header

Ordering data

Type / Version	Qty.	Order No.
Front element black		
CH20M12 F BK	70	**1104190000**

Ordering data

Type / Version	Qty.	Order No.
Hinged cover, dark transparent		
CH20M12 C BK	70	**1104240000**
Hinged cover, transparent		
CH20M12 C TP	70	**1104250000**

Female plug

Type / Version	Qty.	Order No.
Release lever, orange		
BHZ 5.00/02/90LH BK/OR	150	**1063260000**
Release lever, black		
BHZ 5.00/02/90LH BK/BK	150	**1069330000**
Release lever, blue		
BHZ 5.00/02/90LH BK/BL	150	**1069360000**

Male header

Type / Version	Qty.	Order No.
Left version, box packaging		
SHL-SMT 5.00/02GL 4.2BX	156	**1069620000**
SHL-SMT 5.00/02GL 5.9BX	156	**1069750000**
Right version, box packaging		
SHL-SMT 5.00/02GR 4.2BX	156	**1069550000**
SHL-SMT 5.00/02GR 5.9BX	156	**1069680000**
Left version, tape-on-reel		
SHL-SMT 5.00/02GL 4.2RL	260	**1069650000**
SHL-SMT 5.00/02GL 5.9RL	260	**1069780000**
Right version, tape-on-reel		
SHL-SMT 5.00/02GR 4.2RL	260	**1069580000**
SHL-SMT 5.00/02GR 5.9RL	260	**1069720000**

Plug cover

Type / Version	Qty.	Order No.
Cover, black 2-pole		
CH20M AD SHL 5.00/02 BK		**On request**

Markers

Type / Version	Qty.	Order No.
Device marker hinged cover		
ESG 8/13.5/43.3 SAI AU	5	**1912130000**
Device marker Female plug		
ESG 6.6/11 BHZ 5.00/02	200	**1082490000**

L

CH20M17

Modular component housing for electronic components
• 17.5 mm wide
• Pluggable wire connection
• Max. 18 wires

CH20M17 B

BASE element
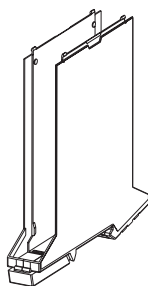
BASE

Base element with pre-attached snap-on foot
• Optionally with BUS cut-out
• Optional with cut-out for functional earth (FE)

CH20M17 S

SIDE element

SIDE

Side element

Technical data

Insulating material	PA6.6
Flammability rating (UL 94)	V0
Rated voltage	250 V AC
Rated current	10 A

Demo/Sample Kit

Type / Version	Qty.	Order No.
SK DEMO CH20M17	1	On request
SK S-KIT CH20M17	1	**1255820000**
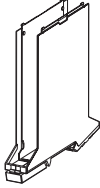
Note: Demo kits are already assembled in final configuration (demonstration pieces), S-kits contain individual parts (e.g. for prototyping)

Dimensional drawing

113.6
107
105.7
17.5
117.2

Ordering data

Type / Version	Qty.	Order No.
Base element, black, Snap-on foot, black CH20M17 B BK/BK	12	**1254120000**
Base element, black, Snap-on foot, orange CH20M17 B BK/OR	12	**1254130000**
Base element, black, BUS, Snap-on foot, orange CH20M17 B BUS BK/OR	12	**1254180000**
Base element, black, FE, Snap-on foot, orange CH20M17 B FE BK/OR	12	**1254190000**

Ordering data
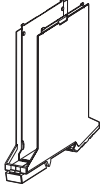
Type / Version	Qty.	Order No.
Side element, black, 1-row, 3 connections CH20M17 S PSCSC BK		**On request**
Side element, black, 2-row, 6 connections CH20M17 S PPSC BK		**On request**
Side element, black, 3-row, 9 connections CH20M17 S PPP BK	12	**1254170000**

L

CH20M17 F

FRONT element
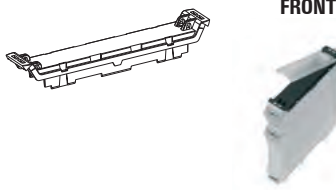
FRONT

Front element

CH20M17 C

COVER element
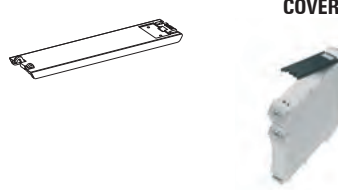
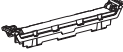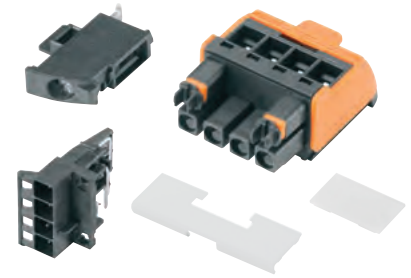**COVER**

Hinged cover

Connection system

and accessories

Female plug 3-pole, black
Male header 3-pole, black,
Left and right versions of header

Ordering data

Type / Version	Qty.	Order No.

Front element, black
| CH20M17 F BK | 50 | **1254140000** |

Ordering data

Type / Version	Qty.	Order No.

Hinged cover,
dark transparent
| CH20M17 C BK | 50 | **1254150000** |

Hinged cover,
transparent
| CH20M17 C TP | 50 | **1254160000** |

Female plug

Type / Version	Qty.	Order No.
Release lever, orange		
BHZ 5.00/03/90LH BK/OR	108	**1063270000**
Release lever, black		
BHZ 5.00/03/90LH BK/BK	108	**1069340000**
Release lever, blue		
BHZ 5.00/03/90LH BK/BL	108	**1069370000**

Male header

Type / Version	Qty.	Order No.
Left version, box packaging		
SHL-SMT 5.00/03GL 1.5BX	120	**1063210000**
SHL-SMT 5.00/03GL 4.2BX	120	**1069630000**
SHL-SMT 5.00/03GL 5.9BX	120	**1069760000**
Right version, box packaging		
SHL-SMT 5.00/03GR 1.5BX	120	**1063140000**
SHL-SMT 5.00/03GR 4.2BX	120	**1069560000**
SHL-SMT 5.00/03GR 5.9BX	120	**1069690000**
Left version, tape-on-reel		
SHL-SMT 5.00/03GL 1.5RL	175	**1063240000**
SHL-SMT 5.00/03GL 4.2RL	175	**1069660000**
SHL-SMT 5.00/03GL 5.9RL	175	**1069790000**
Right version, tape-on-reel		
SHL-SMT 5.00/03GR 1.5RL	175	**1063170000**
SHL-SMT 5.00/03GR 4.2RL	175	**1069590000**
SHL-SMT 5.00/03GR 5.9RL	175	**1069730000**

Plug cover

Type / Version	Qty.	Order No.
Cover, black 3-pole		
CH20M AD SHL 5.00/03 BK	50	**1254110000**

Markers

| Type / Version	Qty.	Order No.
Device marker hinged cover		
ESG 8/13.5/43.3 SAI AU	5	**1912130000**
Device marker Female plug		
ESG 6.6/15 BHZ 5.00/03	200	**1082520000**

L

CH20M22

Modular component housing for electronic components
• 22.5 mm wide
• Pluggable wire connection
• Max. 24 wires

CH20M22 B

BASE element
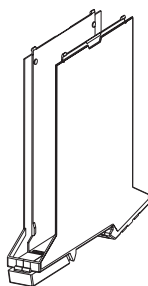
BASE

Base element with pre-attached snap-on foot
• Optionally with BUS cut-out
• Optional with cut-out for functional earth (FE)
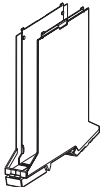
CH20M22 S

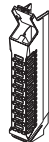**SIDE element**

SIDE

Side element

Technical data

Insulating material	PA6.6
Flammability rating (UL 94)	V0
Rated voltage	250 V AC
Rated current	10 A

Demo/Sample Kit

Type / Version	Qty.	Order No.
SK DEMO CH20M22	1	**1105600000**
SK S-KIT CH20M22	1	**1158390000**

Note: Demo kits are already assembled in final configuration (demonstration pieces), S-kits contain individual parts (e.g. for prototyping)

Dimensional drawing

Ordering data

Type / Version	Qty.	Order No.
Base element, black, Snap-on foot, black CH20M22 B BK/BK	10	**2418630000**
Base element, black, Snap-on foot, orange CH20M22 B BK/OR	10	**1104450000**
Base element, black, BUS, Snap-on foot, orange CH20M22 B BUS BK/OR	10	**1177000000**
Base element, black, FE, Snap-on foot, orange CH20M22 B FE BK/OR	10	**1177010000**

Ordering data
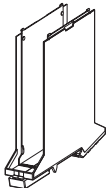
Type / Version	Qty.	Order No.
Side element, black, 1-row, 4 connections CH20M22 S PSCSC BK	10	**1080630000**
Side element, black, 2-row, 8 connections CH20M22 S PPSC BK	10	**2418650000**
Side element, black, 3-row 12 connections CH20M22 S PPP BK	10	**1139790000**

L

CH20M22 F

FRONT element
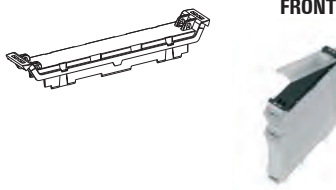
FRONT

Front element

CH20M22 C

COVER element
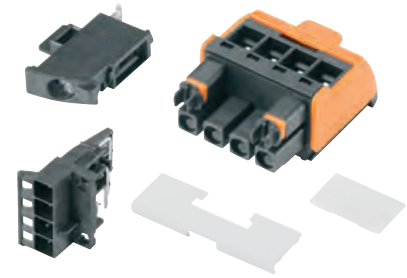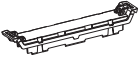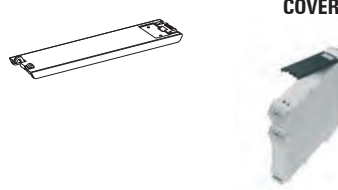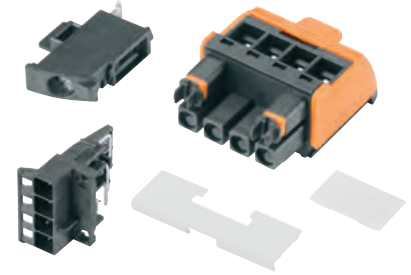
COVER

Hinged cover

Connection system

and accessories

Female plug 4-pole, black
Male header 4-pole, black,
Left and right versions of header

Ordering data

Type / Version	Qty.	Order No.
Front element, black CH20M22 F BK	50	**2418640000**
Front element, closed, black CH20M22 FC BK	50	**1209350000**

Ordering data

Type / Version	Qty.	Order No.
Hinged cover, dark transparent CH20M22 C BK	50	**2418670000**
Hinged cover, transparent CH20M22 C TP	50	**1073420000**

Female plug

Type / Version	Qty.	Order No.
Release lever, orange BHZ 5.00/04/90LH BK/OR	78	**1063280000**
Release lever, black BHZ 5.00/04/90LH BK/BK	78	**1069350000**
Release lever, blue BHZ 5.00/04/90LH BK/BL	78	**1069380000**

Male header

Type / Version	Qty.	Order No.
Left version, box packaging		
SHL-SMT 5.00/04GL 1.5BX	120	**1063220000**
SHL-SMT 5.00/04GL 4.2BX	120	**1069640000**
SHL-SMT 5.00/04GL 5.9BX	120	**1069770000**
Right version, box packaging		
SHL-SMT 5.00/04GR 1.5BX	120	**1063150000**
SHL-SMT 5.00/04GR 4.2BX	120	**1069570000**
SHL-SMT 5.00/04GR 5.9BX	120	**1069710000**
Left version, tape-on-reel		
SHL-SMT 5.00/04GL 1.5RL	130	**1063250000**
SHL-SMT 5.00/04GL 4.2RL	130	**1069670000**
SHL-SMT 5.00/04GL 5.9RL	130	**1069810000**
Right version, tape-on-reel		
SHL-SMT 5.00/04GR 1.5RL	130	**1063180000**
SHL-SMT 5.00/04GR 4.2RL	130	**1069610000**
SHL-SMT 5.00/04GR 5.9RL	130	**1069740000**

Plug cover

Type / Version	Qty.	Order No.
Cover, black 4-pole CH20M AD SHL 5.00/04 BK	50	**1221310000**

Markers

| Type / Version	Qty.	Order No.
Device marker hinged cover ESG 8/13.5/43.3 SAI AU	5	**1912130000**
Device marker Female plug ESG 6.6/20 BHZ 5.00/04	200	**1082540000**

L

CH20M45

Modular component housing for electronic components
- 45 mm wide
- Pluggable wire connection
- Max. 48 wires

CH20M45 B

BASE element
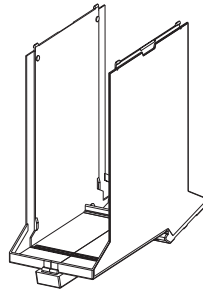
BASE

Base element with pre-attached snap-on foot
- Optionally with BUS cut-out
- Optional with cut-out for functional earth (FE)
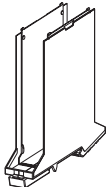
CH20M45 S

SIDE element

SIDE

Side element
- Symmetrical versions

Technical data

Insulating material	PA6.6
Flammability rating (UL 94)	V0
Rated voltage	250 V AC
Rated current	10 A

Demo/Sample Kit

Type / Version	Qty.	Order No.
SK DEMO CH20M45	1	1111640000
SK S-KIT CH20M45	1	1203350000
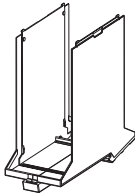
Note: Demo kits are already assembled in final configuration (demonstration pieces), S-kits contain individual parts (e.g. for prototyping)

Dimensional drawing

113.6
107
105.7
45
117.2

Ordering data
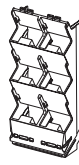
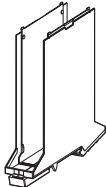| Type / Version	Qty.	Order No.
Base element, black, Snap-on foot, black CH20M45 B BK/BK	10	1104400000
Base element, black, Snap-on foot, orange CH20M45 B BK/OR	10	1104410000
Base element, black, BUS, Snap-on foot, orange CH20M45 B BUS BK/OR	10	1177020000
Base element, black, FE, Snap-on foot, orange CH20M45 B FE BK/OR	10	1177030000

Ordering data
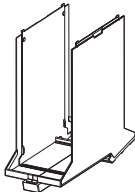
Type / Version	Qty.	Order No.
Side element, black, 1-row, 8 connections CH20M45 S P2SC/P2SC BK	6	1166180000
Side element, black, 2 -row, 16 connections CH20M45 S 2PSC/2PSC BK	6	1111720000
Side element, black, 3-row 24 connections CH20M45 S 3P/3P BK	6	1137730000

L

CH20M45 S
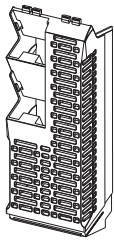
SIDE element

SIDE

Side element
• Asymmetrical versions

CH20M45 C / CH20M45 F

COVER element
FRONT element

COVER

Hinged cover
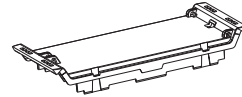
FRONT

Front element

Connection system
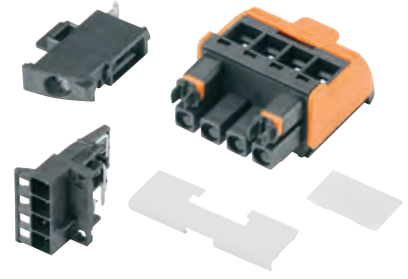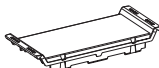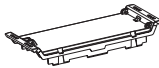
and accessories

Female plug 4-pole, black,
Male header 4-pole, black,
Left and right versions of header

Ordering data
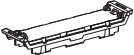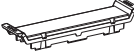
Type / Version	Qty.	Order No.
Side element. black, 1-row, 4 connections		
CH20M45 S P2SC/3SC BK	6	On request
Side element, black, 1-row, 4 connections		
CH20M45 S 3SC/P2SC BK	6	On request
Side element, black, 2-row 8 connections		
CH20M45 S 2PSC/3SC BK	6	1137740000
Side elemen,t black, 2-row 8 connections		
CH20M45 S 3SC/2PSC BK	6	1137750000

Ordering data

Type / Version	Qty.	Order No.
Hinged cover, transparent		
CH20M45 C TP	30	1104440000
Hinged cover, dark transparent		
CH20M45 C BK	30	1104430000
Front element, closed, black		
CH20M45 FC BK	30	1164800000
Front element, black		
CH20M45 F BK	30	1104420000

Female plug

Type / Version	Qty.	Order No.
Release lever, orange		
BHZ 5.00/04/90LH BK/OR	78	1063280000
Release lever, black		
BHZ 5.00/04/90LH BK/BK	78	1069350000
Release lever, blue		
BHZ 5.00/04/90LH BK/BL	78	1069380000

Male header

Type / Version	Qty.	Order No.
Left version, box packaging		
SHL-SMT 5.00/04GL 1.5BX	120	1063220000
SHL-SMT 5.00/04GL 4.2BX	120	1069640000
SHL-SMT 5.00/04GL 5.9BX	120	1069770000
Right version, box packaging		
SHL-SMT 5.00/04GR 1.5BX	120	1063150000
SHL-SMT 5.00/04GR 4.2BX	120	1069570000
SHL-SMT 5.00/04GR 5.9BX	120	1069710000
Left version, tape-on-reel		
SHL-SMT 5.00/04GL 1.5RL	130	1063250000
SHL-SMT 5.00/04GL 4.2RL	130	1069670000
SHL-SMT 5.00/04GL 5.9RL	130	1069810000
Right version, tape-on-reel		
SHL-SMT 5.00/04GR 1.5RL	130	1063180000
SHL-SMT 5.00/04GR 4.2RL	130	1069610000
SHL-SMT 5.00/04GR 5.9RL	130	1069740000

Plug cover

Type / Version	Qty.	Order No.
Cover, black 4-pole		
CH20M AD SHL 5.00/04 BK	50	1221310000

Markers

| Type / Version	Qty.	Order No.
Device marker hinged cover		
ESG 8/13.5/43.3 SAI AU	5	1912130000
Device marker Female plug		
ESG 6.6/20 BHZ 5.00/04	200	1082540000

CH20M67

Modular component housing for electronic components
• 67.5 mm wide
• Pluggable wire connection
• Max. 72 wires

CH20M67 B

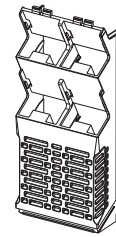**BASE element**
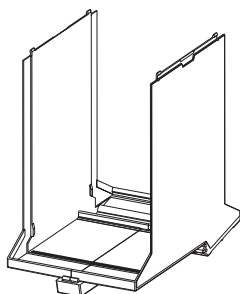
BASE

Base element with pre-attached snap-on foot
• Optionally with BUS cut-out
• Optional with cut-out for functional earth (FE)
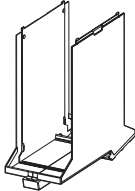
CH20M67 S

SIDE element
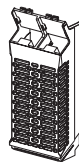

SIDE
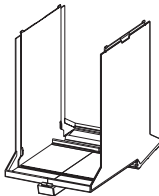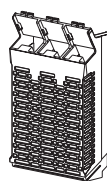
Side element
• Symmetrical versions

Technical data

Insulating material	PA6.6
Flammability rating (UL 94)	V0
Rated voltage	250 V AC
Rated current	10 A

Demo/Sample Kit

Type / Version	Qty.	Order No.
SK DEMO CH20M67	1	On request
SK S-KIT CH20M67	1	1275810000
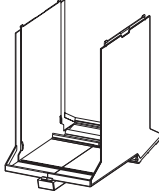
Note: Demo kits are already assembled in final configuration (demonstration pieces), S-kits contain individual parts (e.g. for prototyping)

Dimensional drawing

Ordering data
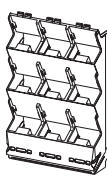
Type / Version	Qty.	Order No.
Base element, black, Snap-on foot, black CH20M67 B BK/BK	4	1235270000
Base element, black, Snap-on foot, orange CH20M67 B BK/O	4	1235250000
Base element, black, BUS, Snap-on foot, orange CH20M67 B BUS BK/OR	4	1247240000
Base element, black, FE, Snap-on foot, orange CH20M45 B FE BK/OR	4	1247250000

Ordering data

Type / Version	Qty.	Order No.
Side element, black, 1-row, 12 connections CH20M67 S P2SC/P2SC/P2SC BK	4	On request
Side element, black, 2-row, 24 connections CH20M67 S 2PSC/2PSC/2PSC BK	4	1235320000
Side element, black, 3-row 36 connections CH20M67 S 3P/3P/3P BK	4	On request

CH20M67 F

FRONT element
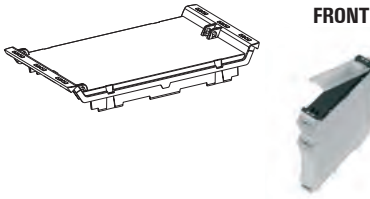
FRONT

Front element

CH20M67 C

COVER element
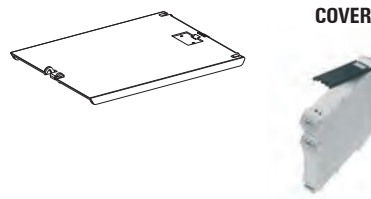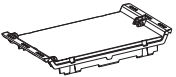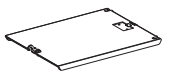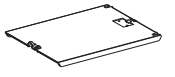
COVER

Hinged cover

Connection system

and accessories

Female plug 4-pole, black
Male header 4-pole, black
Left and right versions of header

Ordering data

Type / Version	Qty.	Order No.
Front element, black CH20M67 F BK	30	**On request**
Front element, closed, black CH20M67 FC BK	30	**1235310000**

Ordering data

Type / Version	Qty.	Order No.
Hinged cover, dark transparent CH20M67 C BK	30	**On request**
Hinged cover, transparent CH20M67 C TP	30	**On request**

Female plug

Type / Version	Qty.	Order No.
Release lever, orange BHZ 5.00/04/90LH BK/OR	78	**1063280000**
Release lever, black BHZ 5.00/04/90LH BK/BK	78	**1069350000**
Release lever, blue BHZ 5.00/04/90LH BK/BL	78	**1069380000**

Male header

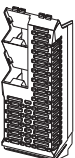| Type / Version	Qty.	Order No.
Left version, box packaging		
SHL-SMT 5.00/04GL 1.5BX	120	**1063220000**
SHL-SMT 5.00/04GL 4.2BX	120	**1069640000**
SHL-SMT 5.00/04GL 5.9BX	120	**1069770000**
Right version, box packaging		
SHL-SMT 5.00/04GR 1.5BX	120	**1063150000**
SHL-SMT 5.00/04GR 4.2BX	120	**1069570000**
SHL-SMT 5.00/04GR 5.9BX	120	**1069710000**
Left version, tape-on-reel		
SHL-SMT 5.00/04GL 1.5RL	130	**1063250000**
SHL-SMT 5.00/04GL 4.2RL	130	**1069670000**
SHL-SMT 5.00/04GL 5.9RL	130	**1069810000**
Right version, tape-on-reel		
SHL-SMT 5.00/04GR 1.5RL	130	**1063180000**
SHL-SMT 5.00/04GR 4.2RL	130	**1069610000**
SHL-SMT 5.00/04GR 5.9RL	130	**1069740000**

Plug cover

Type / Version	Qty.	Order No.
Cover, black 4-pole CH20M AD SHL 5.00/04 BK	50	**1221310000**

Markers

Type / Version	Qty.	Order No.
Device marker hinged cover ESG 8/13.5/43.3 SAI AU	5	**1912130000**
Device marker Female plug ESG 6.6/20 BHZ 5.00/04	200	**1082540000**

L

LHZ

THR PCB terminal for 6 mm housings,
CH20M6 reflow-compatible,
Pole count: 1
solder pin length: 1.5 mm
Orientation: 90°

Technical data

Insulating material	LCP
Flammability rating (UL 94)	V0
Rated voltage	250 V
Rated current	13 A

Conductors that can be connected	
Clamping range	0.13 mm² - 2.5 mm²
Wire cross-section,	
AWG, min.	AWG 26 - AWG 14
Solid, min. H05(07) V-U	0.2 mm² - 2.5 mm²
Flexible, min. H05(07) V-K	0.2 mm² - 2.5 mm²
With wire-end ferrule with	
DIN 46 228/4, min.	0.2 mm² - 2.5 mm²

Rated data according to DIN IEC	
Rated voltage	
for surge voltage class /	
contamination degree III/3	250 V
Rated impulse voltage	
for surge voltage class /	
contamination degree III/3	4 kV
Rated voltage	
for surge voltage class /	
contamination degree III/2	320 V
Rated impulse voltage	
for surge voltage class /	
contamination degree III/2	4 kV
Rated voltage	
for surge voltage class /	
contamination degree II/2	500 V
Rated impulse voltage	
for surge voltage class /	
contamination degree II/2	4 kV

Note: Rated data according to UL – refer to the online data sheet

Dimensional drawing
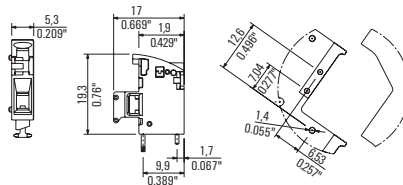
Version left

Version right

Derating curve

LHZ-SMT

Ⓐ = 5 CH20M6-housings x 8 poles
Ⓑ = 1.0 mm² (H05V-K1 / EN 60947-7-1)

On-load current I [A] vs Ambient temperature T [°C]
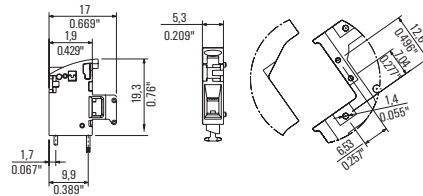
Ordering data

Type / Version	Qty.	Order No.
LHZ-SMT L 1.5SN BK RL		
Left version, tape-on-reel	432	**2418580000**
LHZ-SMT R 1.5SN BK RL		
Right version, tape-on-reel	432	**2418590000**
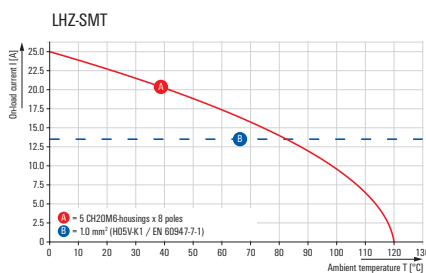
Circuit board positions in CH20M

Housing width (mm)	12.5	17.5	22.5	45.0	67.5
Number of circuit boards	1	1	1	2	3
Positions per circuit board	1	2	2	4	4

Dimensional sketch

Our online product assistant is also available for accurate configuration:
http://galaxy.weidmueller.com

Let's connect.
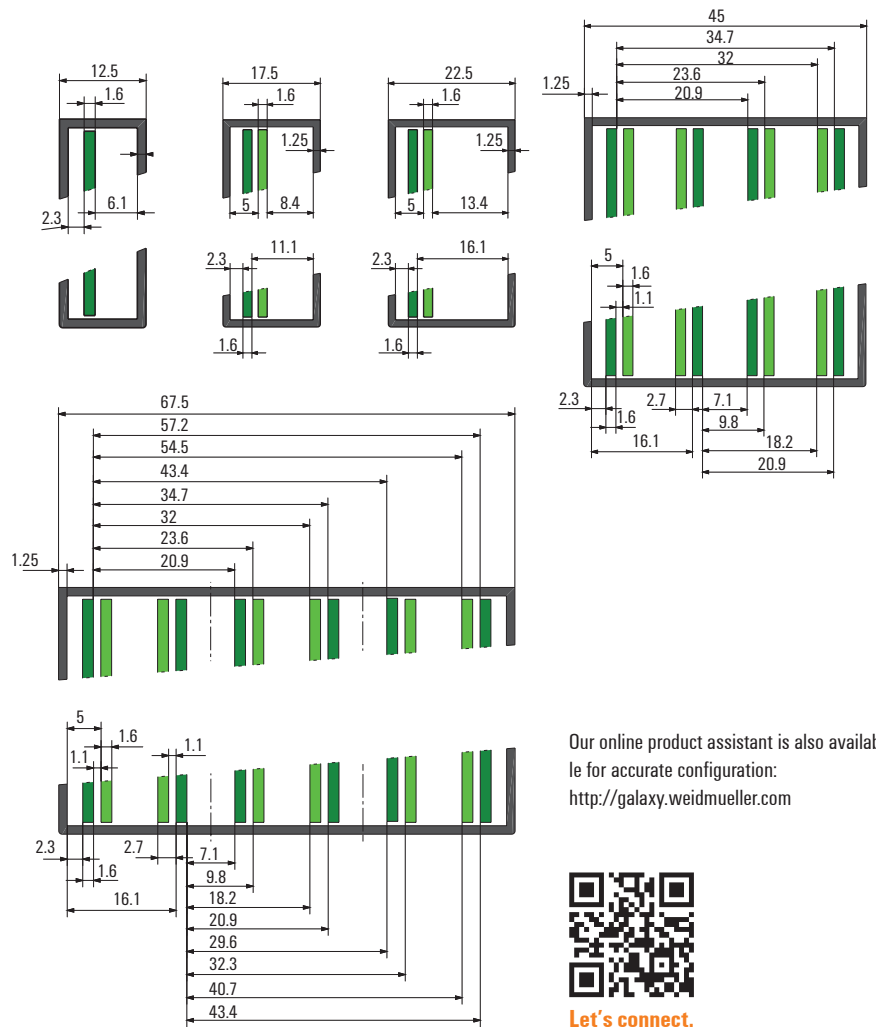
Features of the BHZ/SHL connector system

- Clamping yoke screw connection – with "WireReady", wire guard protection and plus/minus screw
- Integrated, captive coding (with "AutoSet" function) protects against accidental mismatch
- Leading contact on the male headers
- Finger-safety provided for both, male and female connector

❶
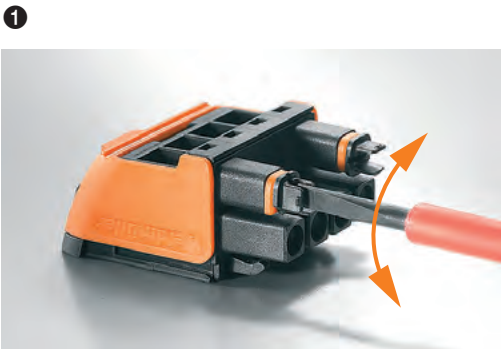
Coding can be set with one of 16 possible configurations

❷
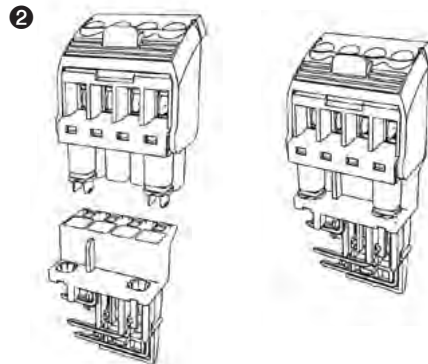
Connecting the female connector

❸
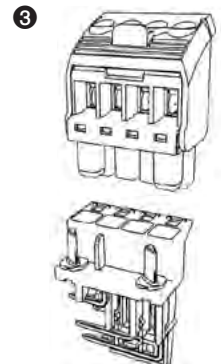
Male header coding transferred to module

L

SHL-SMT
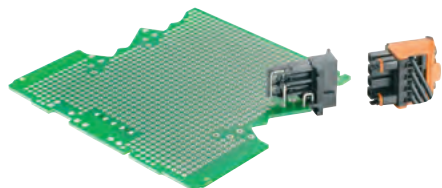
THR male header for modular housing CH2OM12-67
Can be reflow soldered, resistant to high temperatures
The position of the PCB (see also dimensional sketch) is
determined through the configuration of the pin headers
Suffix 1.5: PCB position 5,0 mm / pin length 1,5 mm (Reflow)
Suffix 4.2: PCB position 2,3 mm / pin length 1,5 mm (Reflow)
Suffix 5.9: PCB position 2,3 mm / pin length 3,2 mm (Wave)

Technical data

Insulating material	LCP
Flammability rating (UL 94)	V0
Rated voltage	250 V
Rated current	10 A

SHL-SMT 5.00/GL BX

Left-sided pin header
Box packaging

Ordering data

Type / Version	Poles	Qty.	Order No.
SHL-SMT 5.00/02GL 4.2BX	2	156	**1069620000**
SHL-SMT 5.00/02GL 5.9BX	2	156	**1069750000**
SHL-SMT 5.00/03GL 1.5BX	3	120	**1063210000**
SHL-SMT 5.00/03GL 4.2BX	3	120	**1069630000**
SHL-SMT 5.00/03GL 5.9BX	3	120	**1069760000**
SHL-SMT 5.00/04GL 1.5BX	4	120	**1063220000**
SHL-SMT 5.00/04GL 4.2BX	4	120	**1069640000**
SHL-SMT 5.00/04GL 5.9BX	4	120	**1069770000**

Dimensional drawing

Version left
2-pole
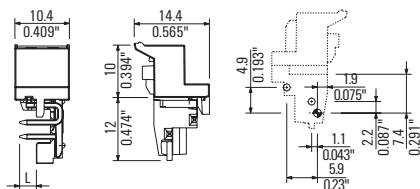
3-pole
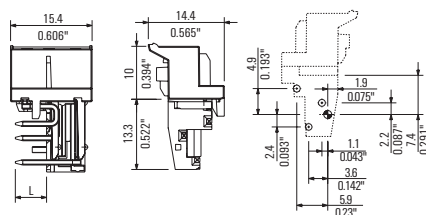
SHL-SMT 5.00GL RL

Left-sided pin header
Tape-on-reel

Ordering data

Type / Version	Poles	Qty.	Order No.
SHL-SMT 5.00/02GL 4.2RL	2	260	**1069650000**
SHL-SMT 5.00/02GL 5.9RL	2	260	**1069780000**
SHL-SMT 5.00/03GL 1.5RL	3	175	**1063240000**
SHL-SMT 5.00/03GL 4.2RL	3	175	**1069660000**
SHL-SMT 5.00/03GL 5.9RL	3	175	**1069790000**
SHL-SMT 5.00/04GL 1.5RL	4	130	**1063250000**
SHL-SMT 5.00/04GL 4.2RL	4	130	**1069670000**
SHL-SMT 5.00/04GL 5.9RL	4	130	**1069810000**

Dimensional drawing

Version right
2-pole
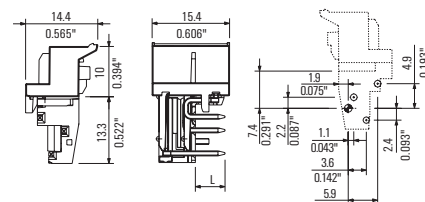
3-pole
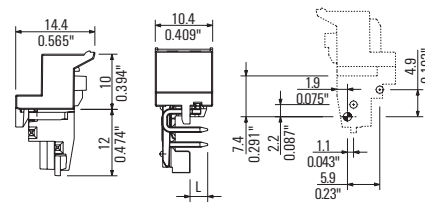
Rated data when used together with BHZxx female plug: refer to page L.32

SHL-SMT 5.00/GR BX

Version right
Box packaging

SHL-SMT 5.00GR RL

Version right
Tape-on-reel

Ordering data

Type / Version	Poles	Qty.	Order No.
SHL-SMT 5.00/02GR 4.2BX	2	156	**1069550000**
SHL-SMT 5.00/02GR 5.9BX	2	156	**1069680000**
SHL-SMT 5.00/03GR 1.5BX	3	120	**1063140000**
SHL-SMT 5.00/03GR 4.2BX	3	120	**1069560000**
SHL-SMT 5.00/03GR 5.9BX	3	120	**1069690000**
SHL-SMT 5.00/04GR 1.5BX	4	120	**1063150000**
SHL-SMT 5.00/04GR 4.2BX	4	120	**1069570000**
SHL-SMT 5.00/04GR 5.9BX	4	120	**1069710000**
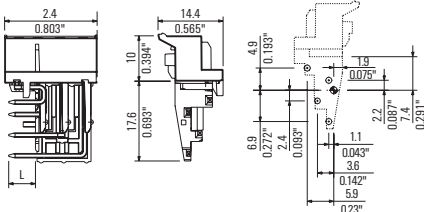
Ordering data

Type / Version	Poles	Qty.	Order No.
SHL-SMT 5.00/02GR 4.2RL	2	260	**1069580000**
SHL-SMT 5.00/02GR 5.9RL	2	260	**1069720000**
SHL-SMT 5.00/03GR 1.5RL	3	175	**1063170000**
SHL-SMT 5.00/03GR 4.2RL	3	175	**1069590000**
SHL-SMT 5.00/03GR 5.9RL	3	175	**1069730000**
SHL-SMT 5.00/04GR 1.5RL	4	130	**1063180000**
SHL-SMT 5.00/04GR 4.2RL	4	130	**1069610000**
SHL-SMT 5.00/04GR 5.9RL	4	130	**1069740000**

Dimensional drawing

Version left
4-pole

Dimensional drawing

Version right
4-pole

L
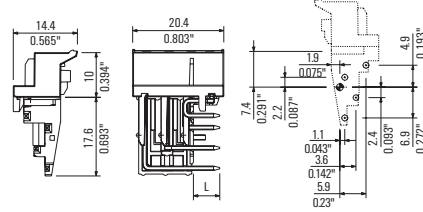
BHZ
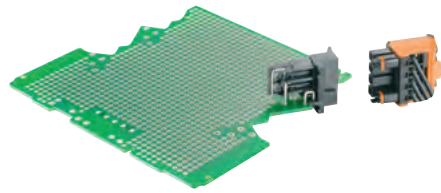
Female plug for modular housing CH2OM12-67
5.00 mm, clamping-yoke connection, integrated
coding, release lever can be colour coded

BHZ 5.00/90 BK/OR

Release lever, orange

Technical data

Insulating material	PA
Flammability rating (UL 94)	V0
Rated voltage	250 V
Rated current	10 A

Conductors that can be connected	
Clamping range	0.13 mm² - 3.31 mm²
Wire cross-section, AWG, min	AWG 26 - AWG 12
Solid, min. H05(07) V-U	0.2 mm² - 2.5 mm²
Flexible, min. H05(07) V-K	0.2 mm² - 2.5 mm²
With wire end ferrule, acc. to DIN 46 228/1, max.	0.2 mm² - 2.5 mm²
With wire-end ferrule with DIN 46 228/4, min.	0.2 mm² - 2.5 mm²

Rated data according to DIN IEC	
Rated current, Max. pole count (Tu=20 °C)	10 A
Rated current, Max. pole count (Tu=40 °C)	9 A
Rated voltage for surge voltage class / contamination degree III/3	250 V
Rated impulse voltage for surge voltage class / contamination degree III/3	4 kV
Rated impulse voltage for surge voltage class / contamination degree III/2	4 kV
Rated voltage for surge voltage class / contamination degree III/2	320 V
Rated voltage for surge voltage class / contamination degree II/2	400 V
Rated impulse voltage for surge voltage class / contamination degree II/2	4 kV

Note: Rated data according to UL – refer to the online data sheet

Dimensional drawing

L+ 7.5
L + 0.295"
L
14.4
0.569"
20.9
0.824"
30.8
1.212"

Ordering data

Type / Version	Poles	Qty.	Order No.
BHZ 5.00/02/90LH BK/OR	2	150	**1063260000**
BHZ 5.00/03/90LH BK/OR	3	180	**1063270000**
BHZ 5.00/04/90LH BK/OR	4	78	**1063280000**

Derating curve

BHZ 5.00/../90 - SHL-SMT 5.00/..G

A = 5 CH2OM22-housings x 16 poles
B = 2.5 mm² (H07V-K2.5 / IEC 60947-7-1)

BHZ 5.00/../90 - SHL-SMT 5.00/..G

A = 1 CH2OM22-housing x 16 poles
B = 2.5 mm² (H07V-K2.5 / IEC 60947-7-1)

BHZ 5.00/90 BK/BK

Release lever, black

BHZ 5.00/90 BK/BL

Release lever, blue

Accessories
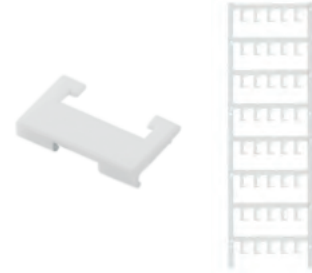
Marker for release lever

Ordering data

Type / Version	Poles	Qty.	Order No.
BHZ 5.00/02/90LH BK/BK	2	150	1069330000
BHZ 5.00/03/90LH BK/BK	3	108	1069340000
BHZ 5.00/04/90LH BK/BK	4	78	1069350000

Ordering data

Type / Version	Poles	Qty.	Order No.
BHZ 5.00/02/90LH BK/BL	2	150	1069360000
BHZ 5.00/03/90LH BK/BL	3	108	1069370000
BHZ 5.00/04/90LH BK/BL	4	78	1069380000

Ordering data

Type / Version	Poles	Qty.	Order No.
ESG 6.6/11 BHZ 5.00/02	2	200	1082490000
ESG 6.6/15 BHZ 5.00/03	3	200	1082520000
ESG 6.6/20 BHZ 5.00/04	4	200	1082540000

L

SR-SMD
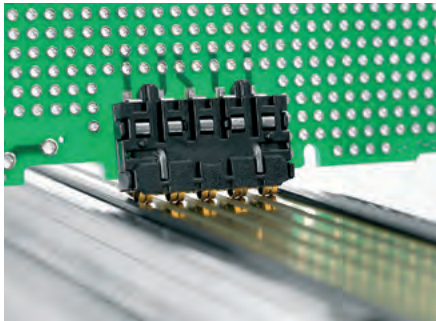
Bus contact block
Reflow-compatible, resistant to high temperatures,
5-pole, for rail bus

SR-SMD

Bus contact for CH20M6

Technical data

Insulating material	LCP
Flammability rating (UL 94)	V0
Rated voltage IEC	63 V AC
Rated current IEC CH20M6	2 A (at 70 °C)
Rated current IEC CH20M22	4 A (at 70 °C)
Rated voltage UL	150 V
Rated current UL	5 A

Dimensional drawing

For CH20M6
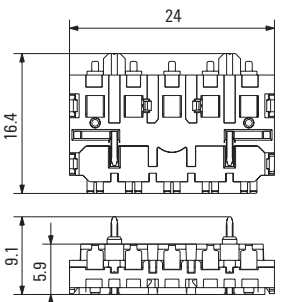
With centre solder flange for CH20M12-67

With solder flange for CH20M12-67
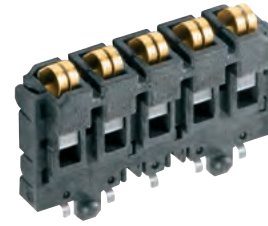
Ordering data

Type / Version	Qty.	Order No.
SR-SMD 4.50/05/90 AU BK BX	72	**1155840000**
SR-SMD 4.50/05/90 AU BK RL	300	**1155850000**

"BX" means box packaging, "RL" means tape-on-reel

Derating curve

CH20M6-Bus

Ⓐ = 5 Modules = 25 Contacts

CH20M22-Bus

Ⓐ = 5 Modules = 25 Contacts

Note: Framework conditions of rating data available on request
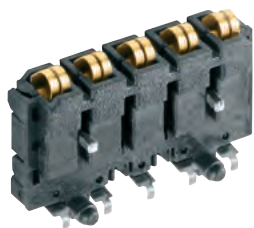
SR-SMD

Bus contact with centre solder flange
for CH20M12-67

SR-SMD
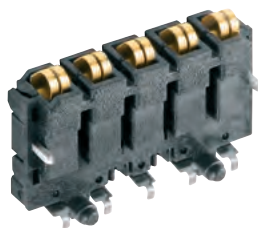
Bus contact with solder flange
for CH20M12-67

CH20M FE 12-67
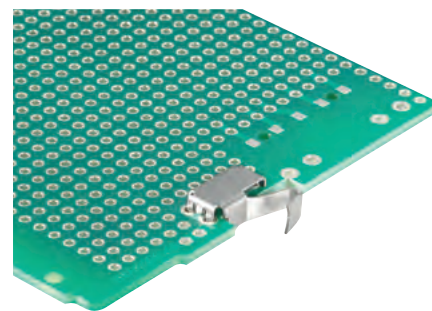
FE contact for CH20M 12-67

Ordering data

Type / Version	Qty.	Order No.
SR-SMD 4.50/05/90LFM AU BK BX	72	1155870000
SR-SMD 4.50/05/90LFM 3.2AU BK RL	300	1155880000

Ordering data

Type / Version	Qty.	Order No.
SR-SMD 4.50/05/90LF AU BK BX	72	1155890000
SR-SMD 4.50/05/90LF 1.5AU BK RL	300	1155900000

Ordering data

Type / Version	Qty.	Order No.
CH20M FE 12-67 1.5SN RL	750	1189370000
CH20M FE 12-67 3.2SN RL	750	1264240000

"BX" means box packaging, "RL" means tape-on-reel

"BX" means box packaging, "RL" means tape-on-reel

L

CH20M BUS-PROFIL TS35x7.5/1000

Support section for bus circuit board

- Support section for TS 35 x 7.5
- Length: 250, 500 or 750 mm

Ordering data

Type	Qty.	Order No.
CH20M BUS-PROFIL TS35x7.5/250	10	1248150000
CH20M BUS-PROFIL TS35x7.5/500	10	1248160000
CH20M BUS-PROFIL TS35x7.5/750	5	1248170000

Note: Length specification /XXX = 250, 500 or 750 mm.
Other lengths available on request.

CH20M BUS-PROFIL TS35x15/1000

Support section for bus circuit board

- Support section for TS 35 x 15
- Length: 250, 500 or 750 mm

Ordering data

Type	Qty.	Order No.
CH20M BUS-PROFIL TS35x15/250	5	1248180000
CH20M BUS-PROFIL TS35x15/500	5	1248190000
CH20M BUS-PROFIL TS35x15/750	5	1248210000

Note: Length specification /XXX = 250, 500 or 750 mm.
Other lengths available on request.

CH20M BUS 4.50/05 AU/1000

Bus PCB

- Bus circuit board for use on TS 35 x 7.5 and TS 35 x 15
- Length: 250, 500 or 750 mm
- Five conductor paths, gold-plated
- Electrical rating: 63 V AC, 5 A/conductor path

Ordering data

Type	Qty.	Order No.
CH20M BUS 4.50/05 AU/250	10	1248220000
CH20M BUS 4.50/05 AU/500	10	1248230000
CH20M BUS 4.50/05 AU/750	5	1248240000

Note: Length specification /XXX = 250, 500 or 750 mm.
Other lengths available on request.

CH20M BUS-ADP TS35/1000

Cover plate

- Cover plate for DIN rail bus
- Length: 250, 500 or 750 mm

Ordering data

Type	Qty.	Order No.
CH20M BUS-ADP TS35/250	10	1248250000
CH20M BUS-ADP TS35/500	10	1248260000
CH20M BUS-ADP TS35/750	5	1248270000

Note: Length specification /XXX = 250, 500 or 750 mm.
Other lengths available on request.

CH20M BUS-AP LI TS35x7.5 & 15

End plate

- End plate for DIN rail bus
- Fits on TS 35 x 7.5 and TS 35 x 15
- left

Ordering data

Type	Qty.	Order No.
CH20M BUS-AP LI TS35x7.5 & 15	50	1193160000

CH20M BUS-AP RE TS35x7.5 & 15

End plate

- End plate for DIN rail bus
- Fits on TS 35 x 7.5 and TS 35 x 15
- right

Ordering data

Type	Qty.	Order No.
CH20M BUS-AP RE TS35x7.5 & 15	50	1193170000

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SET CH20M BUS 250MM TS 35X15

Set

- SET consists of one each of
  CH20M BUS 4.50/05 AU/250
  CH20M BUS-ADP TS 35/250
  CH20M BUS-AP LI TS 35X7.5 & 15
  CH20M BUS-AP RE TS 35X7.5 & 15
  CH20M BUS-PROFIL TS 35X15/250

Ordering data

Type	Qty.	Order No.
SET CH20M BUS 250MM TS 35X15	1	**1335150000**

SET CH20M BUS 250MM TS 35X7.5

Set

- SET consists of one each of
  CH20M BUS 4.50/05 AU/250
  CH20M BUS-ADP TS 35/250
  CH20M BUS-AP LI TS 35X7.5 & 15
  CH20M BUS-AP RE TS 35X7.5 & 15
  CH20M BUS-PROFIL TS 35X7.5/250

Ordering data

Type	Qty.	Order No.
SET CH20M BUS 250MM TS 35X7.5	1	**1335140000**

TS 35x7.5 / TS 35x15

Mounting rail
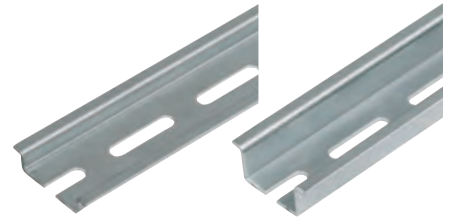
- Mounting rail with slot
- Steel, galvanised and passivated

Ordering data

Type	Qty.	Order No.
TS 35X7.5/LL 1M/ST/ZN	10	**0514510000**
TS 35X15/LL 1M/ST/ZN	10	**0236510000**

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OMNIMATE Housing
MICROBOX / TERMINALBOX

The MICROBOX and TERMINALBOX series of small housings are the perfect solution for miniature sliced applications or for the protective circuitry used in connection with terminal blocks.

Up to 6 wires can be connected using the integrated (but high-performance) clamping-yoke screw or tension-clamp wire connection mechanisms.

Because of its closed construction, each individual MICROBOX is finger-safe. The TERMINALBOX can be aligned side-by-side without end or closed off using an end plate.

Pluggable cross-connectors from our terminal block line allow simple, safe power distribution of up to 32 A.

Secure contacts
The TERMINALBOX MCZ 1.5 can optionally be equipped with a contact element that automatically establishes contact with the rail when the housing is snapped on.
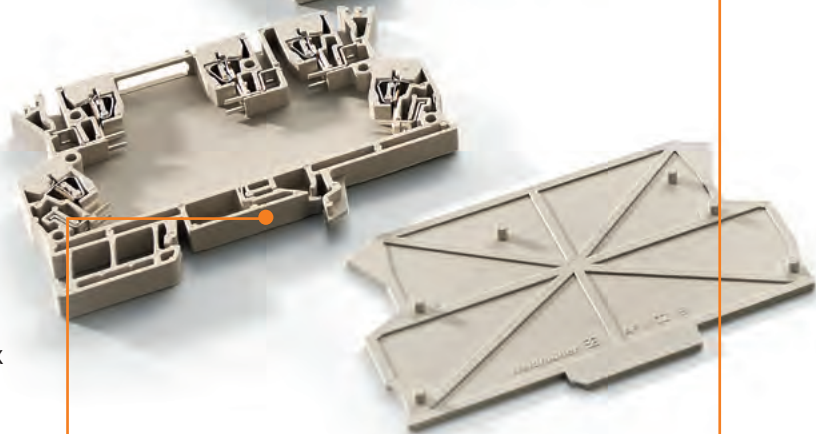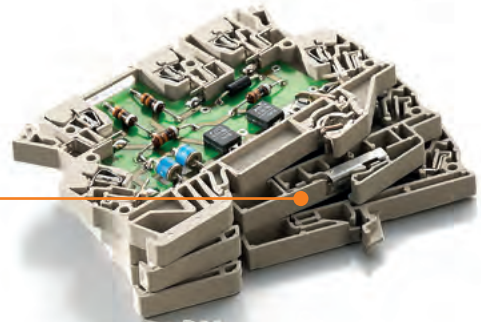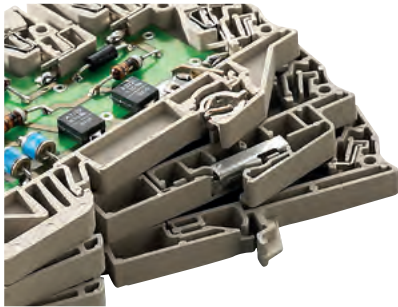
Compact integration
With a width of only 6.00 mm, the TERMINALBOX MCZ 1.5 provides enough space for a miniature circuit board and 5 tension clamp connection for wires up to 1.5 mm².
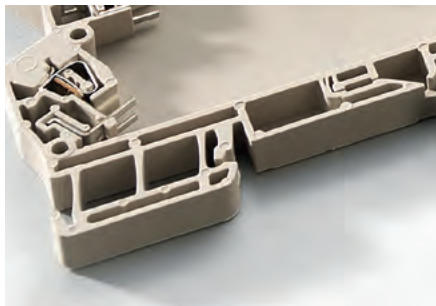
Seamlessly connected
High-power cross-connectors allow power (up to 32 A) to be easily and quickly distributed on up to three levels.

Easy to operate
The transparent hinged covers make adjustments simple (for example, using DIP switches). Labelling is also possible.
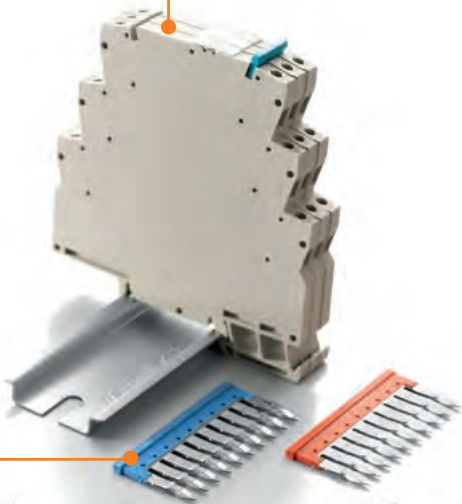
MICROBOX MHS 6
Miniature sliced-section housing in 6.1 mm width A total of 6 clamping yoke screw connections (for 2.5 mm² wires) can be manually or selectively wave soldered.

MICROBOX MHZ 6
Miniature sliced-section housing in 6.1 mm width A total of 6 tension clamp connection (for 1.5 mm² wires) can be manually or selectively wave soldered.
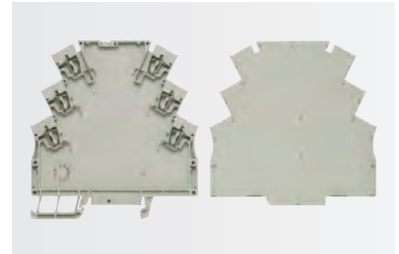
TERMINALBOX MCZ 1.5
Terminal-block-format open housings with tension clamp connection for wires up to 1.5 mm². A total of 5 connection elements can be manually or selectively wave soldered.

Connect reliably
The MICROBOX provides a permanent, secure clamp connection for 6 wires up to 2.5 mm² (MHS 6 with clamping yoke screw connection) or up to 1.5 mm² (MHZ 6 with tension-clamp spring connection).

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MICROBOX 6

1 miniature housing 6 - consists of:
Screw connection
- 1 terminal carrier for TS 35
- 2 horizontal busbars
- 4 vertical busbars
- 6 clamping yoke units
- 1 housing cover

Tension clamp connection
- 1 terminal carrier for TS 35
- 2 busbars, long version
- 4 current bars, short version
- 1 housing cover

MHS 6

Screw connection

MHZ 6

Tension clamp connection

Technical data

General data		MHS 6	MHZ 6
Dimensions W x L x H (w. TS 35 x 7.5)	mm	6.1 / 88 / 97.8	6.1 / 92 / 97,8
No. of connections	total	6	6
Access for calibration			
Shielding		not available	not available
Contact to the mounting rail			
Number of PCB per module		1	1
PCB-connection		soldered connection, directly	soldered connection, directly
Thickness of PCB		0.5 ... 1.0 mm	0.5 ... 1.0 mm
Ingress protection class		IP 20	IP 20
Tightening torque range		0.4...0.6 Nm	0.4...0.6 Nm
Stripping length		7 mm	6 mm
Pollution severity		2	2
Material		PA	PA
Flammability class UL 94		V0	V0
Colour of insulating material		grey	grey

Clampable conductors (H05V/H07V)		Screw connection	Tension clamp connection	Screw connection	Tension clamp connection
Solid	mm^2	0.2...2.5			0.2...1.5
Flexible	mm^2	0.2...2.5			0.2...1.5
Max. conductor AWG		AWG 28...AWG 14			AWG 26...AWG 16
Plug gauge to 60947-1					
Note					

Ordering data

Individual parts		Type	Qty.	Order No.	Type	Qty.	Order No.
For mounting rail TS 35	with connection element	MHS 6	10	**1925740000**	MHZ 6	10	**1925760000**
	for connection element	EBGH MSA ZB	50	**2277700000**	EBGH MSA ZF	50	**2277710000**
	for mounting rail contact, for connection element						
For mounting rail TS 32	with connection element						
Frame for TS 35							
Frame for TS 35	for connection element						
Frame for TS 32							
Top part	open				SMSE FE MSA	1	**2279350000**
	closed				SMSE2 ZF MSD	1	**2277000000**
Current bars (w. tension clamp)	short version						
	long version						
Current bars	horizontal	SMSE MSA ZB	1	**4286620000**			
	vertical	SMSE 1 MSD ZB	1	**4060540000**			
Clamp. yoke unit	clamp. yoke + screw	ZBSC DLI2.5/M2.5X6	1	**1919670000**			
Screw							
Clamping yoke							
Mounting rail contact							
Housing cover		GHDE MSA ZB FR 12	1	**2279280000**	GHDE MSA ZF	1	**2279300000**
Note							

Accessories

End plate	Type	Qty.	Order No.	Type	Qty.	Order No.
Cross-connection	ZQV 4N/2 RT	60	**1793950000**	ZQV 4N/2 RT	60	**1793950000**
	ZQV 4N/2 BL	60	**1793960000**	ZQV 4N/2 BL	60	**1793960000**
	ZQV 4N/2 GE	60	**1758250000**	ZQV 4N/2 GE	60	**1758250000**
Note	Full housing available as set on request.			Full housing available as set on request.		

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MCZ 1.5

The transparent hinged top plate is used for labelling and calibration. Maximum equipment level requires 2 short and 3 long current bars. The space available and the number of connections can be doubled using the frame. CAD drawings that ease the production of layouts and equipping of boards (details of blocked area, max. component heights, pads, etc.), are available on request. The MCZ housing kit consists of:

- 1 terminal holder
- 1 top plate
- 1-5 current bars with tension clamp
- 1 end plate (if required)

MCZ 1.5

Tension clamp connection

Technical data

General data		
Dimensions W x L x H (w. TS 35 x 7.5)	mm	6 / 91.3 / 63.5
No. of connections	total	5
Access for calibration		Movable top plate
Shielding		not available
Contact to the mounting rail		Earthing-contact
Number of PCB per module		1
PCB-connection		soldered connection, directly
Thickness of PCB		1.0 (+ 0.2) mm
Ingress protection class		IP 20
Tightening torque range		
Stripping length		6 mm
Pollution severity		3
Material		PA
Flammability class UL 94		V0
Colour of insulating material		beige/black

Clampable conductors (H05V/H07V)		Screw connection	Tension clamp connection
Solid	mm²		0.2...1.5
Flexible	mm²		0.2...1.5
Max. conductor AWG			AWG 26...AWG 16
Plug gauge to 60947-1			
Note			

Ordering data

Individual parts		Type	Qty.	Order No.
For mounting rail TS 35	with connection element	MCZ 5	10	**8857560000**
	for connection element	GH MCZ1.5	1	**2224220000**
	for mounting rail contact, for connection element	GH MCZUE1.5/UE	1	**2312290000**
For mounting rail TS 32	with connection element			
Frame for TS 35		RA MCZ1.5	25	**2224240000**
Frame for TS 35	for connection element			
Frame for TS 32				
Top part	open	KOPL MCZ1.5	18	**2224040000**
	closed			
Current bars (w. tension clamp)	short version	SMSE KU FE MCZ 1.5	1	**2224390000**
	long version	SMSE LN FE MCZ 1.5	1	**2224380000**
Current bars	horizontal			
	vertical			
Clamp. yoke unit	clamp. yoke + screw			
Screw				
Clamping yoke				
Mounting rail contact		SMSE FE MCZ 1.5/PE	100	**1003280000**
Housing cover				
Note				

Accessories

End plate	Type	Qty.	Order No.
	AP MCZ1.5	50	**8389030000**
Cross-connection	ZQV 4N/2 RT	60	**1793950000**
	ZQV 4N/2 BL	60	**1793960000**
	ZQV 4N/2 GE	60	**1758250000**
Note	Full housing available as set on request.		

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OMNIMATE Housing RS
Profile housing

Flexible – more flexible – profile form

Build housing in profile form – the flexible modular system of coloured and transparent PVC profiles and carrier modules the perfect combination of any mounting utilising standard pitches and precisely cut to length, this creates the perfect balance between flexibility and efficiency: The modular approach is ideal for assemblies with high space requirements and is particularly suited for small quantities or variable widths.

Flexible covers
See-through covers in various heights protect assemblies even with high components safely.
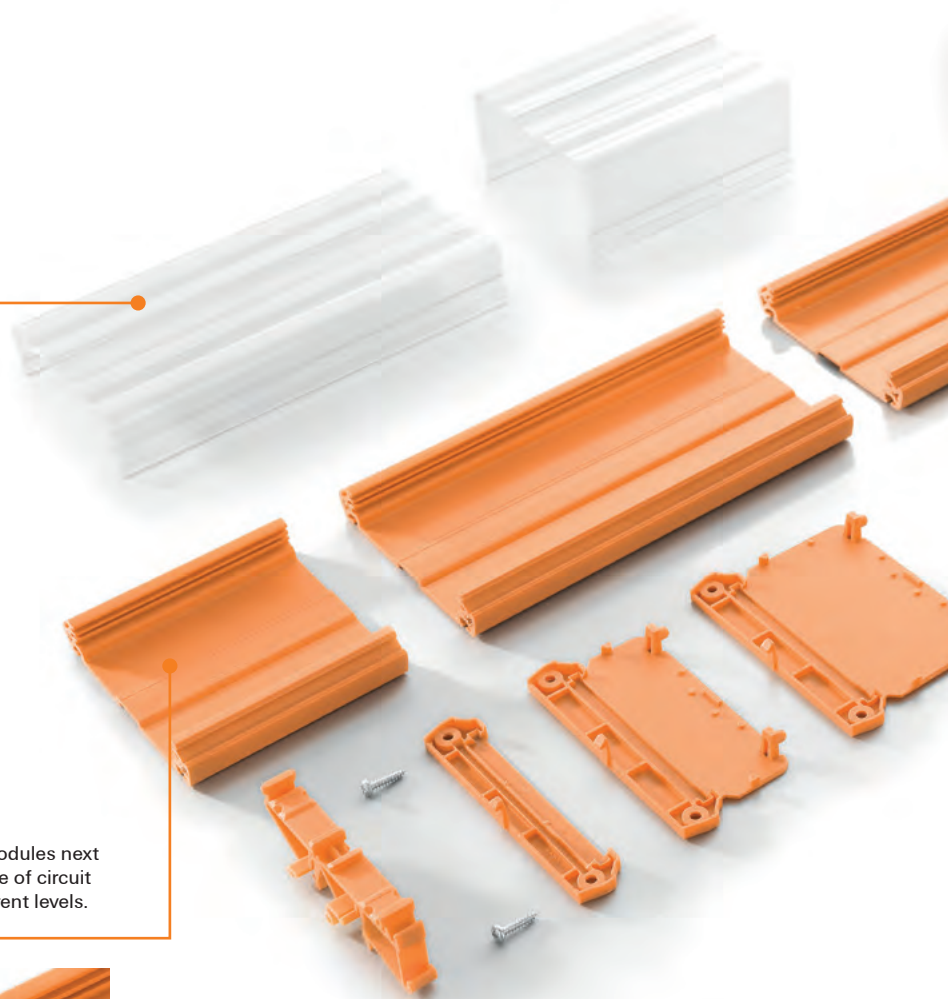
Flexible installation
Extruded profiles can take several modules next to each other. Depending on the type of circuit boards can be installed on two different levels.

Flexible lengths
Cut, or joined together in a row: extruded profiles can be easily adjusted to the space requirements of every application.
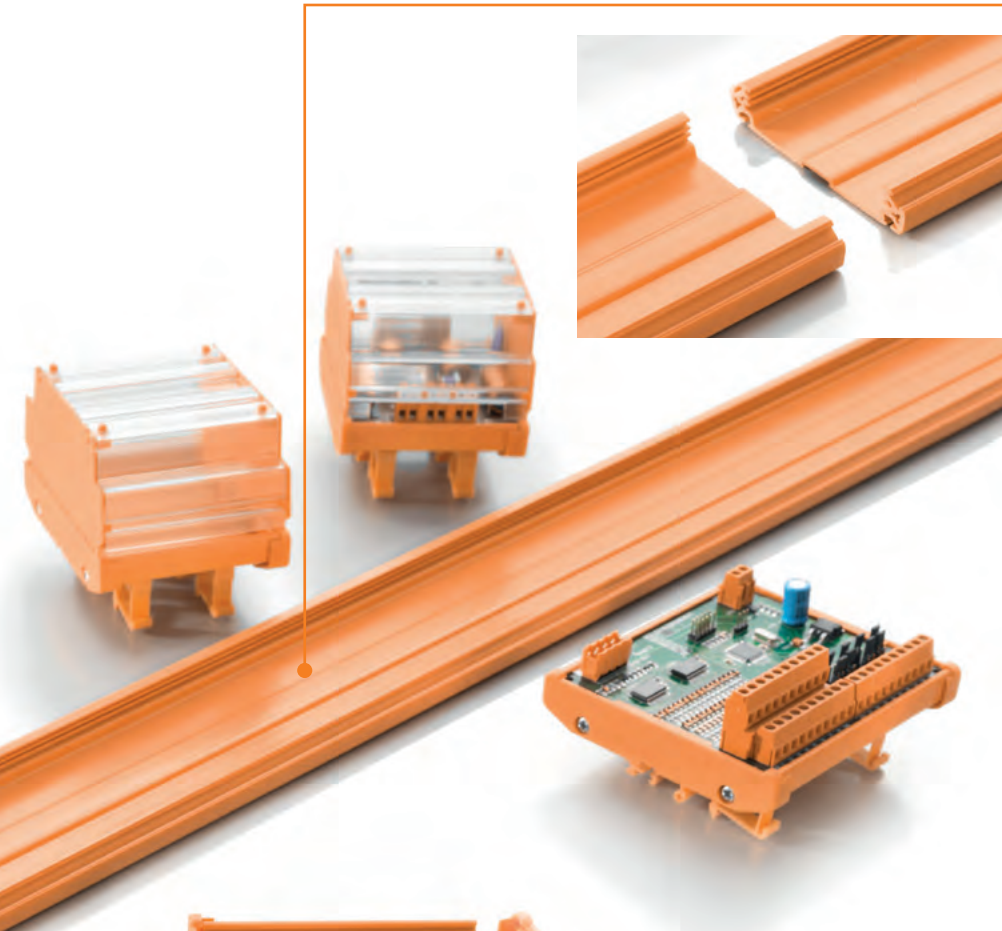
Variable RS-profile housing
Variable, precision cut extruded profile with different height cover hoods allow maximum packing density even for large electronic sub-assemblies.
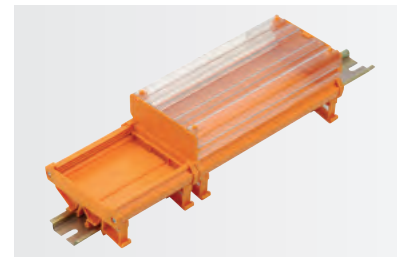
Modular RS-profile housing
Tool-free latching profiles with standard widths from 5 to 45 mm allow rapid assembly of tailor made solutions.

Flexible mounting
Mounting options: snapped onto the mounting rail or directly secured using screws.

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OMNIMATE Housing RS
Profile housing

RS profile housings can be snapped on to DIN rails or mounted directly. They are available in six widths. The extruded profiles can be cut to length or joined together in modules and are ideal for low volume, special assemblies or test set-ups. Fitted transparent hoods are used to protect the components.

Width	Type	Construction/Width of circuit board	Catalogue pages
45.0 mm	RS 45	Variable / 42.0 mm	L.46
70.0 mm	RS 70	Modular / 67.8 mm	L.47
87.0 mm	RS 80	Variable / 67.8 mm	L.48
86.0 mm	RS 90	Variable / 79.8 mm	L.49
109.0 mm	RS 100	Variable / 100.0 mm	L.50
130.8 mm	RS 122	Variable / 122.0 mm	L.51

Colour scale[1)]

■	Similar to RAL 9011
■	Similar to RAL 7024
■	Similar to RAL 2000

Note 1) Other colours on request

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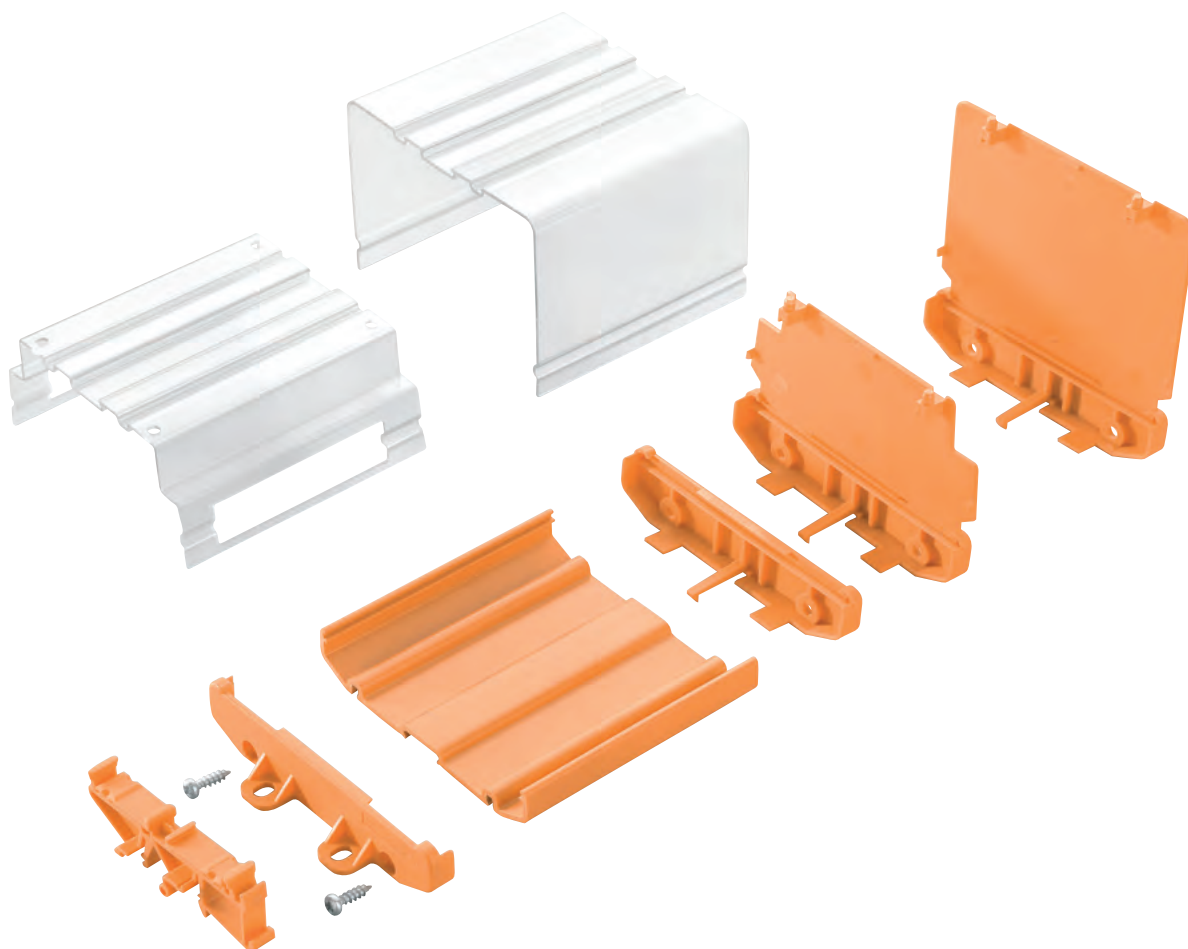
Housing variants	Description/Type	Design options

RS 45
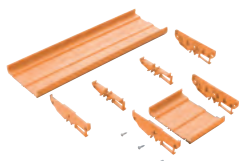
RS extruded profile 45 mm, variable

Features:
- Width: 45 mm
- Circuit board width: 42 mm
- Number of circuit boards (max.): 1
- Protection class (max.): IP 00

- Can be shortened to any length
- Rail mounted
- Direct mount[2]
- Machinable

RS 70

RS extruded profile 70 mm, modular

Features:
- Width: 70 mm
- Circuit board width: 67.8 mm
- Number of circuit boards (max.): 1
- Protection class (max.): IP 00

- Can be aligned side-by-side without any tools
- Rail mounted

RS 80

RS extruded profile 80 mm, variable

Features:
- Width: 87 mm
- Circuit board width: 67.8 mm
- Number of circuit boards (max.): 1
- Protection class (max.): IP 20
- Markable
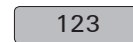
- Can be shortened to any length
- Rail mounted
- Direct mount[2]
- Transparent hood (opt.)
- Machinable

RS 90

RS extruded profile 90 mm, variable

Features:
- Width 86: mm
- Circuit board width: 79.8 mm
- Number of circuit boards (max.): 1
- Protection class (max.): IP 00
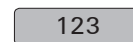
- Can be shortened to any length
- Rail mounted
- Direct mount[2]
- Machinable

RS 100

RS extruded profile 100 mm, variable

Features:
- Width 109: mm
- Circuit board width: 100 mm
- Number of circuit boards (max.): 1
- Protection class (max.): IP 20
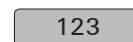
- Can be shortened to any length
- Rail mounted
- Direct mount[2]
- Transparent hood (opt.)
- Machinable

RS 122

RS extruded profile 122 mm, variable

Features:
- Width: 130.8 mm
- Circuit board width: 122 mm
- Number of circuit boards (max.): 2
- Protection class (max.): IP 00

- Can be shortened to any length
- Rail mounted
- Machinable

pad printing, 123 markable, ● ● ● can be machine-worked (drilling/milling), [2] Screw mount

RS 45

Depending on the end plate design, the profiles
can be mounted directly or on rail
1. The rail-mountable assembly requires:
• 2 end plates for DIN-rail mounting
• 1 extruded profile
• 4 screws

2. Direct-mountable assembly requires:
• 2 end plates for direct mounting
• 1 extruded profile
• 4 screws

RS 45

Description

B3 heights are available for cover profile and
end plates:
TS-mounting:
TS 32 = 45 mm, TS 35x7.5 = 40.5 mm
Direct mounting: 24 mm

Dimensions of PCB
Thickness: 1.6 (±0.2) mm, width:
42 (+0.5) mm
Size of RS segment = PCB length - 4.5 mm
Size of ADP segment = PCB length - 1 mm
Example:
PCB length 160 mm,
RS = 155.5 mm, ADP = 159 mm
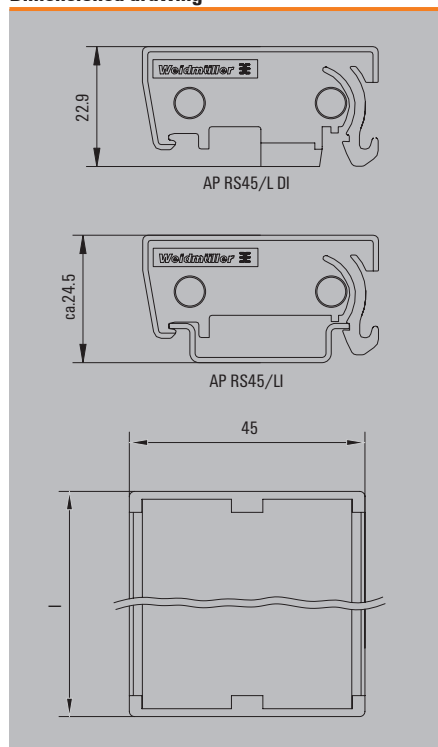
Technical data

General data	
Number of PCB per module	1
Thickness of PCB	1.6 (± 0.2) mm
Material	PVC/PA
Flammability class UL 94	V2
Colour of insulating material	beige
Note	

Ordering data

Extruded profile		Type		Qty.	Order No.
2000 mm	orange	RF RS 45 OR 2000	V0	1	**4340430000**
2000 mm	grey	PF RS 45 GR 2000	V0	1	**4027750000**
1000 mm	grey	PF RS 45 GR 1000	V0	10	**8140880000**
155 mm	orange				
Intermediate piece					
5 mm					
15 mm					
25 mm					
30 mm					
45 mm					
End plate w. locking foot					
Without cover	grey, left version	AP 45/LI	V2	20	**8143910000**
	grey, right-hand version	AP 45/RE	V2	20	**8143900000**
	orange, left version	AP 45/LI OR	V2	20	**1011590000**
	orange, right-hand version	AP 45/RE OR	V2	20	**1011600000**
Locking foot					
	orange				
	grey				
With marking facilities	left version				
	right version				
Without marking facilities	left version				
	right version				
Central	Intermediate foot				
End plate for direct mounting					
Without cover	grey, left version	AP 45/LI DI	V2	20	**8140870000**
	grey, right version	AP 45/RE DI	V2	20	**8140860000**
	orange				
	grey				
For medium-high cover profile	orange				
	grey				
For high cover profile	orange				
	grey				
End plate for mounting rail installation					
Without cover	orange				
	grey				
For medium-high cover profile	orange				
	grey				
For high cover profile	orange				
	grey				
Cover profile 1000 mm	Medium-high	ADP 1/HP1 1M	V2	1	**0485200000**
	high				
Screws		LKSC M2.9x13VZ		100	**4011200000**
Note		Other lengths on request.			

Dimensioned drawing

22.9

AP RS45/L DI

ca.24.5

AP RS45/LI

45

RS 70

Chassis Form:
Rail-mounted version
- 1 clip-on foot left
- 1 clip-on foot right
- 1 or more intermediate pieces
- 1 clip-on foot centre if required

RS 70

Description

Height: TS 32 = 33.5 mm, TS 35x7.5 = 29 mm

Dimensions of PCB:
Thickness: 1.6 (± 0.2) mm
Length: 67.8 (- 0.2) mm
Width of intermediate piece = PCB width -
2x9 mm (snap-on feet)

Example:
PCB width = 68 mm
Width of intermediate piece = 50 mm
Intermediate piece 2x ZW 25 RS or
ZW 45 RS + ZW 5 RS
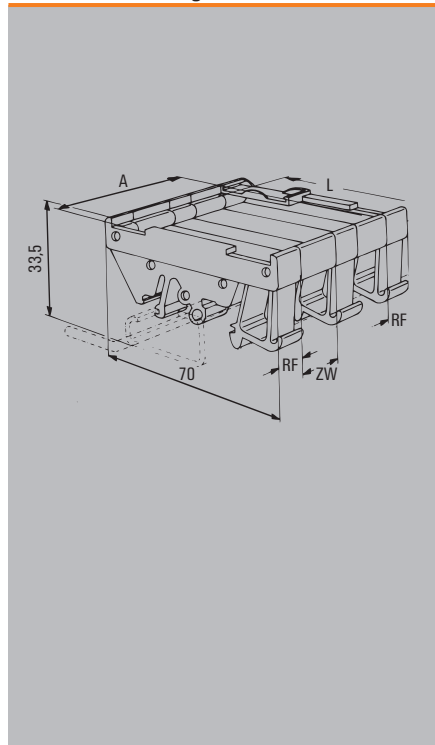
Technical data

General data	
Number of PCB per module	1
Thickness of PCB	1.6 (± 0.2) mm
Material	PA
Flammability class UL 94	V2
Colour of insulating material	orange
Note	

Ordering data

Extruded profile		Type	Qty.	Order No.
2000 mm	orange			
2000 mm	grey			
1000 mm	grey			
155 mm	orange			
Intermediate piece				
5 mm		ZW 5 RS OR	20	**0119760000**
15 mm		ZW 15 RS OR	20	**0119860000**
25 mm		ZW 25 RS OR	20	**0126160000**
30 mm		ZW 30 RS OR	20	**0119960000**
45 mm		ZW 45 RS OR	20	**0120060000**
End plate w. locking foot				
Without cover	grey, left version			
	grey, right version			
Locking foot				
	orange			
	grey			
With marking facilities	left version			
	right version	RF RS 70 RE/A3/M.BEZ	20	**0119560000**
Without marking facilities	left version	RF RS 70 LI/A2/0.SG	20	**0119660000**
	right version	RF RS 70 RE/A4/0.BEZ	20	**0126260000**
Central	Intermediate foot	RF RS 70 MI/A6	20	**0213760000**
End plate for direct mounting				
Without cover	grey, left version			
	grey, right version			
	orange			
	grey			
For medium-high cover profile	orange			
	grey			
For high cover profile	orange			
	grey			
End plate for mounting rail installation				
Without cover	orange			
	grey			
For medium-high cover profile	orange			
	grey			
For high cover profile	orange			
	grey			
Cover profile	Medium-high			
	high			
Screws				
Note				

Dimensioned drawing

RS 80

Housing installation (plus 4 screws):
Rail mounted variant (rail mounted assembly)
• 2 end plates for rail mounted assembly
• 2 or more locking feet
• 1 extruded profile
• 1 cover profile (optional)
Direct mounting variant
• 2 end plates, direct mounting
• 1 extruded profile
• 1 cover profile (optional)

RS 80

Description

3 heights are available for cover profile and end plates:
Rail mounting without cover:
TS 32 = 45 mm, TS 35x7.5 = 40.5 mm
Rail mounting with low cover:
TS 32 = 72 mm, TS 35x7.5 = 67.5 mm
Rail mounting with high cover:
TS 32 = 91 mm, TS 35x7.5 = 86.5 mm
Direct mounting without/low/high cover:
17 / 44 / 63 mm

Dimensions of PCB
Thickness: 1.6 (±0.2) mm, width:
67.8 (+0.2) mm
Size of RS segment = PCB length - 4.5 mm
Size of ADP segment = PCB length - 2 mm
Example:
PCB length 160 mm
RS = 155.5 mm, ADP = 158 mm

Technical data

General data

Number of PCB per module	1
Thickness of PCB	1.6 (± 0.2) mm
Material	PVC/PA
Flammability class UL 94	V0
Colour of insulating material	orange
Note	

Ordering data

Extruded profile		Type		Qty.	Order No.
2000 mm	orange	PF RS 80 OR 2000MM	V0	1	**4157440000**
2000 mm	grey	PF RS 80 GR 2000MM	V0	1	**4183130000**
1000 mm	grey				
155 mm	orange				
Intermediate piece					
5 mm					
15 mm					
25 mm					
30 mm					
45 mm					
End plate w. locking foot					
Without cover	grey, left version	AP RF80 LI	V2	20	**8156210000**
	grey, right version	AP RF80 RE	V2	20	**8156200000**
Locking foot					
	orange	RF 180		20	**1324460000**
	grey	RF 180 GR	V2	20	**1773400000**
With marking facilities	left version				
	right version				
Without marking facilities	left version				
	right version				
Central	intermediate foot				
End plate for direct mounting					
Without cover	grey, left version				
	grey, right version				
	orange	AP 80 D	V2	20	**1324360000**
	grey				
For medium-high cover profile	orange	AP 85 D	V2	20	**1411060000**
	grey				
For high cover profile	orange	AP 86 D	V2	20	**1411160000**
	grey				
End plate for mounting rail installation					
Without cover	orange	AP 80	V2	20	**1324260000**
	grey	AP 80	V2	20	**8320300000**
For medium-high cover profile	orange	AP 85	V2	20	**1410860000**
	grey				
For high cover profile	orange	AP 86		20	**1410960000**
	grey				
Cover profile 1000 mm	Medium-high	ADP 5	V2	1	**4167150000**
1000 mm	high	ADP 6	V2	1	**4167160000**
Screws		LKSC M2.9x13VZ		100	**4011200000**
Note		Other lengths on request.			

Dimensioned drawing

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RS 90

Housing installation (plus 4 screws):
- 2 end plates
- 2 or more locking feet
- 1 extruded profile

RS 90

Description

Dimensions of PCB
Thickness: 1.6 (±0.2) mm, width: 79.8 (+0.2) mm
Size of RS segment = PCB length - 4.5 mm
Example:
PCB length 160 mm
RS = 155.5 mm

Technical data

General data	
Number of PCB per module	1
Thickness of PCB	1.6 (± 0.2) mm
Material	PVC/PA
Flammability class UL 94	V0
Colour of insulating material	orange
Note	

Ordering data

Extruded profile		Type		Qty.	Order No.
2000 mm	orange	PF RS 90 OR 2000MM	V0	1	**4053240000**
2000 mm	grey	PF RS 90 GR 2000MM	V0	1	**4051810000**
1000 mm	grey				
155 mm	orange				
Intermediate piece					
5 mm					
15 mm					
25 mm					
30 mm					
45 mm					
End plate w. locking foot					
Without cover	grey, left version				
	grey, right version				
Locking foot					
	orange	RF 180	V2	20	**1324460000**
	grey	RF 180 GR	V2	20	**1773400000**
With marking facilities	left version				
	right version				
Without marking facilities	left version				
	right version				
Central	intermediate foot				
End plate for direct mounting					
Without cover	grey, left version				
	grey, right version				
	orange				
	grey				
For medium-high cover profile	orange				
	grey				
For high cover profile	orange				
	grey				
End plate for mounting rail installation					
Without cover	orange	AP 90 OR	V2	20	**1961880000**
	grey	AP 90 GR	V2	20	**1961890000**
For medium-high cover profile	orange				
	grey				
For high cover profile	orange				
	grey				
Cover profile	Medium-high				
	high				
Screws		LKSC M2.9x13VZ		100	**4011200000**
Note		Other lengths on request.			

Dimensioned drawing

L

RS 100

Housing installation (plus 4 screws):
Rail mounted variant (rail mounted assembly)
• 2 end plates for rail mounted assembly
• 2 or more locking feet
• 1 extruded profile
• 1 cover profile (optional)
Direct mounting variant
• 2 end plates, direct mounting
• 1 extruded profile
• 1 cover profile (optional)

RS 100

Description

3 heights are available for cover profile and end plates:
Rail mounting without cover:
TS 32 = 45 mm, TS 35x7.5 = 40.5 mm
Rail mounting with low cover:
TS 32 = 89 mm, TS 35x7.5 = 84.5 mm
Rail mounting with high cover:
TS 32 = 121 mm, TS 35x7.5 = 116.5 mm
Direct mounting without/low/high cover:
24 / 69 / 99 mm

Dimensions of PCB
Thickness: 1.6 (±0.2) mm, width:
100 (+0.5) mm
Size of RS segment = PCB length - 4.5 mm
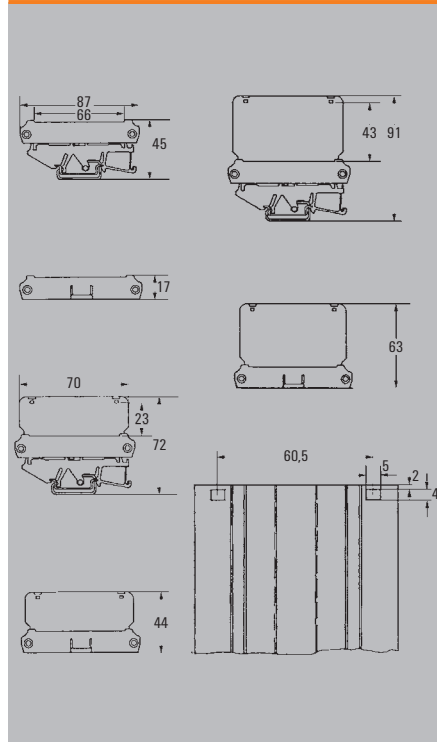Size of ADP segment = PCB length - 1 mm
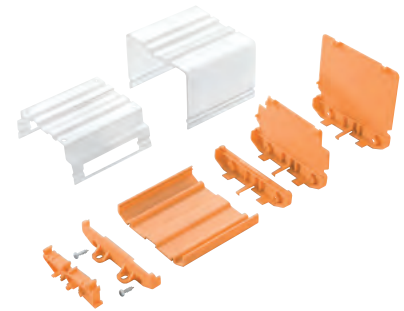Example:
PCB length 160 mm
RS = 155.5 mm, ADP = 159 mm

Technical data

General data	
Number of PCB per module	1
Thickness of PCB	1,6 (± 0.2) mm
Material	PVC/PA
Flammability class UL 94	V0
Colour of insulating material	orange / grey (Black on request)
Note	

Ordering data

Extruded profile		Type		Qty.	Order No.
2000 mm	orange	PF RS 100 OR 2000MM A.1	V0	1	**4144870000**
2000 mm	grey	PF RS 100 GR 2000MM A.1	V0	1	**4010870000**
1000 mm	grey				
155 mm	orange	PF RS 100 A.1 OR 155.5	V0	25	**4148400000**
Intermediate piece					
5 mm					
15 mm					
25 mm					
30 mm					
45 mm					
End plate w. locking foot					
Without cover	grey, left version				
	grey, right version				
Locking foot					
	orange	RF 180	V2	20	**1324460000**
	grey	RF 180 GR	V2	20	**1773400000**
With marking facilities	left version				
	right version				
Without marking facilities	left version				
	right version				
Central	intermediate foot				
End plate for direct mounting					
Without cover	grey, left version				
	grey, right version				
	orange	AP 100 D	V2	20	**1185160000**
	grey				
For medium-high cover profile	orange	AP 110 D	V2	10	**1185360000**
	grey				
For high cover profile	orange	AP 111 D	V2	10	**1185560000**
	grey				
End plate for mounting rail installation					
Without cover	orange	AP 100	V2	20	**1185060000**
	grey				
For medium-high cover profile	orange	AP 110	V2	10	**1185260000**
	grey				
For high cover profile	orange	AP 111	V2	10	**1185460000**
	grey				
Cover profile 2000 mm	Medium-high	ADP 10	V2	1	**4169320000**
2000 mm	high	ADP 11	V2	1	**4169330000**
Screws		PTSC KB40X14		100	**4019420000**

| **Note** | Other lengths on request. |

Dimensioned drawing

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RS 122

Housing construction (plus 4 screws):
available as a rail mounting version (TS mounting)
- 2 end plates for rail mounted assembly
  with locking foot
- 2 or more locking feet
- additional intermediate foot
- 1 Extruded profile

RS 122

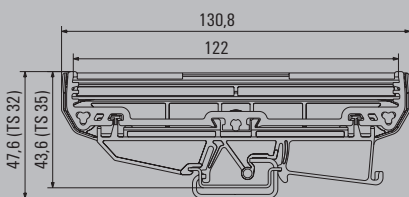## Description

Takes PCB in 2 positions

Dimensions of the PCB
Thickness: 1.6 (±0.2) mm, width: +0.5 mm
i.e. length RS section = PCB length - 5 mm
Example:
PCB length 160 mm,
RS section = 160 mm - 5 mm = 155 mm

Technical data

General data	
Number of PCB per module	1
Thickness of PCB	1.6 (± 0.2) mm
Material	PVC/PA
Flammability class UL 94	V0
Colour of insulating material	orange
Note	

Ordering data

Extruded profile		Type	Qty.	Order No.
2000 mm	orange	PF RS 122 OR 2000MM	10	**1155940000**
2000 mm	grey			
1000 mm	grey			
155 mm	orange			
Intermediate piece				
5 mm				
15 mm				
25 mm				
30 mm				
45 mm				
End plate w. locking foot				
Without cover	grey, left version			
	grey, right version			
Locking foot				
	orange	RF 108 OR	20	**1020690000**
	grey			
With marking facilities	left version			
	right version			
Without marking facilities	left version			
	right version			
Central	intermediate foot			
End plate for direct mounting				
Without cover	grey, left version			
	grey, right version			
	orange			
	grey			
For medium-high cover profile	orange			
	grey			
For high cover profile	orange			
	grey			
End plate for mounting rail installation				
Without cover	orange, left version	AP RF 122 LI OR	20	**1020640000**
	orange, right version	AP RF 122 RE OR	20	**1020650000**
	grey			
For medium-high cover profile	orange			
	grey			
For high cover profile	orange			
	grey			
Cover profile	Medium-high			
	high			
Screws				
Note		Other lengths on request.		

Dimensioned drawing

L

OMNIMATE Housings
Accessories

**OMNIMATE Housings
Accessories**

MTA

Snap-on foot for terminal rail

MOFU

Mounting foot

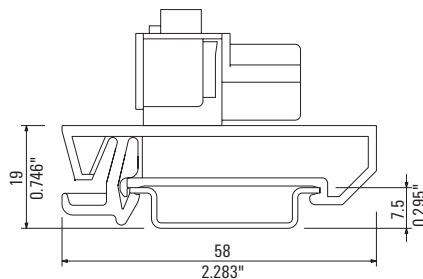## WS 10/5
WS 12/5

MultiCard marking

The MTA 45 mounting adapter enables many different modules to be securely attached to a terminal rail. The adapter, made of fibreglass-reinforced polyamide, ensures high stability and secure fixity to the terminal rail. It is assembled by simply clipping on, and disassembled by pushing up and tilting the module. No tools are required for this.
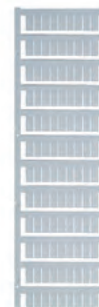
- WS 10/5 = 10 mm long x 5 mm wide
- WS 12/5 = 12 mm long x 5 mm wide
- Delivered as MultiCard 5 mats with 144 markers

Ordering data

Snap-on foot for TS 35		black
Type	Qty.	Order No.
MTA 30 BK	45	1168970000
MTA 45 BK	30	1962250000

Ordering data

Colour		black
Type	Qty.	Order No.
Mounting foot Mofu	20	0646210000

Ordering data

Type	Length mm	Order No.
WS 10/5	10	1635000000
WS 12/5	12	1609860000

M

SDI
VDE-insulated slotted screwdriver

SD
Slotted screwdriver with round blade

SDK PH
Crosshead screwdriver
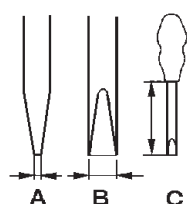
VDE-insulated slotted screwdriver, SDI
• DIN 7437, ISO 2380/2
• Output acc. to DIN 5264, ISO 2380/1
• SoftFinish® handle

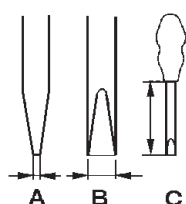**Slotted screwdriver with round blade, SD**
• DIN 5265, ISO 2380/2
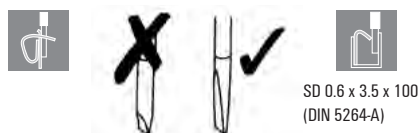• Output acc. to DIN 5264, ISO 2380/1
• ChromTop tip
• SoftFinish® handle

Crosshead screwdriver PH (Philips)
• SDK PH DIN 5262, ISO 8764/2-PH
• Output acc. to ISO 8764-PH
• ChromTop tip
• SoftFinish® grip

Crosshead screwdriver PZ (Pozidrive)
• SDK PZ DIN 5262, ISO 8764/2-PZ
• Output acc. to ISO 8764-PZ
• ChromTop tip
• SoftFinish® grip

Ordering data

Type	Dims (mm)	A	B	C	Order No.
SDI		0,4	2,5	75	9008370000
SDI		0,5	3,0	100	9008380000
SDI		0,6	3,5	100	9008390000
SDI		0,8	4,0	100	9008400000
SDI		1,0	4,5	125	9008910000
SDI		1,0	5,5	125	9008410000
SDI		1,2	6,5	150	9008420000
SDI		1,6	8,0	175	9008430000

Ordering data

Type	Dims (mm)	A	B	C	Order No.
SD		0,4	2,5	75	9009030000
SD		0,5	3,0	80	9008320000
SD		0,6	3,5	100	9008330000
SD		0,8	4,0	100	9008340000
SD		0,8	4,5	125	9009020000
SD		1,0	5,5	150	9008350000
SD		1,2	6,5	150	9009010000

Ordering data PH

Type	Dims (mm)	A	B	C	Order No.
SDK PH0	0			60	9008470000
SDK PH1	1			80	9008480000
SDK PH2	2			100	9008490000
SDK PH3	3			150	9008500000

Ordering data PZ

Type	Dims (mm)	A	B	C	Order No.
SDK PZ1	1			80	9008530000
SDK PZ2	2			100	9008540000
SDK PZ3	3			150	9008550000

Tension clamp terminal tool

Tool for PCB terminals with tension clamp connections

SD 0.6 x 3.5 x 100
(DIN 5264-A)

You do not need any special tool to connect or disconnect our tension clamp connections. The opening is designed to accommodate a standard 0.6 x 3.5 x 100 screwdriver to DIN 5264-A (with flat blade), also available from Weidmüller.

M

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