ME-IO 18,8...

Component housing



Data sheet
105787_en_02

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1 Description

The housings of the ME-IO 18,8... product range consist of a 18.8 mm wide **lower housing part** with space for the PCB assembly.

The lower housing part can be combined with various housing covers. The lower housing part is subdivided into 9 units (1 Unit = 11 mm). These units can be combined with connectors and housing covers in various ways.

The **connectors** correspond to a unit and have a push-in connection. There are 4-pos. connectors for conductor cross sections of up to 2.5 mm^2, and 6-pos. connectors for conductor cross sections of up to 1.5 mm^2. Partially assembled or TWIN variants are also available. All in all, the 4-pos. connectors allow for a maximum of 36 positions in a single housing. The 6-pos. connectors even allow for up to 54 positions. As a counter-part to the connectors, there are **headers** in 2 or 3 unit versions for soldering onto the PCB.

The **housing covers** in 2 to 7 unit versions are especially suited for installing connection systems such as USB or D-SUB as well as display and operating elements. We would be glad to install the required openings for you.

The housings can be snapped onto an NS 35 DIN rail.

It is possible to use the housings with a **DIN rail connector** by means of which communication can be established between the housings, or the supply voltage can be transmitted.

	The 3D housing data can be found at phoenixcontact.net/products.
	Make sure you always use the latest documentation. It can be downloaded at phoenixcontact.net/products.
	This data sheet is valid for all products listed on page 5.

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2 Overview of the ME-IO 18,8... products

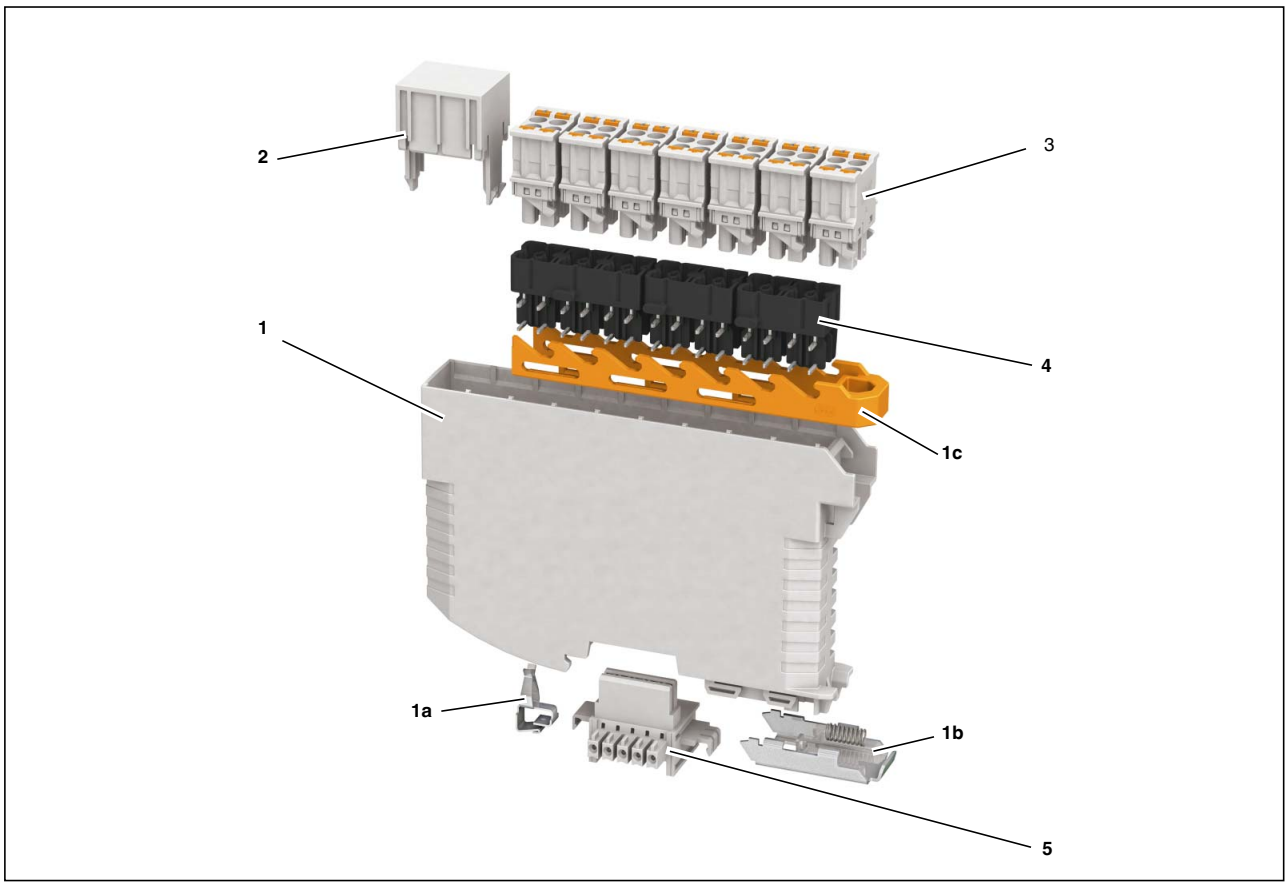


Figure 1 Example of housing structure

1 Lower housing part with FE contact (1a), base latch (1b) and Lock and Release system (1c)

2 Housing cover

3 Push-in connectors

4 Headers

5 DIN rail connector

The orange lever of the Lock and Release system is used for locking and unlocking the push-in connectors.

The push-in connectors are available in three variants, fully and partially assembled, and as a TWIN connector, on which two positions are each bridged together.

The counter-part to the push-in connectors are the headers.

The housing can be optionally combined with a DIN rail connector by means of which data or the power supply can be transmitted from module to module.

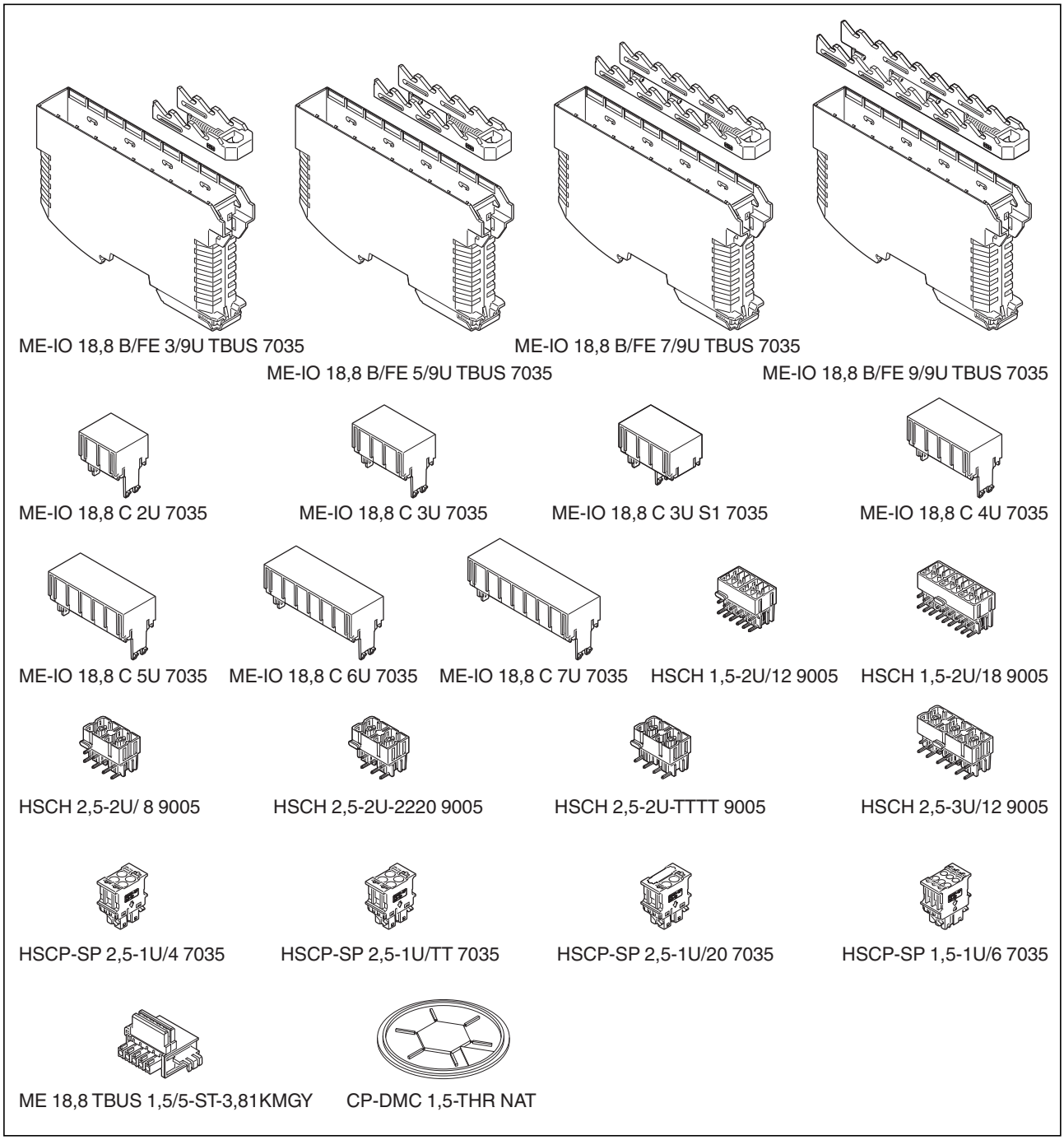


Figure 2 Overview

3 Ordering data

Component housing

Description	Type	Order No.	Pcs. / Pkt.
Lower housing part, overall width 18.8 mm, pre-assembled, with metal foot catch for DIN rail mounting, integrated FE contact, without DIN rail connector, color: similar to RAL 7035			
Lock and Release system, locking of the connectors to the header, included in the units:			
3 units	ME-IO 18,8 B/FE 3/9U TBUS 7035	2201963	10
5 units	ME-IO 18,8 B/FE 5/9U TBUS 7035	2201962	10
7 units	ME-IO 18,8 B/FE 7/9U TBUS 7035	2201961	10
9 units	ME-IO 18,8 B/FE 9/9U TBUS 7035	2201960	10
Housing cover for various units, color: similar to RAL 7035			
2 units	ME-IO 18,8 C 2U 7035	2201799	10
3 units	ME-IO 18,8 C 3U 7035	2201800	10
3 units (covers 2 units and 1 unit with header)	ME-IO 18,8 C 3U S1 7035	2201801	10
4 units	ME-IO 18,8 C 4U 7035	2201802	10
5 units	ME-IO 18,8 C 5U 7035	2201803	10
6 units	ME-IO 18,8 C 6U 7035	2201804	10
7 units	ME-IO 18,8 C 7U 7035	2201805	10
Header, touch-proof, color: similar to RAL 9005			
2 units, 8 connections	HSCH 2,5-2U/ 8 9005	2201789	50
2 units, 6 connections	HSCH 2,5-2U-2220 9005	2201792	50
2 units, 4 connections	HSCH 2,5-2U-TTTT 9005	2201790	50
3 units, 12 connections	HSCH 2,5-3U/12 9005	2201788	50
2 units, 12 connections	HSCH 1,5-2U/12 9005	2202233	50
3 units, 18 connections	HSCH 1,5-3U/18 9005	2202232	50
Push-in connector, for headers, with integrated test connection, color: similar to RAL 7035			
1 unit, 4 pos., fully assembled	HSCP-SP 2,5-1U/ 4 7035	2201780	50
1 unit, 2 TWIN connections	HSCP-SP 2,5-1U-TT 7035	2201781	50
1 unit, 2 pos., partially assembled	HSCP-SP 2,5-1U/20 7035	2201782	50
1 unit, 6 pos., fully assembled	HSCP-SP 1,5-1U/ 6 7035	2202234	50
DIN rail connector, 5-pos., color: similar to RAL 7035	ME 18,8 TBUS 1,5/5-ST-3,81KMGY	2201813	50
Coding profile, for header and push-in plug, color: natural	CP-DMC 1,5-THR NAT	1790647	60

4 Technical data

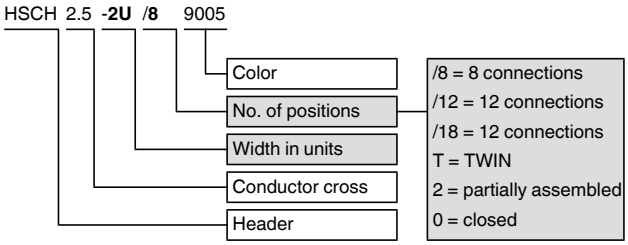
Electrical data	
DIN rail connector, nominal voltage	125 V
DIN rail connector, nominal current	Maximum 8 per position
No. of positions	5

Housing type	
Insulation material	Polyamide
Inflammability class according to UL 94	V0
Color	Similar to RAL 7035, light gray
Power dissipation P_V at 20°C in the horizontal mounting position	Approx. 2.8 W

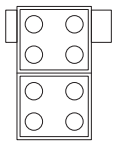
5 Combination of headers and connectors

5.1 Connections of headers and connectors

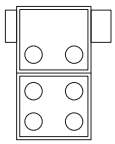
Headers



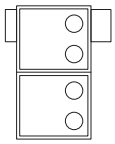
HSCH 2,5-**2U/ 8**



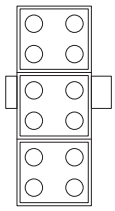
HSCH 2.5-**2U-2220**



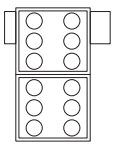
HSCH 2,5-**2U-TTTT**



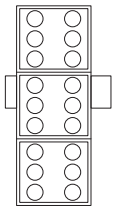
HSCH 2,5-**3U/12**



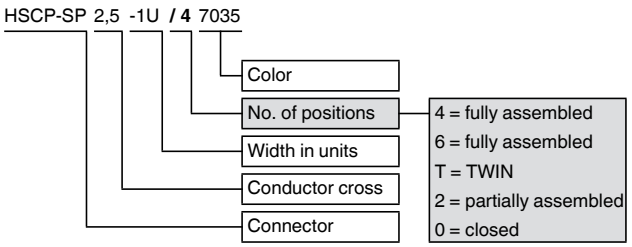
HSCH 1,5-**2U/12**



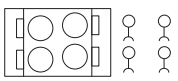
HSCH 1,5-**3U/18**



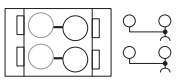
Connectors



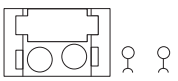
HSCP-SP 2,5-1U/ **4**



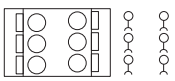
HSCP-SP 2,5-1U-**TT**



HSCP-SP 2,5-1U**/20**



HSCP-SP 1,5-1U**/ 6**



5.2 Selecting headers and connectors

The connectors correspond to a unit. For the connectors there are matching headers in 2 or 3 units for soldering onto the PCB.

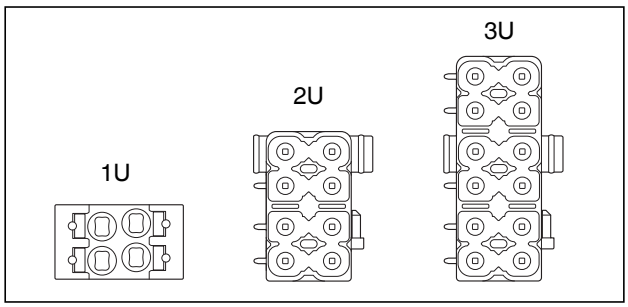


Figure 3 1U connector and 2U + 3U headers (5 mm pitch)

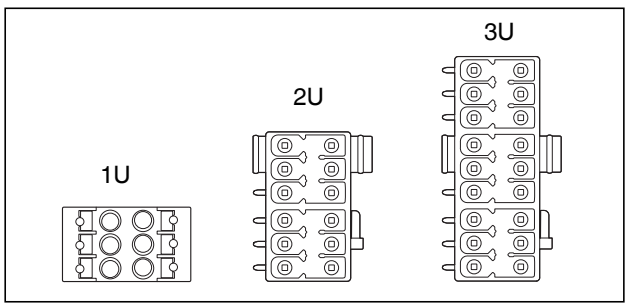


Figure 4 1U connector and 2U + 3U headers (3.45 mm pitch)

ince the connectors are available different variants, the connectors have to be suitable for the headers. For the partially assembled connector with two 1U/20 connections, you also have to pay attention to the position in the header.

Headers		**Suitable connectors**	
	Connections		Number
HSCH 2,5- 2U/ **8** ...	8	HSCP-SP 2,5- 1U/ **4** ...	2x
HSCH 2,5- 2U-**2220** ...	6	HSCP-SP 2,5- 1U/ **4** ... 1U**/20** ...	1x 1x
HSCH 2,5- 2U-**TTTT** ...	4	HSCP-SP 2,5- 1U-**TT** ...	2x
HSCH 2,5- 3U**/12** ...	12	HSCP-SP 2,5- 1U/ **4** ...	3x
HSCH 1,5- 2U**/12** ...	12	HSCP-SP 1,5- 1U**/ 6** ...	2x
HSCH 1,5- 3U**/18** ...	18	HSCP-SP 1,5- 1U**/ 6** ...	3x

You can also code the connectors so that they are not connected incorrectly by accident (see “Coding the connectors” on page 23).

5.3 Concatenating headers

The headers must be concatenated in a way that makes it possible to attach the Lock and Release system, which is available in different lengths (3U – 9U).

The headers have guide pins, which have to fit into the recesses of the Lock and Release system.

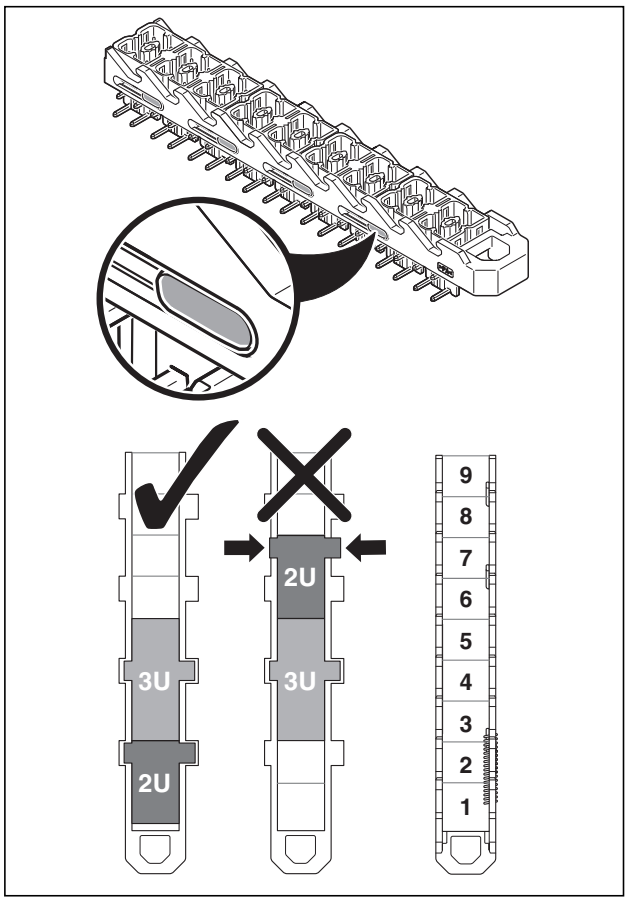


Figure 5 Guide pin and Lock and Release system

The housing is designed for 9 units. The headers can only be concatenated at certain positions. In doing so, it is important to pay attention to the combination of the headers so that the guide pins fit into the Lock and Release system.

It is therefore not possible to concatenate the 3U headers directly because the guide pins will then no longer fit into the Lock and Release system. For the same reason, 2U headers must always be placed **in front of** the 3U headers, e.g. the 2U on position 1 + 2 and the 3U header on positions 3 - 5.

In addition to the headers, housing covers can also be equipped, which are available in 2 to 7 unit versions. Their position can be chosen freely.

Possible positions of 3U headers

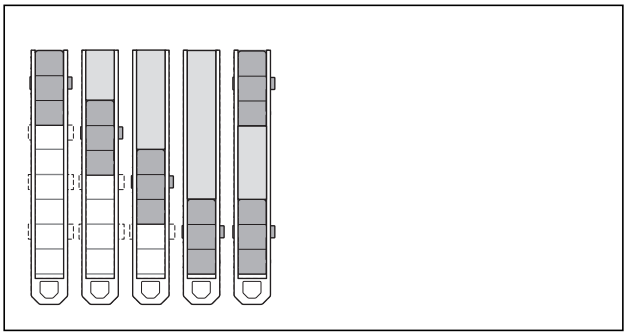


Figure 6 Possible position and combination of HSCH ...-3U... 3U headers

In Figure 6 the possible positions of the 3U headers are displayed. It shows that a direct concatenation of 3U headers is not possible.

In front of the 3U headers it is possible to concatenate 2U headers; housing covers are equipped before and between them.

Possible positions of 2U headers

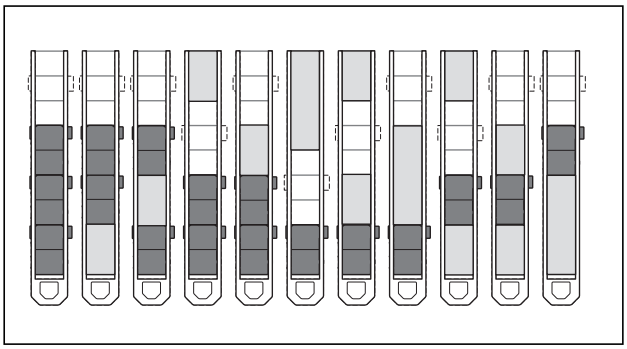


Figure 7 Possible positions and combinations of HSCH ...-2U... 2U headers

The 2U headers can also be directly concatenated. Figure 7 shows all possible positions. You can use the different variants of the 2U header for this purpose.

3U headers fit to some extent on the unoccupied positions behind the 2U headers (see Figure 5 and Figure 6). In addition, housing covers can be equipped. When doing so, make sure that there are no 1U housing covers.

6 Dimensions

6.1 External dimensions

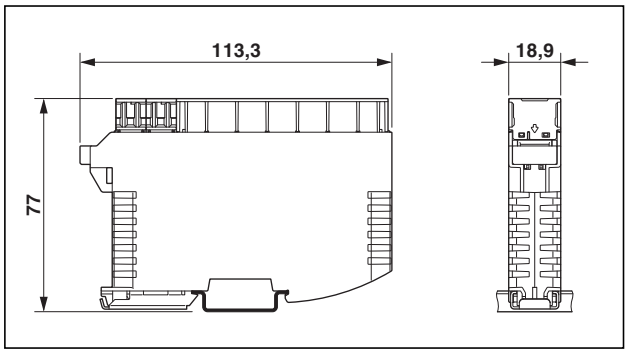


Figure 8 External dimensions of lower housing part with housing cover

6.2 Internal dimensions of lower housing part

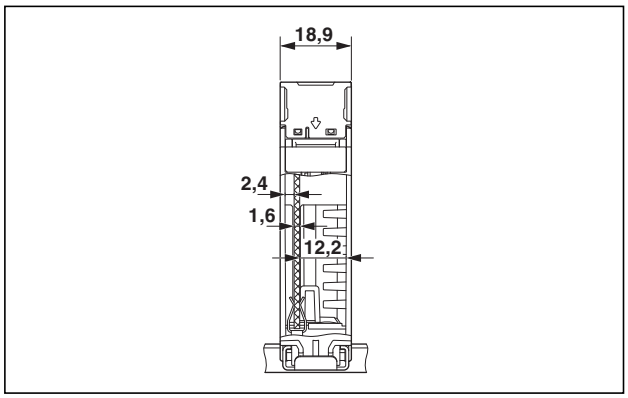


Figure 9 Lower housing part, internal view

Recommended PCB thickness	1.4 mm ... 1.8 mm

6.3 Dimensions of the housing cover

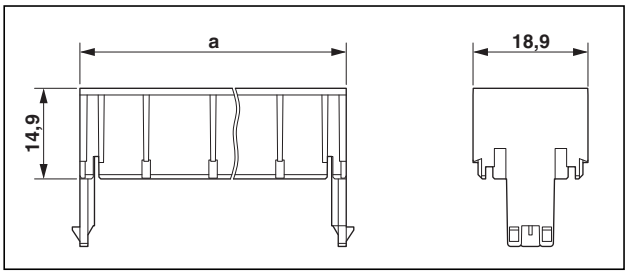


Figure 10 Dimensions of the housing cover

ME-IO 18.8 C 2U 7035	22 mm
ME-IO 18.8 C 3U 7035	33 mm
ME-IO 18.8 C 3U S1 7035	33 mm
ME-IO 18.8 C 4U 7035	44 mm
ME-IO 18.8 C 5U 7035	55 mm
ME-IO 18.8 C 6U 7035	66 mm
ME-IO 18.8 C 7U 7035	77 mm

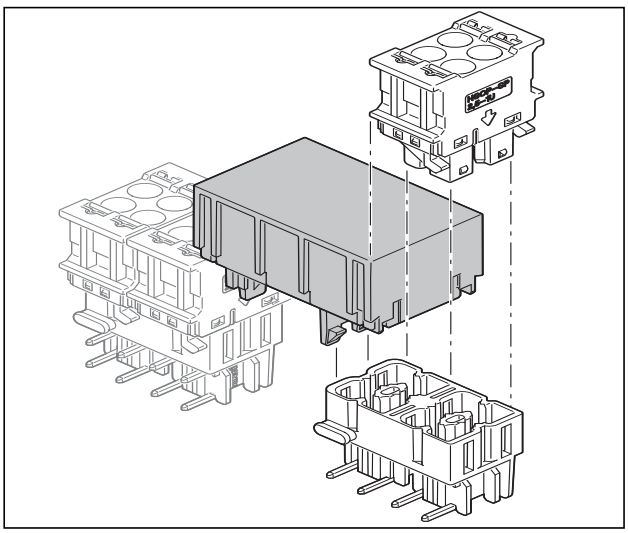


Figure 11 Housing cover ME-IO 18.8 C 3U **S1** 7035

The housing cover ME-IO 18.8 C 3U S1 7035 is used for covering a unit of the header. The snap-in hook is therefore positioned at an offset of 1 unit. At the position to be covered there are no connectors in the header.

The cover can however also be used for all other headers.

7 PCB dimensions

7.1 Maximum PCB dimensions in the lower housing part

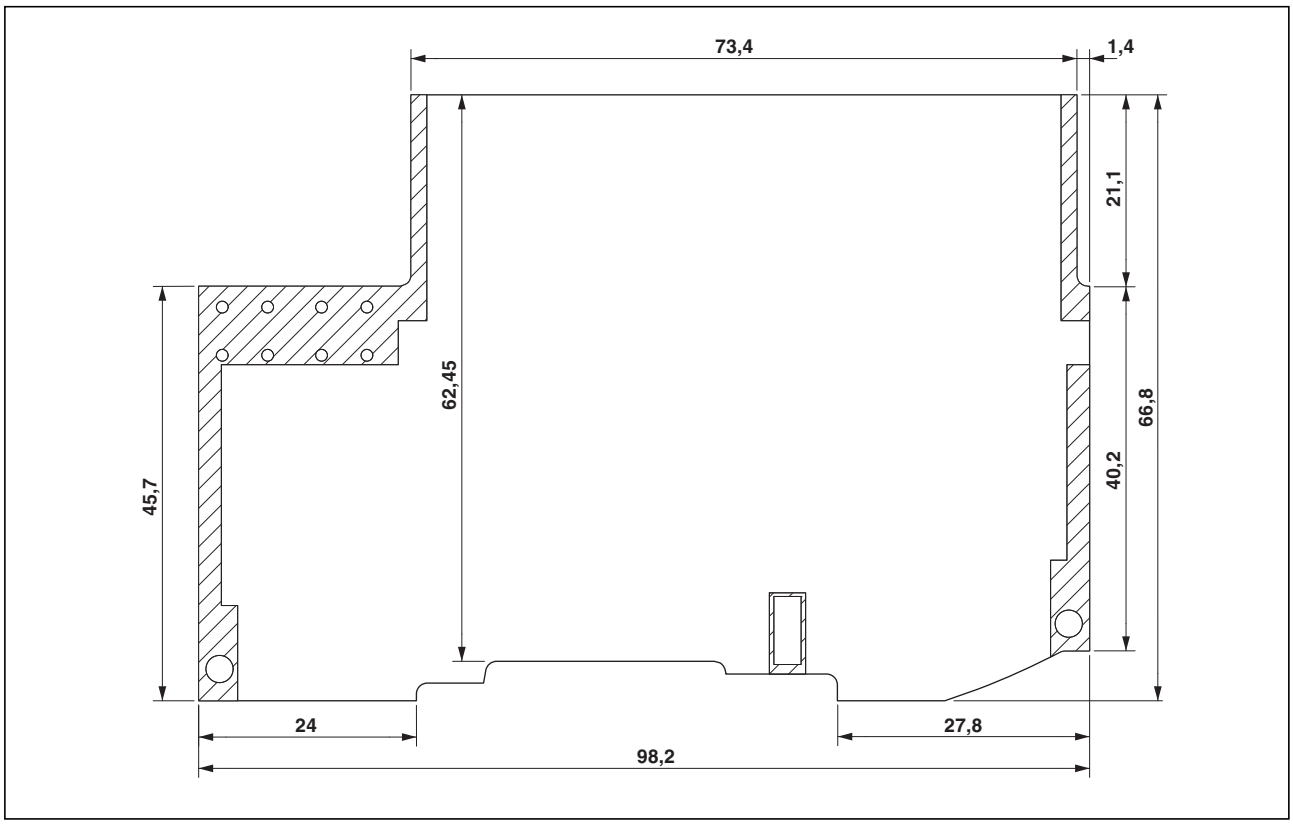


Figure 12 Maximum dimensions of the PCB **without** use of the DIN rail connector, with housing cover 7U

	Locked area, no components at these positions

To enable faster PCB removal, the hole on the left-side can alternatively be an indentation in the edge of the PCB. It would then not be necessary to remove the base latch before removal (see “Removing the base latch” on page 26).

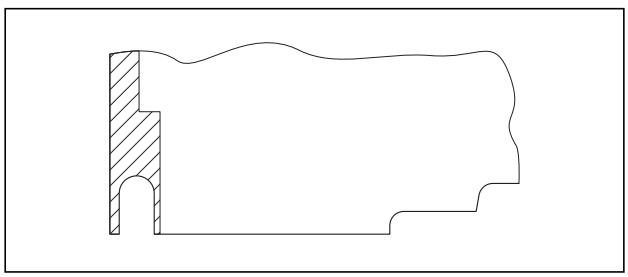


Figure 13 PCB with indentation

7.2 Maximum PCB dimensions with DIN rail connector

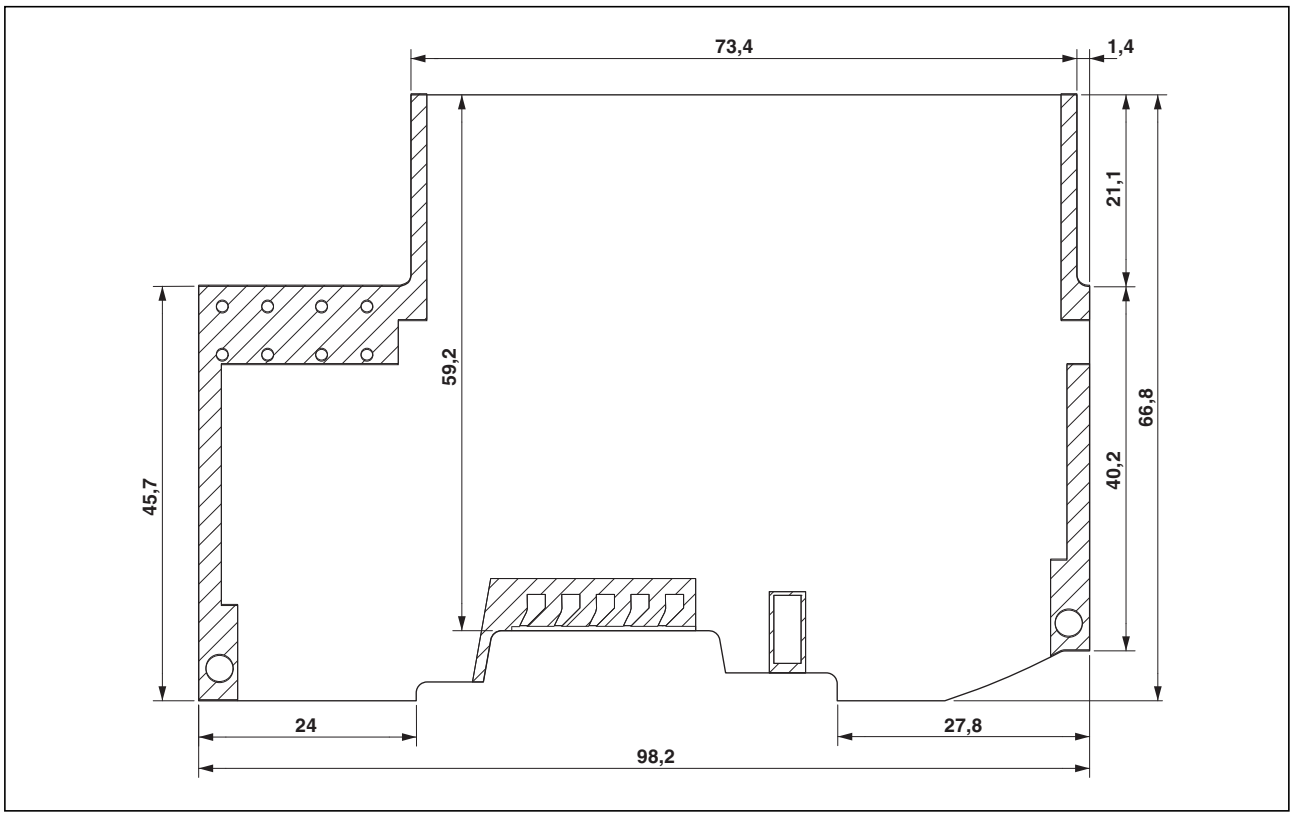


Figure 14 Maximum dimensions of the PCB **with** use of the DIN rail connector, with housing cover 7U

The dimensions of the contact pads can be found in “DIN rail connector” on page 20.

	Locked area, no components at these positions

7.3 PCB dimensions according to housing cover

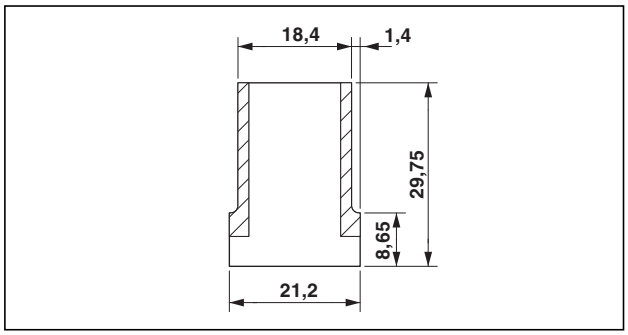


Figure 15 Dimensions of the PCB for housing cover ME-IO 18.8 C 2U 7035 and ME-IO 18.8 C 3U S1 7035

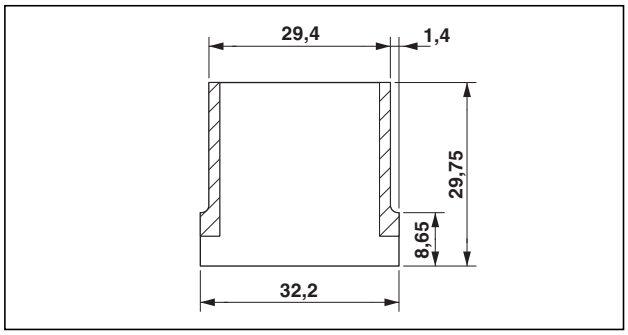


Figure 16 Dimensions of the PCB for housing cover ME-IO 18.8 C 3U 7035

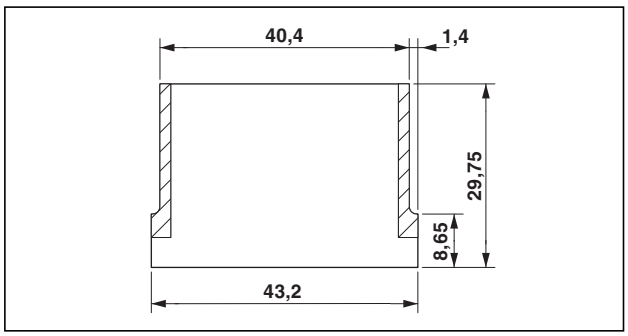


Figure 17 Dimensions of the PCB for housing cover ME-IO 18.8 C 4U 7035

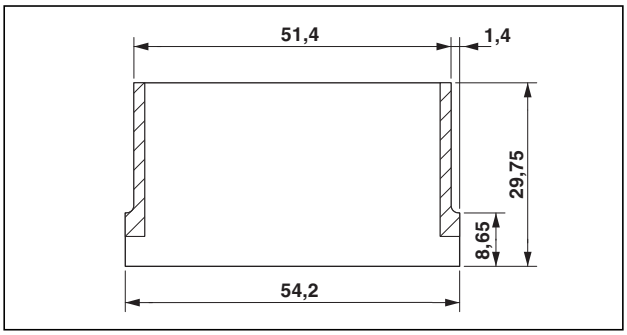


Figure 18 Dimensions of the PCB for housing cover ME-IO 18.8 C 5U 7035

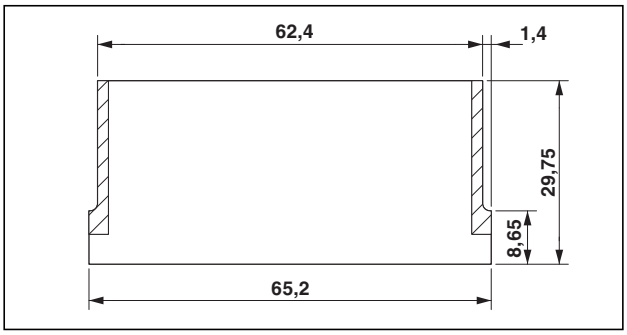


Figure 19 Dimensions of the PCB for housing cover ME-IO 18.8 C 6U 7035

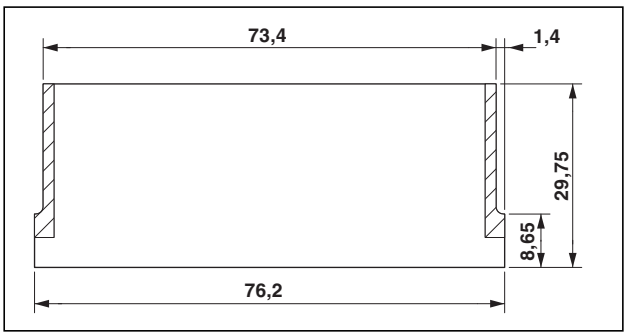


Figure 20 Dimensions of the PCB for housing cover ME-IO 18.8 C 7U 7035

Locked area, no components at these positions

7.4 PCB with FE contact

The FE contact establishes the contact between the electronics module and the DIN rail in order to discharge electromagnetic interference.

The lower housing part is delivered with a pre-assembled FE contact. A pad has to be equipped on the PCB for this purpose (FE contact pad with tin surface; Sn 2-4µm).

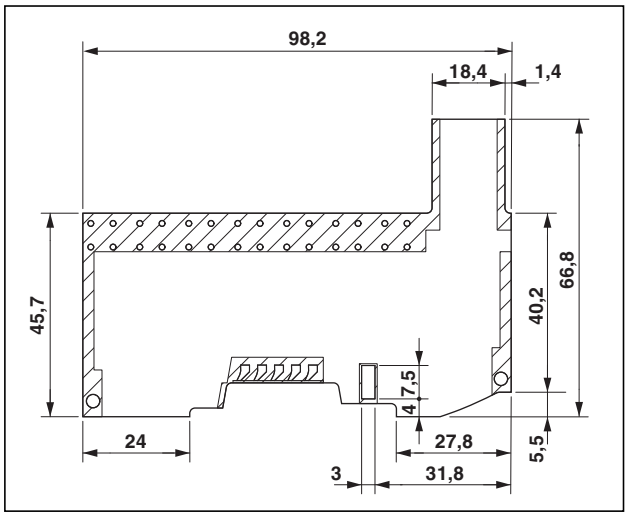


Figure 21 Dimensions of the PCB for FE contact and housing cover 2U

Locked area, no components at these positions

8 Connection technology

8.1 Header (pitch 5 mm)

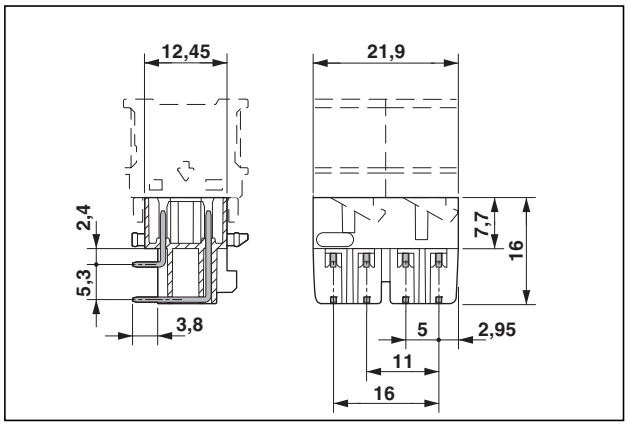


Figure 22 Dimensions of header HSCH 2,5-2U/ 8 9005

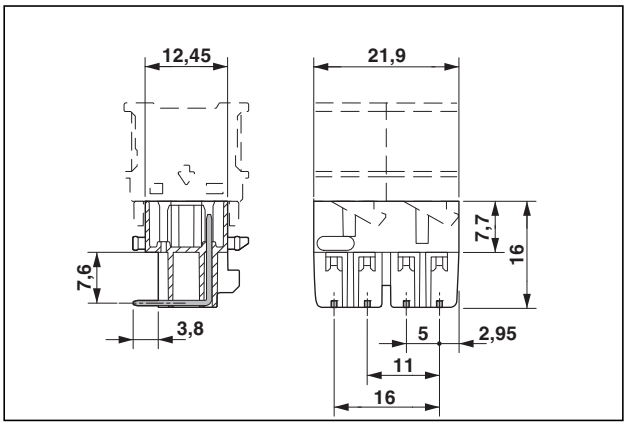


Figure 24 Dimensions of header HSCH 2,5-2U-TTTT 9005

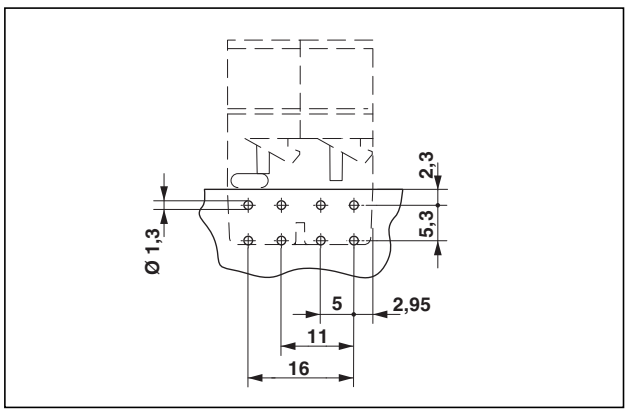


Figure 23 Drilling diagram of header HSCH 2,5-2U/ 8 9005

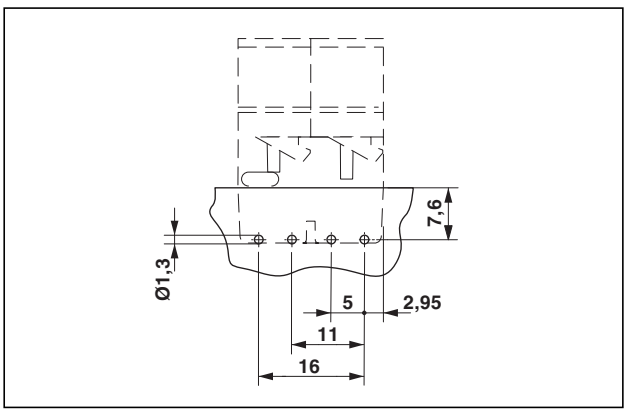


Figure 25 Drilling diagram of header HSCH 2,5-2U-TTTT 9005

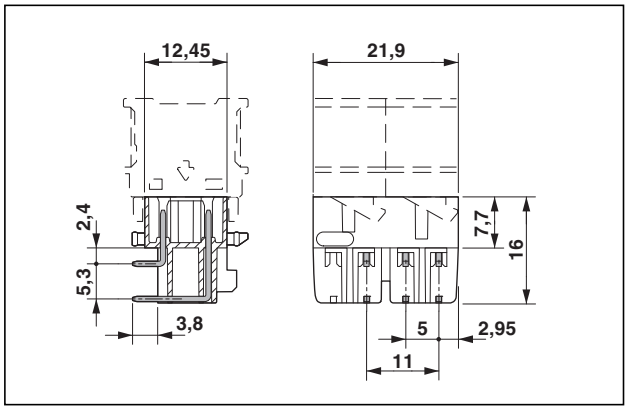


Figure 26 Dimensions of header HSCH 2,5-2U-2220 9005

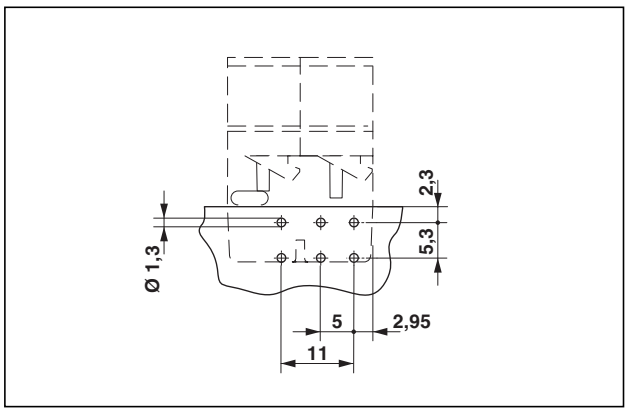


Figure 27 Drilling diagram of header HSCH 2,5-2U-2220 9005

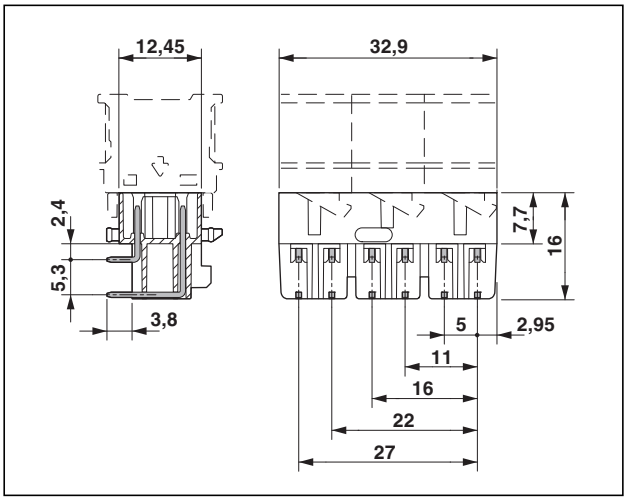


Figure 28 Dimensions of header HSCH 2,5-3U/ 12 9005

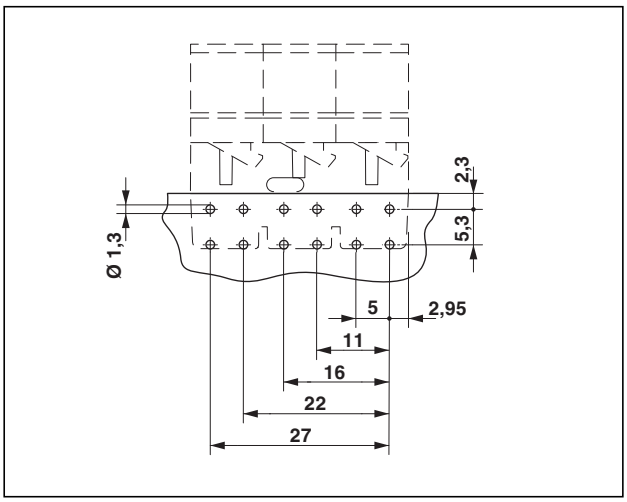


Figure 29 Drilling diagram of header HSCH 2,5-3U/12 9005

HSCH 2,5-...

Dimensions / Positions	
Pitch	5 mm
No. of positions	
HSCH 2,5-2U/ 8 9005	8
HSCH 2,5-2U-TTTT 9005	4
HSCH 2,5-2U-2220 9005	6
HSCH 2,5-3U/12 9005	12

Technical Data	
Insulation material group	I (CTI 600)
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	2.5 kV
Rated voltage (III/3)	250 V
Rated voltage (III/2)	300 V
Rated voltage (II/2)	600 V
Connection according to standard	DIN EN 61984
Nominal current I_N, depending on the connector used	8 A
Insulation material	PA
Inflammability class according to UL 94	V0
Color	RAL 9005, black

Mask for wave soldering process

The header protrudes from the PCB on the soldering side. Be aware of this protrusion during the wave soldering process. The protrusion has to be covered by the soldering mask.

8.2 Header (pitch 3.45 mm)

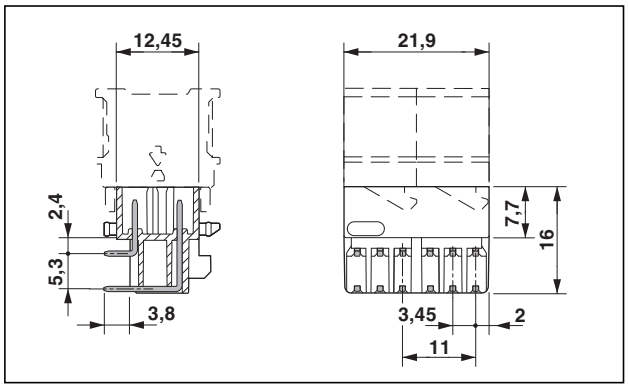


Figure 30 Dimensions of header HSCH 1,5-2U-/12 9005

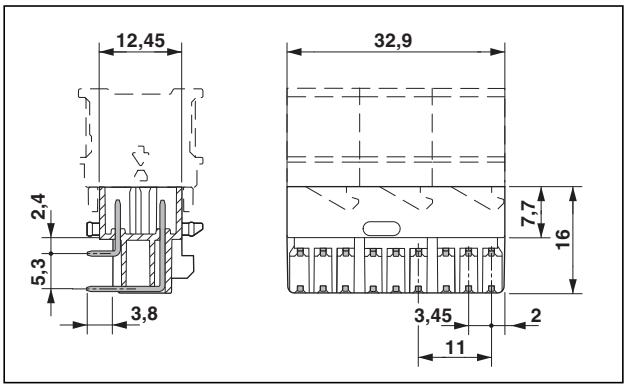


Figure 32 Dimensions of header HSCH 1,5-3U/ 18 9005

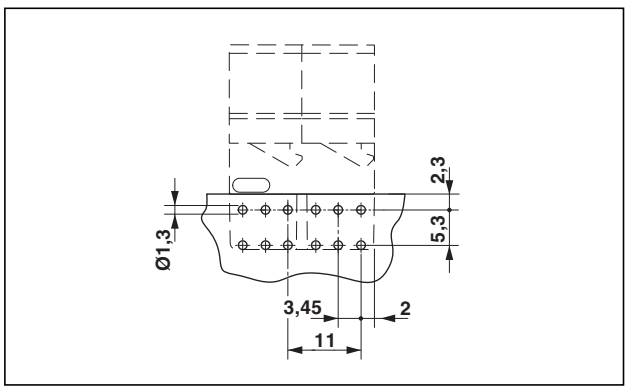


Figure 31 Drilling diagram of header HSCH 1,5-2U/12 9005

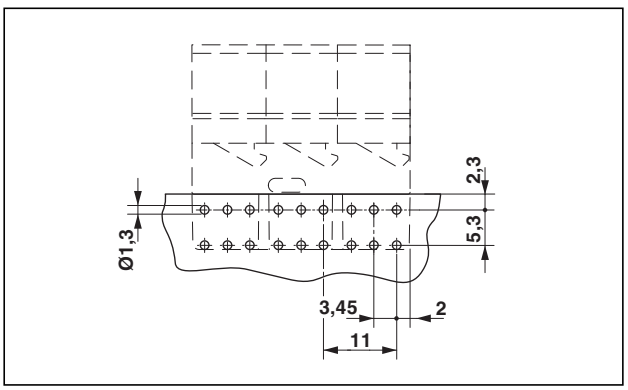


Figure 33 Drilling diagram of header HSCH 1,5-3U/18 9005

HSCH 1,5-...

Dimensions / Positions	
Pitch	3.45 mm
No. of positions	
HSCH 1,5-2U/12	12
HSCH 1,5-3U/18	18

Technical Data	
Insulation material group	I (CTI 600)
Rated surge voltage (III/3)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 kV
Rated voltage (III/3)	63 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	320 V
Connection according to standard	DIN EN 61984
Nominal current I_N, depending on the connector used	8 A
Insulation material	PA
Inflammability class according to UL 94	V0
Color	RAL 9005, black

8.3 Connector (pitch 5 mm)

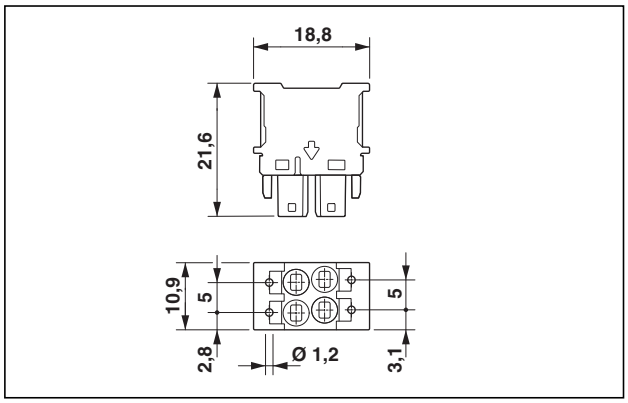


Figure 34 Dimensions of the connector HSCP-SP 2,5-1U-TT 7035

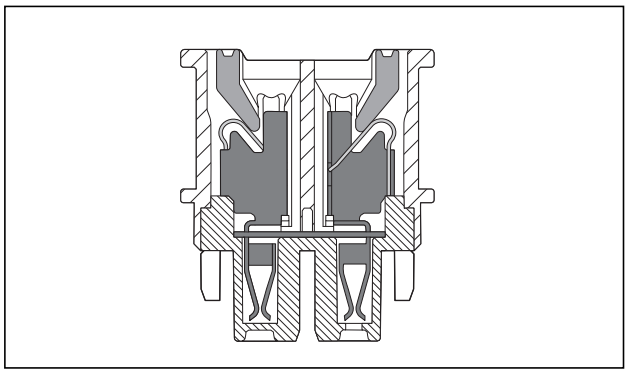


Figure 35 Cross section connector with TWIN connection HSCP-SP 2,5-1U-TT 7035

Derating

Representation in accordance with DIN EN 60512-5-2

- Reduction factor: 0.8
- Number of positions: 4

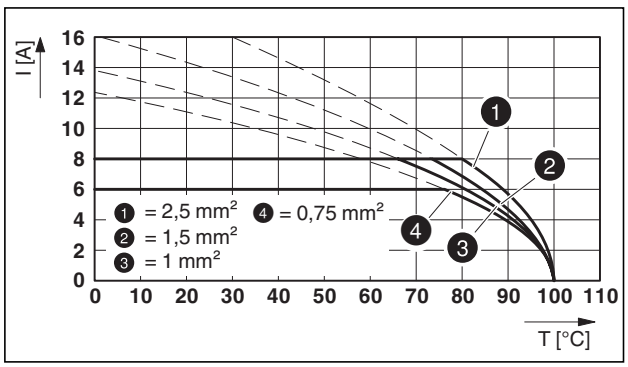


Figure 36 Derating (current I [A], ambient temperature T [°C])

HSCP-SP 2,5-...

Dimensions / Positions	
No. of positions	
HSCP-SP 2,5-1U/ 4 7035	4
HSCP-SP 2,5-1U-TT 7035	2 TWIN
HSCP-SP 2,5-1U/20 7035	2

Technical Data	
Insulation material group	I (CTI 600)
Rated surge voltage (III/3)	4 kV
Rated surge voltage (III/2)	4 kV
Rated surge voltage (II/2)	2.5kV
Rated voltage (III/3)	250 V
Rated voltage (III/2)	300 V
Rated voltage (II/2)	600 V
Connection in acc. with standard	DIN EN 61984
Nominal current I_N	8 A
Nominal cross section	2.5 mm²
Insulation material	PA
Inflammability class in acc. with UL 94	V0

Connection data	
Stripping length w/o ferrule	8 mm ... 9.5 mm
Ferrule	8 mm ... 10 mm
Conductor cross section, solid	0.20 mm² ... 1.5 mm²; AWG 24 ... 16
Conductor cross section, stranded	0.20 mm²... 2.5 mm²; AWG 24 ... 14
Conductor cross section, stranded, with ferrule, w/o plastic sleeve	0.25 mm² ... 1.5 mm²; AWG 24 ... 16
Conductor cross section, stranded, with ferrule, with plastic sleeve	0.25 mm² ... 1.5 mm²; AWG 24 ... 16

Test connection

For the test connection we recommend the test probe MPS-MT 1-S4-B RD, 1982800. Observe the rated voltage of the test probe of 60 V.

Color variants and labeling

The spring levers can be requested in different colors.

The connector surface can be labeled.

8.4 Connector (pitch 3.45 mm)

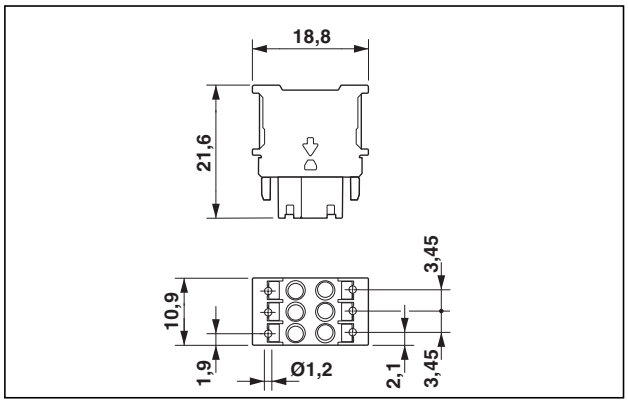


Figure 37 Dimensions of the connector HSCP-SP 1,5-1U/ 6 7035

Derating

Representation in accordance with DIN EN 60512-5-2

– Reduction factor: 0.8
– Number of positions: 6

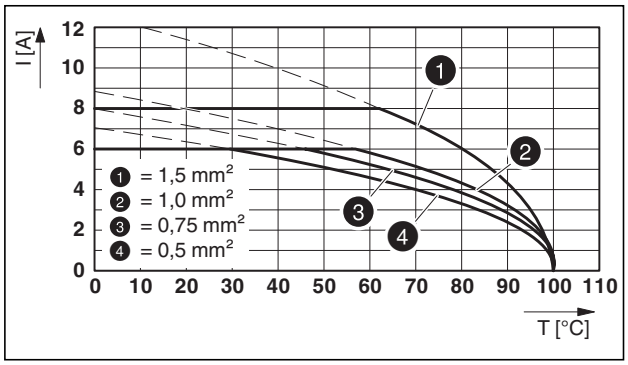


Figure 38 Derating (current I [A], ambient temperature T [°C])

We recommend using trapezoidal crimp contacts, and crimping them using the CRIMPFOX 6 (1212034) crimping pliers.

HSCP-SP 1,5...

Dimensions / Positions	
No. of positions	
HSCP-SP 1,5-1U/ 6 7035	6

Technical Data	
Insulation material group	I (CTI 600)
Rated surge voltage (III/3)	2,5 kV
Rated surge voltage (III/2)	2,5 kV
Rated surge voltage (II/2)	2,5kV
Rated voltage (III/3)	63 V
Rated voltage (III/2)	320 V
Rated voltage (II/2)	320 V
Connection in acc. with standard	DIN EN 61984
Nominal current I_N	8 A
Nominal cross section	1.5 mm²
Insulation material	PA
Inflammability class in acc. with UL 94	V0

Connection data	
Stripping length w/o ferrule	8 mm ... 10 mm
Ferrule	10 mm
Conductor cross section, solid	0.2 mm² ... 1.5 mm² AWG 24 ... 16
Conductor cross section, stranded	0.25 mm²... 1.0 mm² AWG 24 ... 18
Conductor cross section, stranded, with ferrule, w/o plastic sleeve	0.25 mm² ... 1.5 mm² AWG 24 ... 16
Conductor cross section, stranded, with ferrule, with plastic sleeve	0.25 mm² ... 1.0 mm² AWG 24 ... 18

Test connection

For the test connection we recommend the test probe MPS-MT 1-S4-B RD, 1982800. Observe the rated voltage of the test probe of 60 V.

Color variants and labeling

The spring levers can be requested in different colors.

The connector surface can be labeled.

8.5 DIN rail connector

It is possible to combine the housings with a DIN rail connector (TBUS) by means of which data or the power supply can be transmitted from module to module.

The DIN rail connector is simply laid into the DIN rail NS 35/7.5 and the housing is snapped onto it.

This concept allows complete individual devices to be removed from the group without interrupting the contact chain.

In addition, the DIN rail connector is compatible with the ME-MAX and ME-TBUS housing ranges.

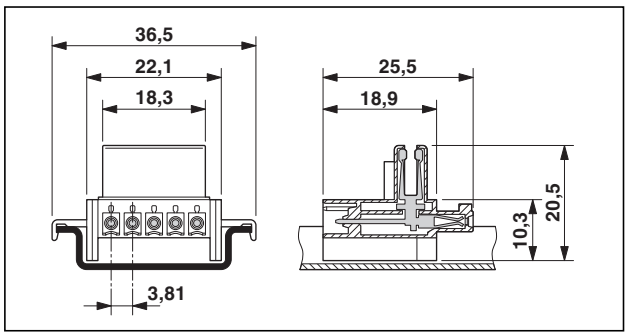


Figure 39 Dimensions of DIN rail connector

ME 18,8 TBUS 1,5/5-ST-3,81KMGY

Dimensions / Positions	
Pitch	3.81 mm
No. of positions	5

Technical Data	
Insulation material group	I (CTI 600)
Rated surge voltage (III/3)	2.5 kV
Rated surge voltage (III/2)	2.5 kV
Rated surge voltage (II/2)	2.5 kV
Rated voltage (III/3)	125 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	320 V
Connection according to standard	DIN EN 61984
Nominal current I_N	8 A
Nominal voltage U_N	125 V
Insulation material	PA
Inflammability class according to UL 94	V0

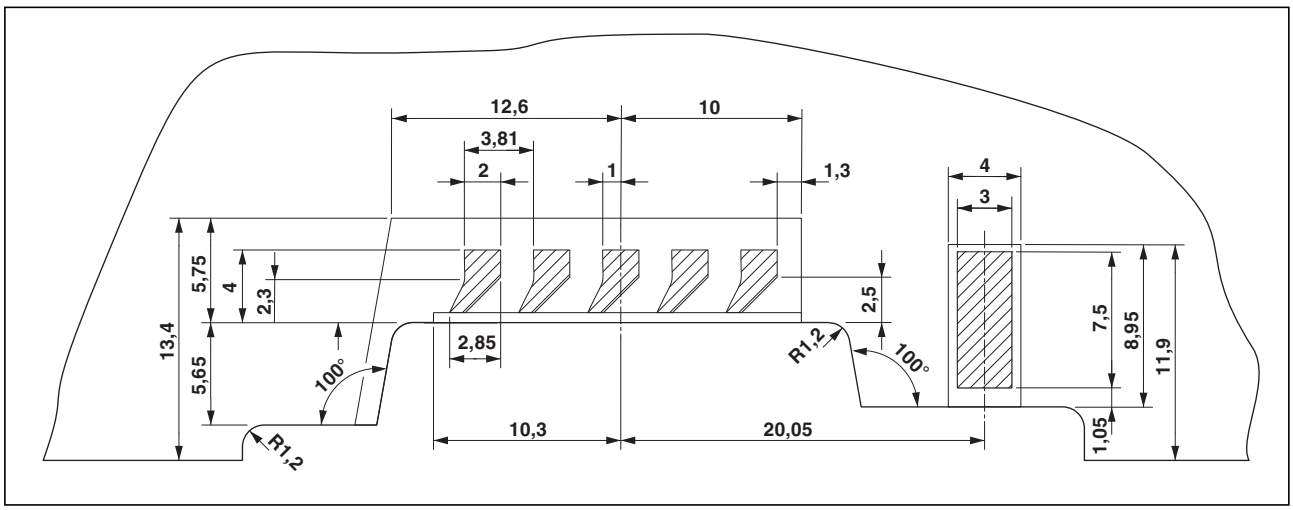


Figure 40 Detailed dimensional drawing of the contact pad of the DIN rail connector

9 Mounting the housing

9.1 Assembling the Lock and Release system

When the PCB is completely assembled, the orange Lock and Release system, included in the scope of delivery of the lower housing part, has to be assembled.

Pay attention to the positioning of the connectors and the headers (see page 6).

To do this, proceed as follows:

- Solder the header onto the PCB.

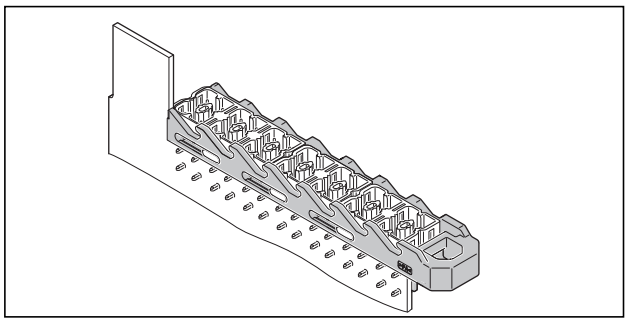


Figure 41 Attaching the Lock and Release system

- Attach the orange Lock and Release system onto the header. The recesses of the Lock and Release system have to fit over the protruding guide pins of the header. Press the Lock and Release system against the header.

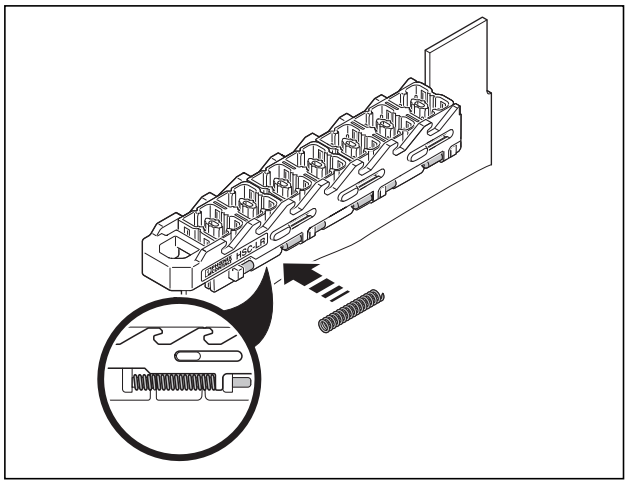


Figure 42 Attaching the spring

- Attach the spring which is included in the scope of delivery. The spring is inserted at one of the possible positions.

9.2 Inserting the PCB

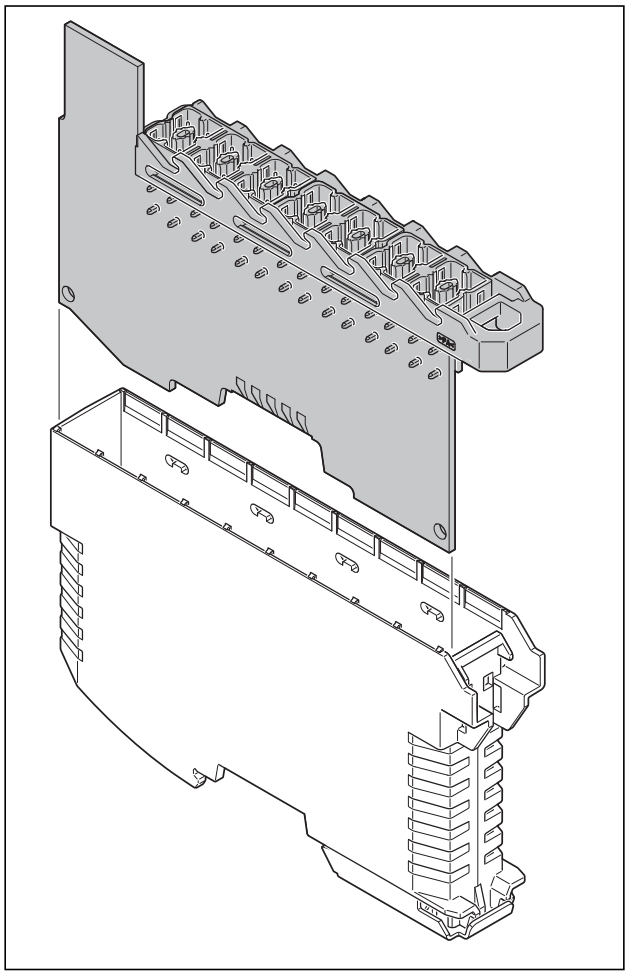


Figure 43 Inserting the PCB

- Insert the PCB into the guide slot of the housing and push it downwards until it audibly snaps in.

9.3 Assembling the housing covers

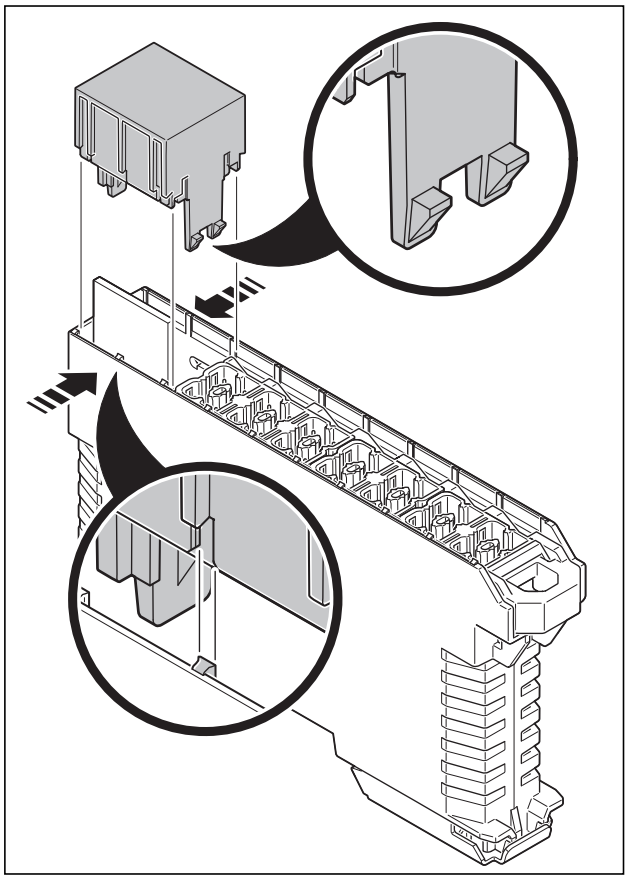


Figure 44 Attaching the housing cover

- Attach the housing covers if they are equipped.
  The housing cover has two snap-in hooks on one side and only one on the other side. The side with the two snap-in hooks has to be facing the base latch.
  Make sure that the concealed side guides are also snapped in. To do so, it helps if you lightly push the sides of the housing together.

9.4 Assembling the connectors

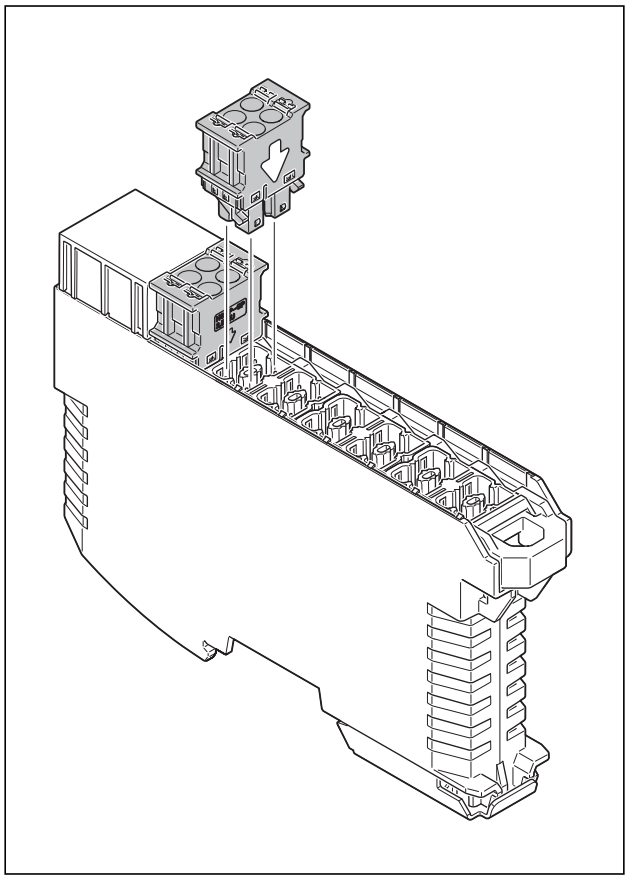


Figure 45 Inserting the connectors

- Insert the connectors.
  The connectors only fit onto certain headers and can also be coded.
  Each connector has an engraved arrow that has to be facing the base latch.

9.5 Releasing the connectors (Lock and Release)

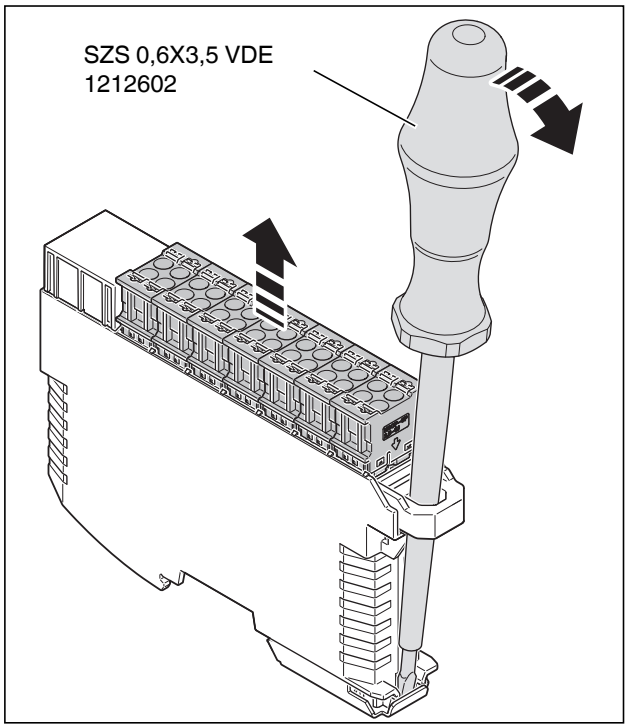


Figure 46 Releasing the connectors

WARNING: Electric shock
Make sure that the module is free of current.

- Insert a screwdriver through the opening of the Lock and Release system.
- Hook the tip of the screwdriver into the base latch.
- Pull the screwdriver forward to release the Lock and Release system.

  The connectors are lifted and the contact is released. But the connectors do not fall out.

  The housing cover remains in its position.

9.6 Coding the connectors

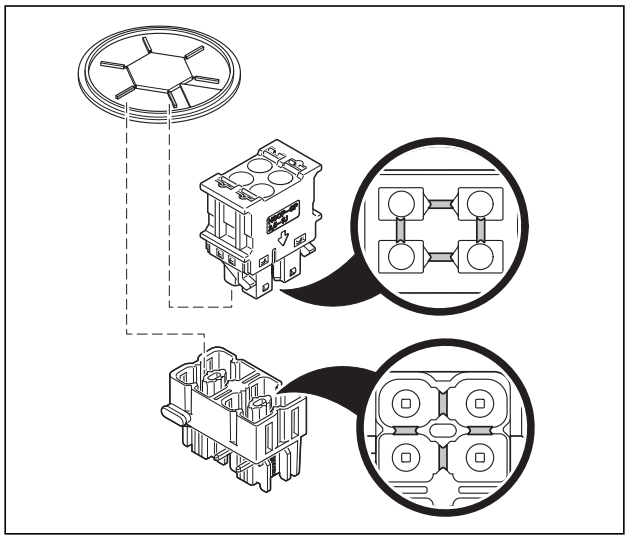


Figure 47 Coding the connectors (pitch 5 mm)

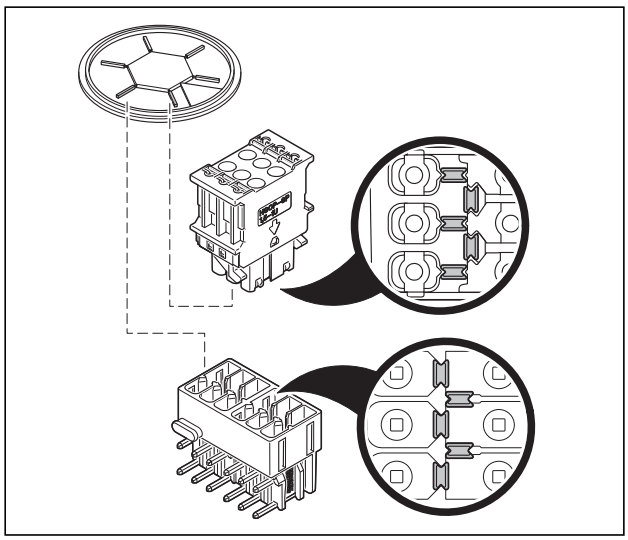


Figure 48 Coding the connectors (pitch 3.45 mm)

You can code the connectors and the headers in order to prevent them from being connected incorrectly by accident.

Each connector has for four or five positions for attaching coding plates.

Use the coding profile CP-DMC 1,5-THR NAT, 1790647.

- Insert a coding plate at the correct position and twist it off the pentagonal holder.

9.7 Connecting conductors (push-in connection)

Conductor cross section 1.5 mm² ... 2.5 mm², solid or with ferrule

- Insert the stripped wire into the round opening of the terminal block without using a tool.

Wires with a smaller cross section or stranded conductors without ferrule

- Push in the pushbutton with a screwdriver to open the spring.

Disconnecting

- Push in the pushbutton with a screwdriver to release.
- Pull out the conductor.

We recommend using a bladed screwdriver
SZS 0.4X2.5 VDE, 1205037.

9.8 Mounting the housing on a DIN rail

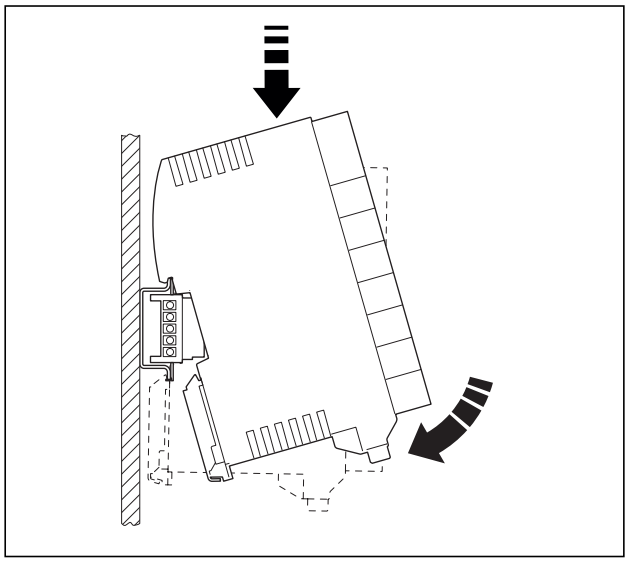


Figure 49 Snapping the housing onto the DIN rail

Assembly

- If you use a DIN rail connector, then lay it into the DIN rail with the protruding connector side facing left.
- Place the device onto a grounded 35 mm DIN rail from above so that the upper housing slot hooks onto the top edge of the DIN rail.
- Press the device carefully at the top of the housing towards the mounting surface.
- Once the snap-on foot has audibly snapped onto the DIN rail, check whether it is securely attached.

10 Removing the housing

10.1 Taking the housing off the DIN rail

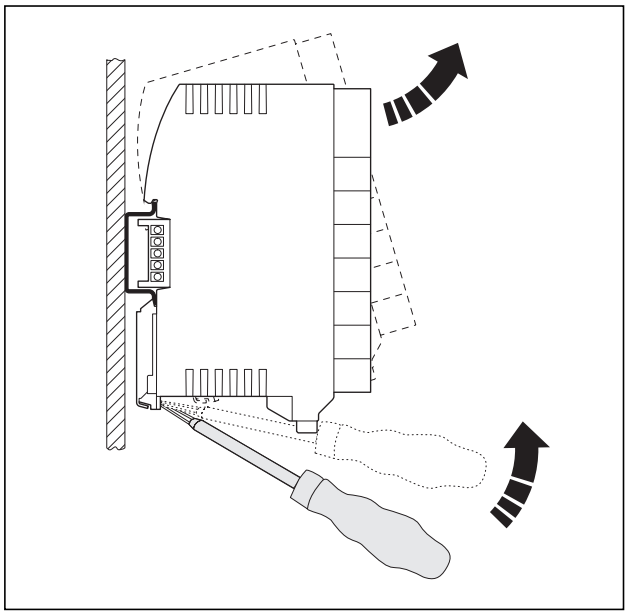


Figure 50 Releasing the housing from the DIN rail

- Release the connectors with the aid of the Lock and Release system (see page 23).
- Make sure that the module is free of current.
- Pry the module off the DIN rail.

10.2 Removing the housing covers

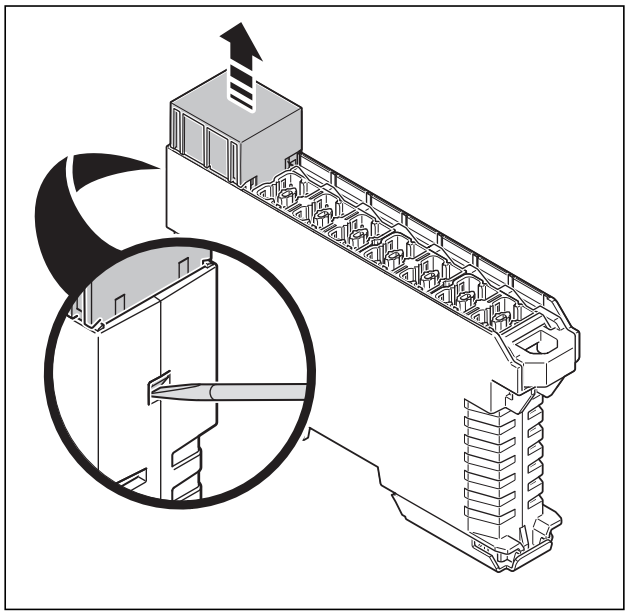


Figure 51 Removing the housing covers

Housing cover snapped into the lower housing part on one side

- Push in the snap-in hooks on the slim side of the housing with a screwdriver.

Housing cover is located between headers

- A housing cover between the headers is removed together with the PCB.
  See “Taking out the PCB” on page 26.

10.3 Removing the base latch

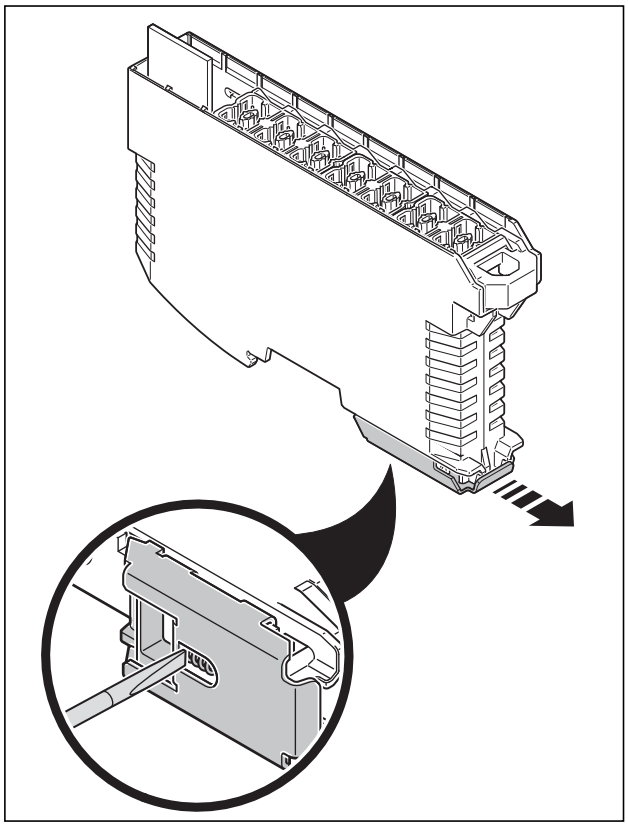


Figure 52 Removing the base latch

- To do so, you must first remove the spring, e.g. with a screwdriver.
- Then pull off the base latch.

To enable faster PCB removal, the hole on the left-side can alternatively be an indentation in the edge of the PCB. It would then not be necessary to remove the base latch before removal (see “Maximum PCB dimensions in the lower housing part” on page 9).

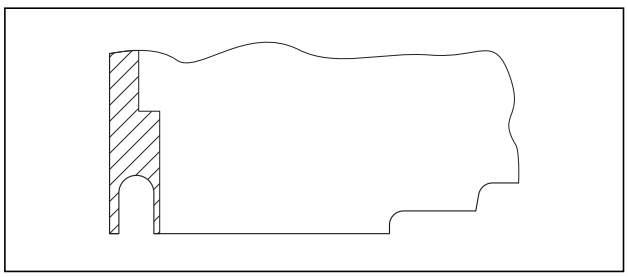


Figure 53 PCB with indentation

10.4 Taking out the PCB

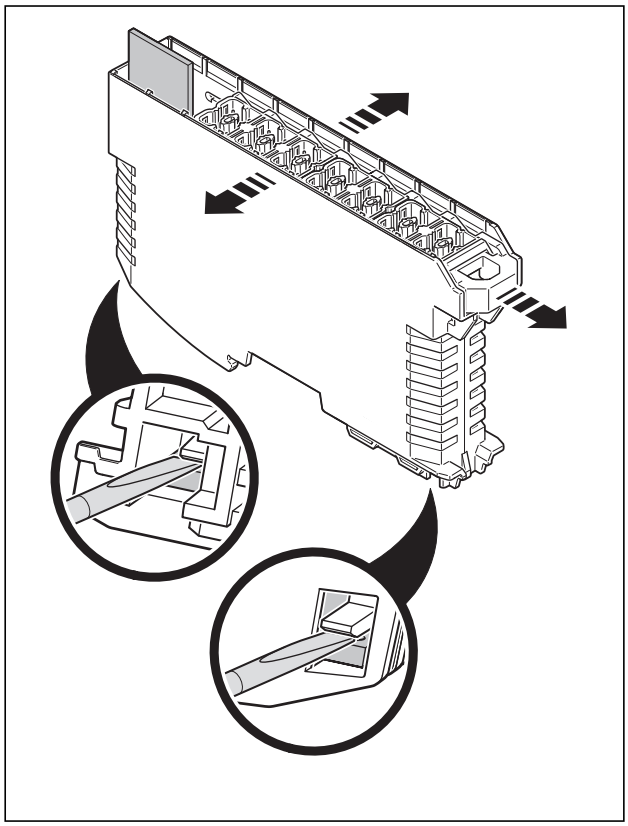


Figure 54 Taking out the PCB

- On the bottom of the housing there are two openings at the outermost ends. Release the catch mechanism there using a screwdriver. Keep both catch mechanisms open.
- To remove the PCB, you have to slightly bend the housing wall up while pulling the Lock and Release system forward at the same time.
- Pull the PCB out.

10.5 Taking off the Lock and Release system

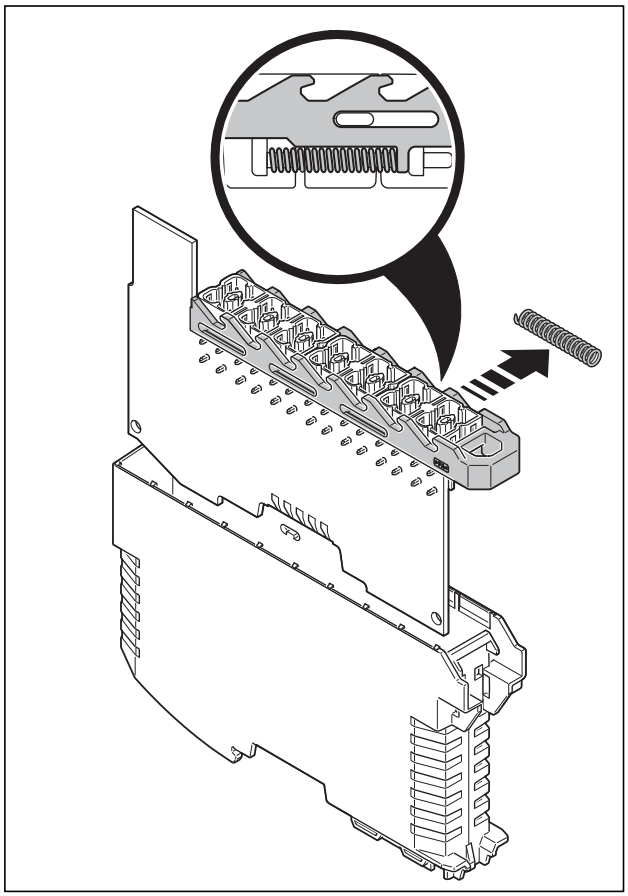


Figure 55 Taking off the Lock and Release system

- Remove the spring and take off the orange Lock and Release system.

  It is easiest to take off when you push it so that the guide pins of the header are positioned in the center of the recesses of the Lock and Release system.