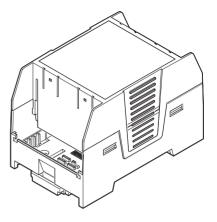
## Series EH...F electronics housings

Series EH...F electronics housings for universal use, flat design



Data sheet 106461\_en\_00

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#### 1 Description

The series EH...F electronics housings consist of a lower housing part that can be combined with three different housing covers. The housing is available in seven overall widths.

The housing covers are snapped onto the lower housing part. They are available with connection technology openings either on one side or on both sides. Closed housing covers are also available. They can be provided with customer-specific openings.

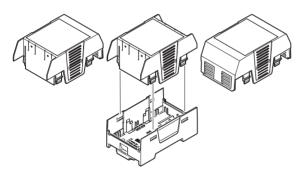


Figure 1 Housing covers and lower housing part

The receptacle housing version ensures shock and contamination-proof accommodation of electronic components.

Different connection technologies for the PCBs can be integrated in the housing. The PCBs can be mounted horizontally. They also have a large assembly area.

The housings can be snapped onto symmetrical DIN rails according to EN 60715. Wall mounting is also possible.

The housings are available in material version ABS. This type is approved for flammability rating HB according to UL 94.

The housing covers are provided with integrated labeling fields for device marking.

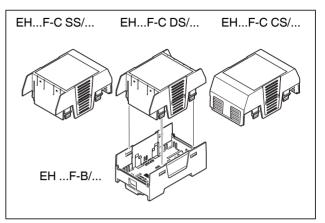
1	The 3D housing data can be found at phoenixcontact.net/products.
1	Make sure you always use the latest documentation. It can be downloaded at <u>phoenixcontact.net/products</u> .
1	This data sheet is valid for all products listed from page 3.



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## 2 Overview of the EH...F products





## 3 Ordering data

## Electronics housing of width 22.5

Licentrines housing of what 22.5			
Description	Туре	Order No.	Pcs. / Pkt.
Lower housing part with vents and base latch for DIN rail mounting, width 22.5 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 22,5 F-B/ABS GY7035	2200665	10
Color: black, similar to RAL 9005	EH 67,5-B/ABS BK9005	2200666	10
Housing cover for PCB connection on one side, width 22.5 mm Material: ABS			
Color: light gray, similar to RAL 7035	EH 22,5 F-C SS/ABS GY7035	2200674	10
Color: black, similar to RAL 9005	EH 22,5 F-C SS/ABS BK9005	2200874	10
Housing cover for PCB connection on two sides, width 22.5 mm	EH 22,3 F-C 33/AB3 BR9005	2201452	10
Material: ABS			
Color: light gray, similar to RAL 7035	EH 22,5 F-C DS/ABS GY7035	2201453	10
Color: black, similar to RAL 9005	EH 22,5 F-C DS/ABS BK9005	2201455	10
Housing cover, closed, width 22.5 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 22,5 F-C CS/ABS GY7035	2201653	10
Color: black, similar to RAL 9005	EH 22,5 F-C CS/ABS BK9005	2201765	10
Electronics housing of width 35			
Description	Туре	Order No.	Pcs. / Pkt.
Lower housing part with vents and base latch for DIN rail mounting, width 35 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 35 F-B/ABS GY7035	2201814	10
Color: black. similar to RAL 9005	EH 35 F-B/ABS BK9005	2201815	10
Housing cover for PCB connection on one side, width 35 mm		2201013	10
Material: ABS			
Color: light gray, similar to RAL 7035	EH 35-C SS/ABS GY7035	2201820	10
Color: black, similar to RAL 9005	EH 35-C SS/ABS BK9005	2201821	10
Housing cover for PCB connection on two sides, width 35 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 35 F-C DS/ABS GY7035	2201826	10
Color: black, similar to RAL 9005	EH 35 F-C DS/ABS BK9005	2201827	10
Housing cover, closed, width 35 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 35 F-C CS/ABS GY7035	2201832	10
Color: black, similar to RAL 9005	EH 35 F-C CS/ABS BK9005	2201833	10

#### Electronics housing of width 45

Electronics housing of which 45			
Description	Туре	Order No.	Pcs. / Pkt.
Lower housing part with vents and base latch for DIN rail mounting, width $45 \text{ mm}$			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 45 F-F-B/ABS GY7035	2200474	10
Color: black, similar to RAL 9005	EH 45 F-F-B/ABS BK9005	2200492	10
Housing cover for PCB connection on one side, width 45 mm Material: ABS			
Color: light gray, similar to RAL 7035	EH 45 F-C SS/ABS GY7035	2200789	10
Color: black, similar to RAL 9005	EH 45 F-C SS/ABS BK9005	2201448	10
Housing cover for PCB connection on two sides, width 45 mm Material: ABS			
Color: light gray, similar to RAL 7035	EH 45 F-C DS/ABS GY7035	2201770	10
Color: black, similar to RAL 9005	EH 45 F-C DS/ABS BK9005	2201771	10
Housing cover, closed, width 45 mm Material: ABS			
Color: light gray, similar to RAL 7035	EH 45 F-C CS/ABS GY7035	2201769	10
Color: black, similar to RAL 9005	EH 45 F-C CS/ABS BK9005	2201766	10
Electronics housing of width 52.5			
Description	Туре	Order No.	Pcs. / Pkt.
Description Lower housing part with vents and base latch for DIN rail mounting, width 52.5 mm	Туре	Order No.	Pcs. / Pkt.
Lower housing part with vents and base latch for DIN rail mounting, width	Туре	Order No.	Pcs. / Pkt.
<b>Lower housing part</b> with vents and base latch for DIN rail mounting, width 52.5 mm	<b>Type</b> EH 52,5 F-F-B/ABS GY7035	Order No.	10
Lower housing part with vents and base latch for DIN rail mounting, width 52.5 mm Material: ABS			
Lower housing part with vents and base latch for DIN rail mounting, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035	EH 52,5 F-F-B/ABS GY7035	2201816	10
Lower housing part with vents and base latch for DIN rail mounting, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 52.5 mm	EH 52,5 F-F-B/ABS GY7035	2201816	10
Lower housing part with vents and base latch for DIN rail mounting, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 52.5 mm Material: ABS	EH 52,5 F-F-B/ABS GY7035 EH 52,5 F-F-B/ABS BK9005	2201816 2201817	10 10
Lower housing part with vents and base latch for DIN rail mounting, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035	EH 52,5 F-F-B/ABS GY7035 EH 52,5 F-F-B/ABS BK9005 EH 52,5 F-C SS/ABS GY7035	2201816 2201817 2201822	10 10 10
Lower housing part with vents and base latch for DIN rail mounting, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on two sides, width 52.5 mm	EH 52,5 F-F-B/ABS GY7035 EH 52,5 F-F-B/ABS BK9005 EH 52,5 F-C SS/ABS GY7035	2201816 2201817 2201822	10 10 10
Lower housing part with vents and base latch for DIN rail mounting, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on two sides, width 52.5 mm Material: ABS	EH 52,5 F-F-B/ABS GY7035 EH 52,5 F-F-B/ABS BK9005 EH 52,5 F-C SS/ABS GY7035 EH 52,5 F-C SS/ABS BK9005	2201816 2201817 2201822 2201823	10 10 10 10
Lower housing part with vents and base latch for DIN rail mounting, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on two sides, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035	EH 52,5 F-F-B/ABS GY7035 EH 52,5 F-F-B/ABS BK9005 EH 52,5 F-C SS/ABS GY7035 EH 52,5 F-C SS/ABS BK9005 EH 52,5 F-C DS/ABS GY7035	2201816 2201817 2201822 2201823 2201829	10 10 10 10 10
Lower housing part with vents and base latch for DIN rail mounting, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on two sides, width 52.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: light gray, similar to RAL 7035 Color: light gray, similar to RAL 7035 Color: black, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover, closed, width 52.5 mm	EH 52,5 F-F-B/ABS GY7035 EH 52,5 F-F-B/ABS BK9005 EH 52,5 F-C SS/ABS GY7035 EH 52,5 F-C SS/ABS BK9005 EH 52,5 F-C DS/ABS GY7035	2201816 2201817 2201822 2201823 2201829	10 10 10 10 10
<ul> <li>Lower housing part with vents and base latch for DIN rail mounting, width 52.5 mm</li> <li>Material: ABS</li> <li>Color: light gray, similar to RAL 7035</li> <li>Color: black, similar to RAL 9005</li> <li>Housing cover for PCB connection on one side, width 52.5 mm</li> <li>Material: ABS</li> <li>Color: black, similar to RAL 7035</li> <li>Color: black, similar to RAL 9005</li> <li>Housing cover for PCB connection on two sides, width 52.5 mm</li> <li>Material: ABS</li> <li>Color: light gray, similar to RAL 7035</li> <li>Color: black, similar to RAL 7035</li> <li>Color: light gray, similar to RAL 7035</li> <li>Color: light gray, similar to RAL 7035</li> <li>Color: black, similar to RAL 9005</li> <li>Housing cover, closed, width 52.5 mm</li> <li>Material: ABS</li> </ul>	EH 52,5 F-F-B/ABS GY7035 EH 52,5 F-F-B/ABS BK9005 EH 52,5 F-C SS/ABS GY7035 EH 52,5 F-C SS/ABS BK9005 EH 52,5 F-C DS/ABS GY7035 EH 52,5 F-C DS/ABS BK9005	2201816 2201817 2201822 2201823 2201823 2201829 2201828	10 10 10 10 10 10

#### Electronics housing of width 67.5

Electronics housing of width 67.5			
Description	Туре	Order No.	Pcs. / Pkt.
Lower housing part with vents and base latch for DIN rail mounting, width 67.5 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 67,5 F-F-B/ABS GY7035	2200519	10
Color: black, similar to RAL 9005	EH 67,5 F-F-B/ABS BK9005	2200520	10
Housing cover for PCB connection on one side, width 67.5 mm Material: ABS			
Color: light gray, similar to RAL 7035	EH 67,5 F-C SS/ABS GY7035	2201097	10
Color: black, similar to RAL 9005	EH 67,5 F-C SS/ABS BK9005	2201447	10
Housing cover for PCB connection on two sides, width 67.5 mm Material: ABS			
Color: light gray, similar to RAL 7035	EH 67,5 F-C DS/ABS GY7035	2201773	10
Color: black, similar to RAL 9005	EH 67,5 F-C DS/ABS BK9005	2201772	10
Housing cover, closed, width 67.5 mm Material: ABS			
Color: light gray, similar to RAL 7035	EH 67,5 F-C CS/ABS GY7035	2201774	10
Color: black, similar to RAL 9005	EH 67,5 F-C CS/ABS BK9005	2201775	10
Electronics housing of width 70			
Description	Туре	Order No.	Pcs. / Pkt.
Description	iype	order No.	1 03. / 1 KL
<b>Lower housing part</b> with vents and base latch for DIN rail mounting, width 70 mm	iype	Order No.	1 03. / 1 Kt.
Lower housing part with vents and base latch for DIN rail mounting, width	1990	Order NO.	
Lower housing part with vents and base latch for DIN rail mounting, width 70 mm Material: ABS Color: light gray, similar to RAL 7035	EH 70 F-F-B/ABS GY7035	2201819	10
Lower housing part with vents and base latch for DIN rail mounting, width 70 mm Material: ABS			
Lower housing part with vents and base latch for DIN rail mounting, width 70 mm Material: ABS Color: light gray, similar to RAL 7035	EH 70 F-F-B/ABS GY7035	2201819	10
Lower housing part with vents and base latch for DIN rail mounting, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 70 mm	EH 70 F-F-B/ABS GY7035	2201819	10
Lower housing part with vents and base latch for DIN rail mounting, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 70 mm Material: ABS	EH 70 F-F-B/ABS GY7035 EH 70 F-F-B/ABS BK9005	2201819 2201818	10 10
Lower housing part with vents and base latch for DIN rail mounting, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 70 mm Material: ABS Color: light gray, similar to RAL 7035	EH 70 F-F-B/ABS GY7035 EH 70 F-F-B/ABS BK9005 EH 70 F-C SS/ABS GY7035	2201819 2201818 2201825	10 10 10
Lower housing part with vents and base latch for DIN rail mounting, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on two sides, width 70 mm	EH 70 F-F-B/ABS GY7035 EH 70 F-F-B/ABS BK9005 EH 70 F-C SS/ABS GY7035	2201819 2201818 2201825	10 10 10
Lower housing part with vents and base latch for DIN rail mounting, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on two sides, width 70 mm Material: ABS	EH 70 F-F-B/ABS GY7035 EH 70 F-F-B/ABS BK9005 EH 70 F-C SS/ABS GY7035 EH 70 F-C SS/ABS BK9005	2201819 2201818 2201825 2201824	10 10 10 10
Lower housing part with vents and base latch for DIN rail mounting, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on two sides, width 70 mm Material: ABS Color: light gray, similar to RAL 7035	EH 70 F-F-B/ABS GY7035 EH 70 F-F-B/ABS BK9005 EH 70 F-C SS/ABS GY7035 EH 70 F-C SS/ABS BK9005 EH 70 F-C DS/ABS GY7035	2201819 2201818 2201825 2201824 2201830	10 10 10 10 10
Lower housing part with vents and base latch for DIN rail mounting, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on two sides, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: light gray, similar to RAL 7035 Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover, closed, width 70 mm	EH 70 F-F-B/ABS GY7035 EH 70 F-F-B/ABS BK9005 EH 70 F-C SS/ABS GY7035 EH 70 F-C SS/ABS BK9005 EH 70 F-C DS/ABS GY7035	2201819 2201818 2201825 2201824 2201830	10 10 10 10 10
Lower housing part with vents and base latch for DIN rail mounting, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on one side, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover for PCB connection on two sides, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005 Housing cover, closed, width 70 mm Material: ABS	EH 70 F-F-B/ABS GY7035 EH 70 F-F-B/ABS BK9005 EH 70 F-C SS/ABS GY7035 EH 70 F-C SS/ABS BK9005 EH 70 F-C DS/ABS GY7035 EH 70 F-C DS/ABS BK9005	2201819 2201818 2201825 2201824 2201830 2201831	10 10 10 10 10 10

#### Electronics housing of width 90

Licenterines housing of when so			
Description	Туре	Order No.	Pcs. / Pkt.
Lower housing part with vents and base latch for DIN rail mounting, width 90 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 90 F-F-B/ABS GY7035	2200663	10
Color: black, similar to RAL 9005	EH 90 F-F-B/ABS BK9005	2200664	10
Housing cover for PCB connection on one side, width 90 mm Material: ABS			
Color: light gray, similar to RAL 7035	EH 90 F-C SS/ABS GY7035	2201282	10
Color: black, similar to RAL 9005	EH 90 F-C SS/ABS BK9005	2201388	10
Housing cover for PCB connection on two sides, width 90 mm Material: ABS			
Color: light gray, similar to RAL 7035	EH 90 F-C DS/ABS GY7035	2201778	10
Color: black, similar to RAL 9005	EH 90 F-C DS/ABS BK9005	2201779	10
Housing cover, closed, width 90 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 90 F-C CS/ABS GY7035	2201777	10
Color: black, similar to RAL 9005	EH 90 F-C CS/ABS BK9005	2201776	10
Accessories			
Description	Туре	Order No.	Pcs. / Pkt.
Filler plug for unoccupied terminal points, width 22.5 mm Suitable for EH 45 F, EH 67,5 F and EH 90 F			
Color: light gray, similar to RAL 7035	EH 22,5 F-FP/ABS GY7035	2201843	50
Color: black, similar to RAL 9005	EH 22,5 F-FP/ABS BK9005	2201842	50
Filler plug for unoccupied terminal points, width 17.5 mm Suitable for EH 35 F, EH 52,5 F and EH 70 F			
Color: light gray, similar to RAL 7035	EH 17,5 F-FP/ABS GY7035	2201840	50
Color: black, similar to RAL 9005	EH 17,5 F-FP/ABS BK9005	2201841	50

## 4 Material

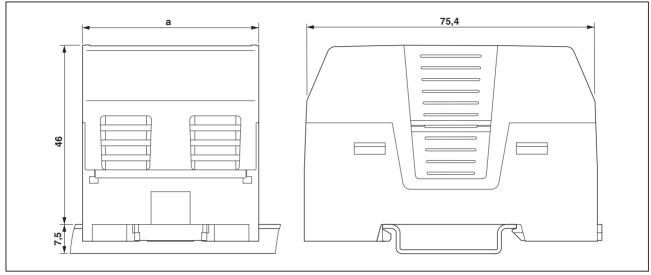
Housing type Material ABS

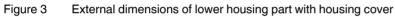
Flammability rating according to UL 94

ΗB

## 5 External dimensions

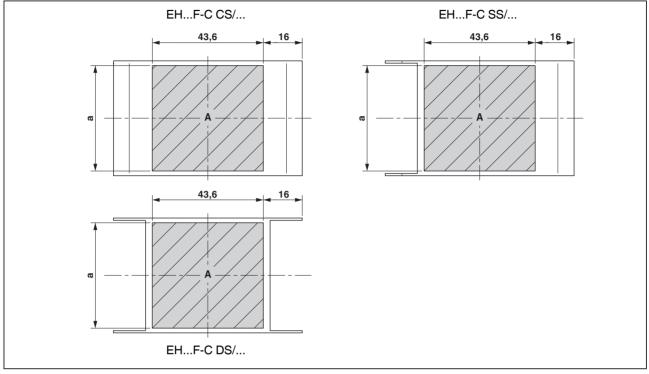
#### 5.1 Lower housing part with housing cover





#### Dimensions for a

EH 22,5 F	22.7 mm
EH 35 F	35.7 mm
EH 45 F	45.2 mm
EH 52,5 F	52.7 mm
EH 67,5 F	67.7 mm
EH 70 F	70.2 mm
EH 90 F	90.2 mm



### 5.2 Housing cover (breakouts and labeling field)

Figure 4 Maximum useable area (A) for breakouts or labels

#### Dimensions for a

EH 22,5 F	18.9 mm
EH 35 F	31.4 mm
EH 45 F	41.4 mm
EH 52,5 F	48.9 mm
EH 67,5 F	63.9 mm
EH 70 F	66.4 mm
EH 90 F	86.4 mm

## 6 PCB arrangement

## 6.1 PCB, horizontal, L1 – L3

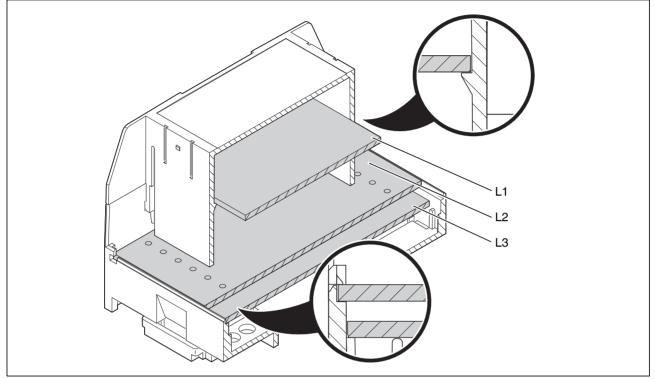


Figure 5 Horizontal installation options for the PCB

#### 6.2 Inner dimensions with L1 – L3

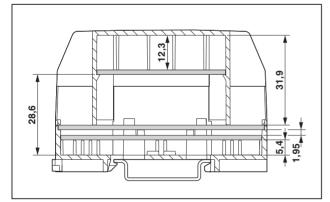


Figure 6 Horizontal installation of the PCB

## 7 PCBs, dimensional drawings

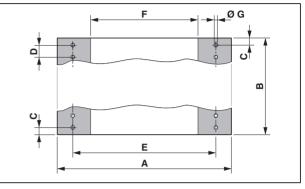
#### 7.1 PCB dimensions, horizontal, L1 – L3

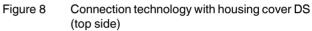
	A	-

Figure 7 Dimensional drawing of horizontal PCB

Dimensions for	Α	В
PCB L1	45.6 mm	18.3 mm
PCBL2 <sup>*</sup>	73.1 mm	18.5 mm
PCB L3 <sup>†</sup>	71.0 mm	18.5 mm
PCB L1	45.6 mm	30.7 mm
PCB L2 <sup>*</sup>	73.1 mm	31.0 mm
PCB L3 <sup>†</sup>	71.0 mm	31.0 mm
PCB L1	45.6 mm	40.7 mm
PCB L2 <sup>*</sup>	73.1 mm	41.0 mm
PCB L3 <sup>†</sup>	71.0 mm	41.0 mm
PCB L1	45.6 mm	48.2 mm
PCB L2 <sup>*</sup>	73.1 mm	48.5 mm
PCB L3 <sup>†</sup>	71.0 mm	48.5 mm
PCB L1	45.6 mm	63.2 mm
PCB L2 <sup>*</sup>	73.2 mm	63.5 mm
PCB L3 <sup>†</sup>	71.0 mm	63.5 mm
PCB L1	45.6 mm	65.7 mm
PCB L2 <sup>*</sup>	73.2 mm	66.0 mm
PCB L3 <sup>†</sup>	71.0 mm	66.0 mm
PCB L1	45.6 mm	85.7 mm
PCB L2 <sup>*</sup>	73.2 mm	86.0 mm
PCB L3 <sup>†</sup>	71.0 mm	86.0 mm
	PCB L1 PCB L $2^*$ PCB L $3^{\dagger}$ PCB L1 PCB L $2^*$ PCB L $3^{\dagger}$ PCB L $1^*$ PCB L $2^*$ PCB L $1^*$ PCB L $2^*$ PCB L $1^*$ PCB L $2^*$ PCB L $2^*$ PCB L $2^*$ PCB L $3^{\dagger}$ PCB L $1^*$ PCB L $2^*$ PCB L $1^*$ PCB L $2^*$ PCB L $1^*$ PCB L $2^*$	PCB L1       45.6 mm         PCB L 2*       73.1 mm         PCB L3 <sup>†</sup> 71.0 mm         PCB L1       45.6 mm         PCB L2*       73.1 mm         PCB L3 <sup>†</sup> 71.0 mm         PCB L3*       73.1 mm         PCB L3       71.0 mm         PCB L2*       73.1 mm         PCB L2*       73.1 mm         PCB L3*       73.1 mm         PCB L3*       73.1 mm         PCB L2*       73.1 mm         PCB L2*       73.1 mm         PCB L3*       73.1 mm         PCB L2*       73.1 mm         PCB L2*       73.1 mm         PCB L2*       73.1 mm         PCB L3*       71.0 mm         PCB L2*       73.2 mm         PCB L2*       73.2 mm         PCB L3*       71.0 mm         PCB L2*       73.2 mm

#### 7.2 Connection technology with housing cover DS





Connection technology	for plug	D	E	F	G
MKDS 3/		5.08	60.80		1.4
MKKDSH 3/		52.9			1.3
MSTBV 2,5 (5)	MVSTBW (5)	5	63.35		1.4
MSTBV 2,5 (5,08)	MVSTBW (5,08)	3) 5 08 63.35		43.6	1.4
MSTBV 2,5 (5,08)	MSTB (5,08)				1.4
MSTBV 2,5 (5,08)	FKCT (5,08)		62.20		1.4
PST 1,3/5,0		5	55.50		1.5
MCV 1,3/G-3,81		3.81	59.30		1.4

\* for connection technology MKDS and PST

<sup>†</sup> for connection technology MKKDSH, MSTBV, MCV and PST

	EH	22,5	5 F	35 F	=	45	F	52,5	5 F	67,5	F	70	) F	90	F
Connection tech- nology	for plug	С	*	С	*	С	*	С	*	С	*	С	*	С	*
MKDS 3/		1.63		2.80		2.72		3.93		3.81		2.52		4.90	
MKKDSH 3/		1.75		3.00		3.00		4.25		4.25		3.00		5.50	
MSTBV 2,5 (5)	MVSTBW (5)	1.75		3.00		3.00		4.25		4.25		3.00	13	5.50	
MSTBV 2,5 (5,08)	MVSTBW (5,08)		4		6		8		9		12		13		17
MSTBV 2,5 (5,08)	MSTB (5,08)	1.63		2.80		2.72		3.93		3.81		2.52		4.90	
MSTBV 2,5 (5,08)	FKCT (5,08)														
PST 1,3/5,0		1.75		3.00		3.00		4.25		4.25		5.50	12	5.50	
MCV 1,3/G-3,81		1.63	5	2.165	8	3.355	10	3.295	12	2.48	16	3.83	12	4.205	17

\* Maximum no. of pos.

#### 7.3 Connection technology with housing cover SS

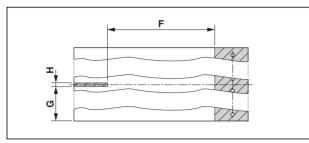


Figure 9 Connection technology with housing cover SS (top side)

	F	G	Н
EH 22,5 F	43.6 mm	-	-
EH 35 F	43.6 mm	14.80 mm	1.4 mm
EH 45 F	43.6 mm	19.50 mm	2.0 mm
EH 52,5 F	43.6 mm	23.30 mm	1.9 mm
EH 67,5 F	43.6 mm	30.75 mm	2.0 mm
EH 70 F	43.6 mm	32.00 mm	2.0 mm
EH 90 F	43.6 mm	42.00 mm	2.0 mm

#### 7.5 Locked areas, lower side

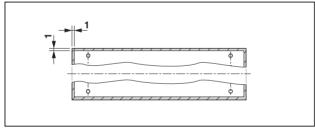


Figure 11 Lower side for all PCBs (locked areas)



Keep-out zone, no components at these positions

#### 7.4 Connection technology with housing cover CS

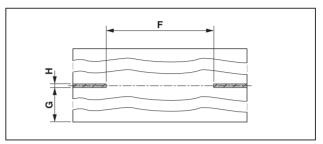


Figure 10 Connection technology with housing cover CS (top side)

## 8 Connection technology

H = Ho	rizontal	GN = green			PCB connecti	on technology			
Number of positions		BK = Black	PCB terminal block		Header				
posi	tions	GY7035 = Light gray	Pitch 5.08	Pitch 5	Pitch 5	Pitch 5	Pitch 5.08	Pitch 3.81	
			MKDS	MKKDSH	PST 1,3/	MSTBV	MSTBV	MCV 1,5/	
			3/	3/		2.5/	2.5/		
			Sees	section		See section			
			8.1	8.4	8.5	8.2	8.3	8.6	
EH 22	2,5 F							•	
Н	4	GN	1712805	1721045		1753479	1758034		
		BK	1729069		1933202		1758801		
	5	GN						1803455	
EH 35	5 F								
Н	6	GN	1701144	1721045		1753518	1758050		
		BK			1933228	1755286	1758788		
		GY7035					1703841		
	8	GN						1803484	
EH 45	5 F								
Н	8	GN	1712708	1703283		1753550	1758076		
		BK	1871762		1933244	1755309	1759431		
		GY7035							
	10	GN						1803507	
EH 52	2,5 F								
Н	9	GN	1707331			1753576	1758089		
		BK			1933257		1820742		
	12	GN						1803523	
EH 67	7,5 F								
Н	12	GN	1714308			1753631	1758115		
		BK			1933286				
	16	GN						1803565	
EH 70									
Н	13	GN				1753657	1758128		
		BK			1933299				
	16	GN						1803565	
EH 90	) F								
Н	17	GN				1753738	1758160		
		BK			1935556				

i

Other versions with different numbers of positions or in colors such as light gray or black can be provided on request.

# 8.1 PCB terminal block base, soldered, pitch 5.08 for PCB L2

Assembly: soldering

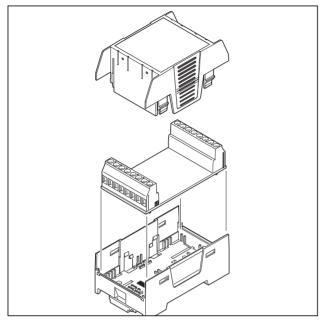


Figure 12 PCB terminal block base (example, 1712708)

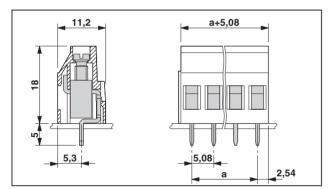


Figure 13 Dimensions of MKDS 3/...-5,08

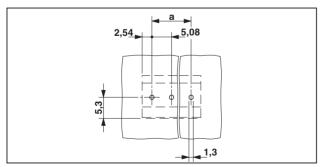


Figure 14 Drilling diagram of MKDS 3/...-5,08

<b>D</b>					
Dimensions					
Length			11.2 mm		
Height			18 mm		
Pitch			5.08 mm		
Pin dimensions			0.9 mm x 0	.9 mm	
Hole diameter			1.3 mm		
Product		Di	mension a	No. of pos.	
MKDS 3/ 4-5,08	1712805	15	.24 mm	4	
MKDS 3/ 4-5,08 BK	1729069	15	.24 mm	4	
MKDS 3/ 6-5,08	1701144	25	.40 mm	6	
MKDS 3/ 8-5,08	1712708	35	.56 mm	8	
MKDS 3/ 8-5,08 BK	1871762	35	.56 mm	8	
MKDS 3/ 9-5,08	1707331	40	.64 mm	9	
MKDS 3/ 12-5,08	1714308	55	.88 mm	12	
Technical data					
Insulation material g			I		
Rated surge voltage (III/3)			4 kV		
Rated surge voltage (III/2)			4 kV		
Rated surge voltage	(II/2)		4 kV		
Rated voltage (III/3)			250 V		
Rated voltage (III/2)			400 V		
Rated voltage (II/2)			630 V		
Connection acc. to s	tandard		EN-VDE		
Nominal current I <sub>N</sub>			24 A		
Nominal cross section	on		2.5 mm <sup>2</sup>		
Maximum load curre 4 mm <sup>2</sup> conductor cro	,		28 A		
Insulation material			PA		
Flammability rating a UL 94	according to	C	V0		
Solder pin surface			Sn		
Internal cylindrical ga	auge		A3		
Stripping length			8 mm		
Screw thread			М3		
Tightening torque			0.5 Nm 0.6 Nm		

#### 8.2 Plug-in base strip, pitch 5 for PCB L3

Contact surface: tin. Assembly: soldering

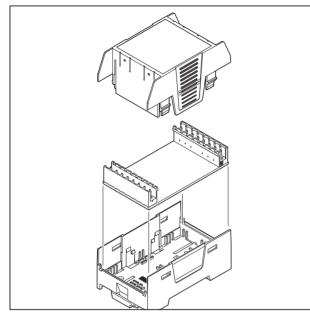


Figure 15 Base strip (example, 1753550)

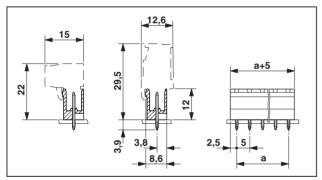


Figure 16 Dimensions of MSTBV 2,5/...-G

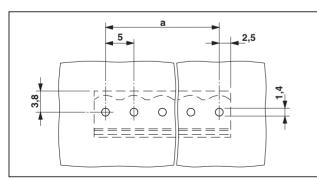


Figure 17 Drilling diagram of MSTBV 2,5/...-G

<b>MSTBV</b>	2,5/G
--------------	-------

Dimensions					
Length			8.6 mm		
Pitch			5 mm		
Pin dimensions			1 mm x 1 r	nm	
Hole diameter			1.4 mm		
Product		D a	imension	No. of pos.	
MSTBV 2,5/ 4-G	1753479	1	5 mm	4	
MSTBV 2,5/ 6-G	1753518	2	5 mm	6	
MSTBV 2,5/ 6-G BK	1755286	2	5 mm	6	
MSTBV 2,5/ 8-G	1753550	3	5 mm	8	
MSTBV 2,5/ 8-G BK	1755309	3	5 mm	8	
MSTBV 2,5/ 9-G	1753576	4	0 mm	9	
MSTBV 2,5/12-G	1753631	5	5 mm	12	
MSTBV 2,5/13-G	1753657	6	0 mm	13	
MSTBV 2,5/17-G	1753738	8	0 mm	17	
Technical data					
Insulation material gr	-		I		
Rated surge voltage			4 kV		
Rated surge voltage (III/2)			4 kV		
Rated surge voltage (II/2)			4 kV		
Rated voltage (III/3)			250 V		
Rated voltage (III/2)			320 V		
Rated voltage (II/2)			400 V		
Connection acc. to st	andard		EN-VDE		
Nominal current I <sub>N</sub>			12 A		
Maximum load currer	nt		12 A		
Insulation material			PA		
Flammability rating a UL 94	ccording to		V0		
Suitable connectors	S				
PCB connector with s		ect	ion		
MVSTBW 2,5/ST (					
MVSTBW 2,5/STE					
PCB connector with s	spring conn	ec	tion		
FKCT 2,5/ST (pitcl	h 5)				
Accessories					
Coding tab for heade	r pin		MSTB-BL, 1755477		
Coding section			CR-MSTB, 1734401		
Coding profile			CP-MSTB,1734634		

#### 8.3 Plug-in base strip, pitch 5.08 for PCB L3

Contact surface: tin. Assembly: soldering

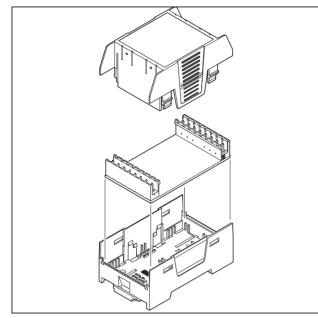


Figure 18 Base strip (example, 1758076)

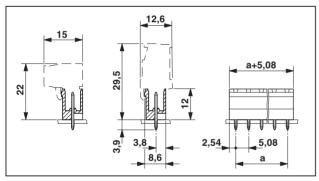
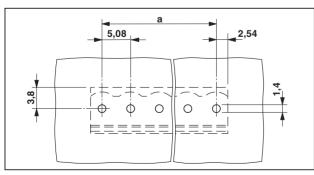
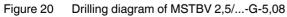


Figure 19 Dimensions of MSTBV 2,5/...-G-5,08





MSTBV 2,5/...-G-5,08

Dimensions					
Length		8.6 mm			
Pitch	5.08 mm				
Pin dimensions		1 mm x 1 mr	n		
Hole diameter		1.4 mm			
Product		Dimen- sion a	No. of pos.		
MSTBV 2,5/ 4-G-5,08	1758034	15.24 mm	4		
MSTBV 2,5/ 4-G-5,08 BK	1758801	15.24 mm	4		
MSTBV 2,5/ 6-G-5,08	1758050	25.40 mm	6		
MSTBV 2,5/ 6-G-5,08 BK	1758788	25.40 mm	6		
MSTBV 2,5/ 6-G-5,08 GY7035	1703841	25.40 mm	6		
MSTBV 2,5/ 8-G-5,08	1758076	35.56 mm	8		
MSTBV 2,5/ 8-G-5,08 BK	1759431	35.56 mm	8		
MSTBV 2,5/ 9-G-5,08	1758089	40.64 mm	9		
MSTBV 2,5/ 9-G-5,08 BK	1820742	40.64 mm	9		
MSTBV 2,5/ 12-G-5,08	1758115	55.88 mm	12		
MSTBV 2,5/ 13-G-5,08	1758128	60.96 mm	13		
MSTBV 2,5/ 17-G-5,08	1758160	81.28 mm	17		
Technical data					
Insulation material group		I			
Rated surge voltage (III/3)		↓ kV			
Rated surge voltage (III/2)		4 kV			
Rated surge voltage (II/2)		4 kV			
Rated voltage (III/3)		250 V			
Rated voltage (III/2)		320 V			
Rated voltage (II/2)		400 V			
Connection acc. to standa	rd	EN-VDE			
Nominal current I <sub>N</sub>		12 A			
Maximum load current		12 A			
Insulation material		PA			
Flammability rating acc. to	UL 94	V0			
Suitable connectors					
PCB connector with screw	connectio	on			
MVSTBW 2,5/ST-5,08					
MVSTBW 2,5/STEH-5,	08				
PCB connector with spring	g connecti	on			
FKCT 2,5/ST-5,08					
Accessories					
Coding tab for header pin		MSTB-BL, 1755477			
Coding section		CR-MSTB, 1734401			
Coding profile		CP-MSTB, 1	734634		

# 8.4 PCB terminal block base, soldered, pitch 5 for PCB L3

#### Assembly: soldering

Several PCB terminal block bases can be mounted in rows onto the PCB on each housing side.

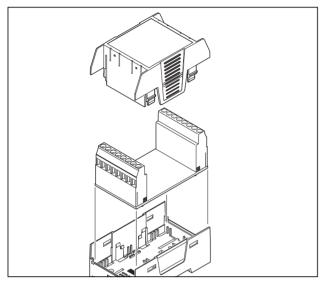


Figure 21 PCB terminal block base (example, 1703283)

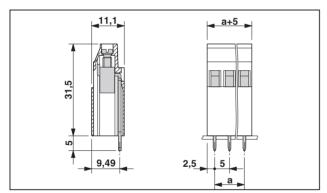


Figure 22 Dimensions of MKKDSH 3/...

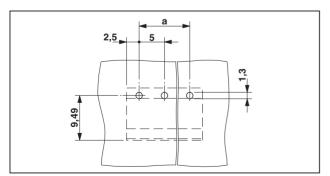


Figure 23 Drilling diagram of MKKDSH 3/...

MKKDSH 3/
-----------

Dimensions					
Length			11.1 mm		
Pitch			5 mm		
Number of position	S		2		
Pin dimensions			0.9 mm x (	0.9 mm	
Hole diameter			1.3 mm		
Product		Din	nension a	No. of pos.	
MKKDSH 3/2	1721045	5 m	ım	2	
MKKDSH 3/8	1703283	35	mm	8	
Technical data					
Insulation material	group		1		
Rated surge voltag	e (III/3)		4 kV		
Rated surge voltag	e (III/2)		4 kV		
Rated surge voltag	e (II/2)		4 kV		
Rated voltage (III/3	)		250 V		
Rated voltage (III/2	)		400 V		
Rated voltage (II/2)			630 V		
Connection acc. to	standard		EN-VDE		
Nominal current $I_N$			24 A		
Nominal cross sect	tion		2.5 mm <sup>2</sup>		
Maximum load curr 4 mm <sup>2</sup> conductor c		n	24 A		
Insulation material			PA		
Flammability rating according to UL 94		to	VO		
Solder pin surface			Sn		
Internal cylindrical gauge			A3		
Stripping length			7 mm		
Screw thread			M3		
Tightening torque			0.5 Nm 0.6 Nm		

#### 8.5 Pin strip, pitch 5 for PCB L3

Contact surface: tin. Assembly: soldering

Voltage and current depend on the installed plug terminal. The value of the weaker component always applies. The pin strip is made of high-temperature proof plastic. This makes it suitable for the reflow process.

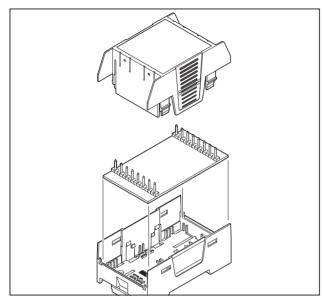
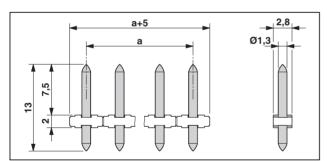


Figure 24 Base strip (example, 1933244)





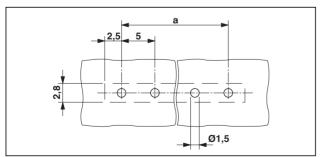


Figure 26 Drilling diagram PST 1,3/ ...-5,0

PST 1,3/...-5,0

Dimensions				
Length		2.8 mm		
Pitch		5 mm		
Pin dimensions		1.3 mm		
Hole diameter		1.5 mm		
Product		Dimen- sion a	No. of pos.	
PST 1,3/ 4-5,0	1933202	2 15 mm	4	
PST 1,3/ 6-5,0	1933228	8 25 mm	6	
PST 1,3/8-5,0	1933244	35 mm	8	
PST 1,3/9-5,0	1933257	' 40 mm	9	
PST 1,3/12-5,0	1933286	55 mm	12	
PST 1,3/13-5,0	1933299	60 mm	13	
PST 1,3/17-5,0	1935556	80 mm	17	
Technical data				
Insulation material group		Illa		
Rated surge voltage (III/3)		4 kV		
Rated surge voltage (III/2)		4 kV		
Rated surge voltage (II/2)		4 kV		
Rated voltage (III/3)		250 V		
Rated voltage (III/2)		320 V		
Rated voltage (II/2)		400 V		
Connection acc. to standa	ırd	EN-VDE		
Nominal current I <sub>N</sub>		12 A <sup>*</sup>		
Maximum load current		12 A <sup>*</sup>		
Insulation material		PA		
Flammability rating accord UL 94	ling to	VO		
* Depends on the connector	used; obser	ve derating		

#### Suitable connectors

PCB connection terminal block with screw connection PT 1,5/... (e.g., 1755606)

#### 8.6 Base strip, pitch 5.08 for PCB L3

Contact surface: tin. Assembly: soldering

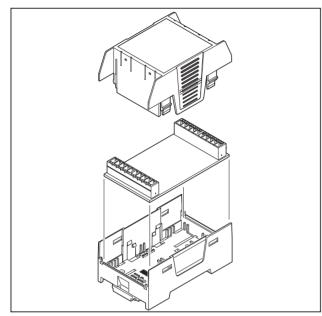


Figure 27 Base strip (example, 1803507)

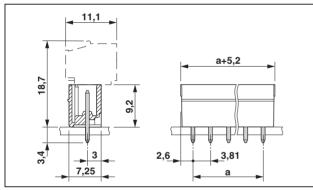


Figure 28 Dimensions PST 1,3/ ...-5,0

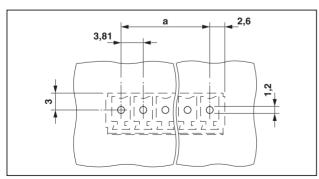


Figure 29 Drilling diagram PST 1,3/ ...-5,0

MCV	1,3/	G-3,81
-----	------	--------

Dimensions					
Length	7.25 mm				
Pitch		3.81 m	m		
Pin dimensions		0.8 mm	n x 0.8	mm	
Hole diameter		1.2 mm	า		
Product		Dime sion		No. of pos.	
MCV 1,5/ 5-G-3,81	180345	5 15.24	1 mm	5	
MCV 1,5/ 8-G-3,81	1803484	4 26.67	7 mm	8	
MCV 1,5/10-G-3,81	1803507	7 34.29	) mm	10	
MCV 1,5/12-G-3,81	1803523	3 41.91	l mm	12	
MCV 1,5/16-G-3,81	180356	5 57.15	5 mm	13	
Technical data					
Insulation material group		Illa			
Rated surge voltage (III/3)		2.5 kV			
Rated surge voltage (III/2)		2.5 kV	2.5 kV		
Rated surge voltage (II/2)		2.5 kV			
Rated voltage (III/3)		160 V			
Rated voltage (III/2)		160 V			
Rated voltage (II/2)		250 V			
Connection acc. to standa	ırd	EN-VDE			
Nominal current IN		8 A <sup>*</sup>			
Maximum load current		8 A <sup>*</sup>			
Insulation material		PBT			
Flammability rating accord UL 94	ling to	VO			
* Observe derating					
Suitable connectors					
PCB connector with screw	/ connect	ion			
MCVR 1,5/ (e.g., 1827156)					
PCB connector with spring	g connect	ion			

FMC 1,5/... (e.g., 1745920)

Accessories	
Marker card	SK 3,81/2,8:FORTL.ZAHLEN, 0804109
Coding profile	CP-MSTB, 1734634

## 9 Mounting the housing

#### 9.1 Mounting on a DIN rail

The housing is supplied with a base latch for DIN rail mounting as standard.

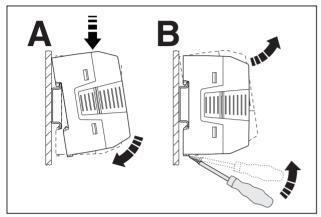


Figure 30 Snapping the housing onto the DIN rail (A), and removing it (B)

#### Mounting

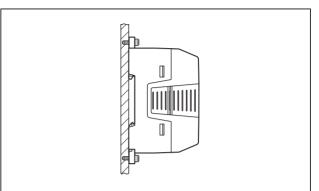
- Place the device onto a grounded 35 mm DIN rail from above so that the upper housing slot hooks onto the top edge of the DIN rail (A).
- Press the device carefully at the top of the housing towards the mounting surface.
- Once the snap-on foot has audibly snapped onto the DIN rail, check whether it is securely attached.

#### Removal

- Use a suitable screwdriver to release the locking mechanism on the snap-on foot of the device (B).
- Hold the device at the housing cover and carefully tilt it upwards.
- Carefully lift the device off the DIN rail.

#### 9.2 Mounting on a mounting surface

The housing can be supplied with a base latch for wall mounting on customer request.





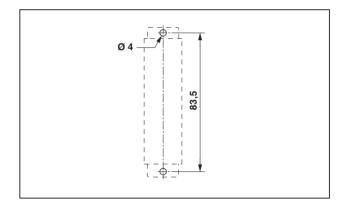


Figure 32 Drilling diagram for wall mounting

## 9.3 Mounting the housing cover

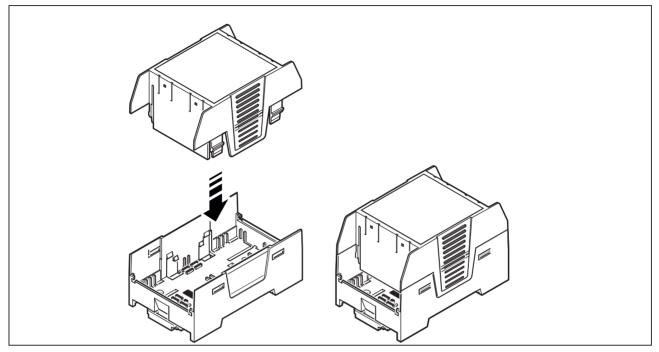


Figure 33 Snapping on the housing cover

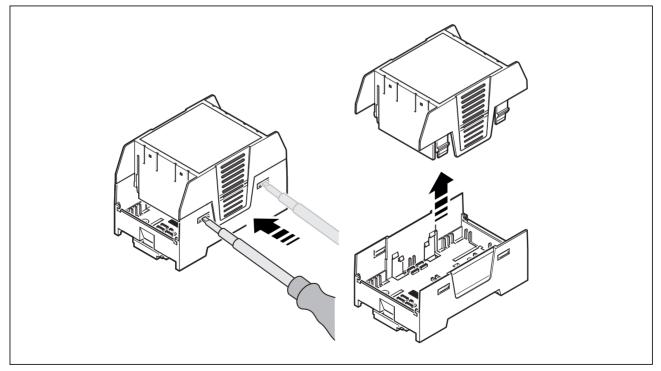


Figure 34 Releasing the housing cover

#### 9.4 Mounting the filler plugs

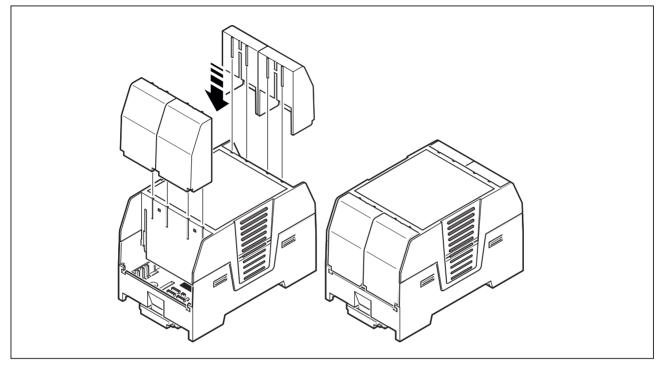


Figure 35 Mounting the filler plugs

#### Accessories

Description	Туре	Order No.	Pcs. / Pkt.
Filler plug for unoccupied terminal points, width 22.5 mm			
Suitable for EH 45 F, EH 67,5 F and EH 90 F			
Color: light gray, similar to RAL 7035	EH 22,5 F-FP/ABS GY7035	2201843	50
Color: black, similar to RAL 9005	EH 22,5 F-FP/ABS BK9005	2201842	50
Filler plug for unoccupied terminal points, width 17.5 mm			
Suitable for EH 35 F, EH 52,5 F and EH 70 F			
Color: light gray, similar to RAL 7035	EH 17,5 F-FP/ABS GY7035	2201840	50
Color: black, similar to RAL 9005	EH 17,5 F-FP/ABS BK9005	2201841	50



## Housing cover - EH 35 F-C DS/ABS GY7035 - 2201826

Component housing, Color: gray

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#### **Product Features**

- ☑ Item is part of the EH product range
- ☑ Tool-free mounting
- ☑ Available in overall widths from 22.5 mm ... 90 mm
- ☑ Inflammability class HB acc. to UL 94
- Variety of connection technologies
- ☑ Can be mounted on the DIN rail or the wall

## Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
Weight per Piece (excluding packing)	16.0 g
Custom tariff number	85472000
Country of origin	India

## Technical data

Product type	Component housing upper part
Color	gray

#### Classifications

#### eCl@ss

eCl@ss 5.0	27180506
eCl@ss 5.1	27180506
eCl@ss 6.0	27180802
eCl@ss 8.0	27182702



# Housing cover - EH 35 F-C DS/ABS GY7035 - 2201826

#### Classifications

ETIM

ETIM 4.0	EC001031
ETIM 5.0	EC001031

## Accessories

Accessories

Filler plug

Electronic housing - EH 17,5 F-FP/ABS BK9005 - 2201846



Component housing, Color: black

Electronic housing - EH 17,5 F-FP/ABS GY7035 - 2201847



Component housing, Color: gray

Required add-on products

Electronic housing - EH 35 F-B/ABS BK9005 - 2201815



Component housing, Color: black

Electronic housing - EH 35 F-B/ABS GY7035 - 2201814



Component housing, Color: gray



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