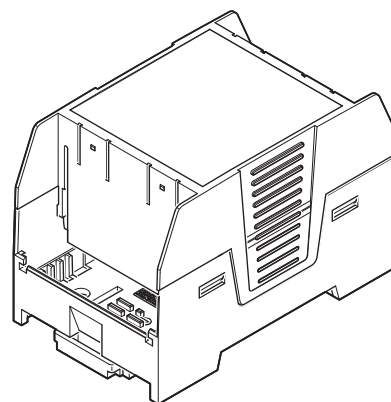


# Series EH...F electronics housings

## 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.

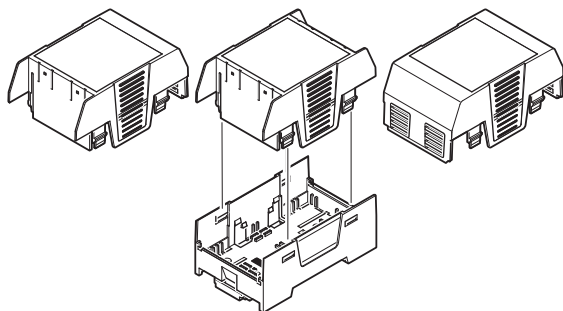


Figure 1 Housing covers and lower housing part

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.



The 3D housing data can be found at [phoenixcontact.net/products](http://phoenixcontact.net/products).



Make sure you always use the latest documentation. It can be downloaded at [phoenixcontact.net/products](http://phoenixcontact.net/products).



This data sheet is valid for all products listed from page 3.

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

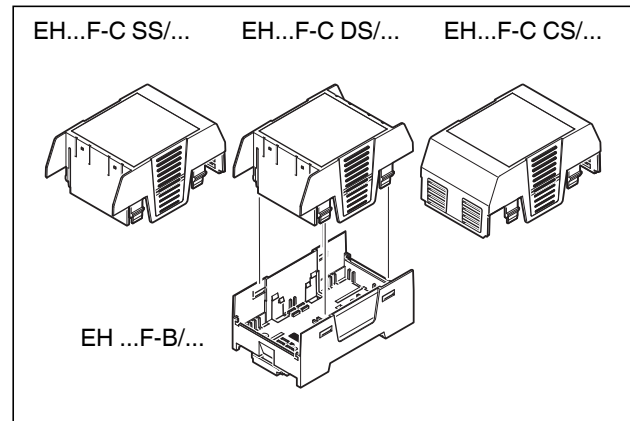


Figure 2 Overview (example, EH 45 F)

### 3 Ordering data

#### Electronics housing of width 22.5

Description	Type	Order No.	Pcs. / Pkt.
<b>Lower housing part</b> with vents and base latch for DIN rail mounting, width 22.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 22,5 F-B/ABS GY7035 EH 67,5-B/ABS BK9005	2200665 2200666	10 10
<b>Housing cover</b> for PCB connection on one side, width 22.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 22,5 F-C SS/ABS GY7035 EH 22,5 F-C SS/ABS BK9005	2200674 2201452	10 10
<b>Housing cover</b> for PCB connection on two sides, width 22.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 22,5 F-C DS/ABS GY7035 EH 22,5 F-C DS/ABS BK9005	2201453 2201456	10 10
<b>Housing cover</b> , closed, width 22.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 22,5 F-C CS/ABS GY7035 EH 22,5 F-C CS/ABS BK9005	2201653 2201765	10 10

#### Electronics housing of width 35

Description	Type	Order No.	Pcs. / Pkt.
<b>Lower housing part</b> with vents and base latch for DIN rail mounting, width 35 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 35 F-B/ABS GY7035 EH 35 F-B/ABS BK9005	2201814 2201815	10 10
<b>Housing cover</b> for PCB connection on one side, width 35 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 35-C SS/ABS GY7035 EH 35-C SS/ABS BK9005	2201820 2201821	10 10
<b>Housing cover</b> for PCB connection on two sides, width 35 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 35 F-C DS/ABS GY7035 EH 35 F-C DS/ABS BK9005	2201826 2201827	10 10
<b>Housing cover</b> , closed, width 35 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 35 F-C CS/ABS GY7035 EH 35 F-C CS/ABS BK9005	2201832 2201833	10 10

**Electronics housing of width 45**

Description	Type	Order No.	Pcs. / Pkt.
<b>Lower housing part</b> with vents and base latch for DIN rail mounting, width 45 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
<b>Housing cover</b> 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
<b>Housing cover</b> 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
<b>Housing cover</b> , 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	Type	Order No.	Pcs. / Pkt.
<b>Lower housing part</b> 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
Color: black, similar to RAL 9005	EH 52,5 F-F-B/ABS BK9005	2201817	10
<b>Housing cover</b> for PCB connection on one side, width 52.5 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 52,5 F-C SS/ABS GY7035	2201822	10
Color: black, similar to RAL 9005	EH 52,5 F-C SS/ABS BK9005	2201823	10
<b>Housing cover</b> for PCB connection on two sides, width 52.5 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 52,5 F-C DS/ABS GY7035	2201829	10
Color: black, similar to RAL 9005	EH 52,5 F-C DS/ABS BK9005	2201828	10
<b>Housing cover</b> , closed, width 52.5 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 52,5 F-C CS/ABS GY7035	2201835	10
Color: black, similar to RAL 9005	EH 52,5 F-C CS/ABS BK9005	2201834	10

**Electronics housing of width 67.5**

Description	Type	Order No.	Pcs. / Pkt.
<b>Lower housing part</b> with vents and base latch for DIN rail mounting, width 67.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 67,5 F-F-B/ABS GY7035 EH 67,5 F-F-B/ABS BK9005	2200519 2200520	10 10
<b>Housing cover</b> for PCB connection on one side, width 67.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 67,5 F-C SS/ABS GY7035 EH 67,5 F-C SS/ABS BK9005	2201097 2201447	10 10
<b>Housing cover</b> for PCB connection on two sides, width 67.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 67,5 F-C DS/ABS GY7035 EH 67,5 F-C DS/ABS BK9005	2201773 2201772	10 10
<b>Housing cover</b> , closed, width 67.5 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 67,5 F-C CS/ABS GY7035 EH 67,5 F-C CS/ABS BK9005	2201774 2201775	10 10

**Electronics housing of width 70**

Description	Type	Order No.	Pcs. / Pkt.
<b>Lower housing part</b> 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	EH 70 F-F-B/ABS GY7035 EH 70 F-F-B/ABS BK9005	2201819 2201818	10 10
<b>Housing cover</b> for PCB connection on one side, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 70 F-C SS/ABS GY7035 EH 70 F-C SS/ABS BK9005	2201825 2201824	10 10
<b>Housing cover</b> for PCB connection on two sides, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 70 F-C DS/ABS GY7035 EH 70 F-C DS/ABS BK9005	2201830 2201831	10 10
<b>Housing cover</b> , closed, width 70 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 70 F-C CS/ABS GY7035 EH 70 F-C CS/ABS BK9005	2201836 2201837	10 10

**Electronics housing of width 90**

Description	Type	Order No.	Pcs. / Pkt.
<b>Lower housing part</b> with vents and base latch for DIN rail mounting, width 90 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 90 F-F-B/ABS GY7035 EH 90 F-F-B/ABS BK9005	2200663 2200664	10 10
<b>Housing cover</b> for PCB connection on one side, width 90 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 90 F-C SS/ABS GY7035 EH 90 F-C SS/ABS BK9005	2201282 2201388	10 10
<b>Housing cover</b> for PCB connection on two sides, width 90 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 90 F-C DS/ABS GY7035 EH 90 F-C DS/ABS BK9005	2201778 2201779	10 10
<b>Housing cover</b> , closed, width 90 mm Material: ABS Color: light gray, similar to RAL 7035 Color: black, similar to RAL 9005	EH 90 F-C CS/ABS GY7035 EH 90 F-C CS/ABS BK9005	2201777 2201776	10 10

**Accessories**

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

**4 Material****Housing type**

Material ABS

Flammability rating according to UL 94

HB

## 5 External dimensions

### 5.1 Lower housing part with housing cover

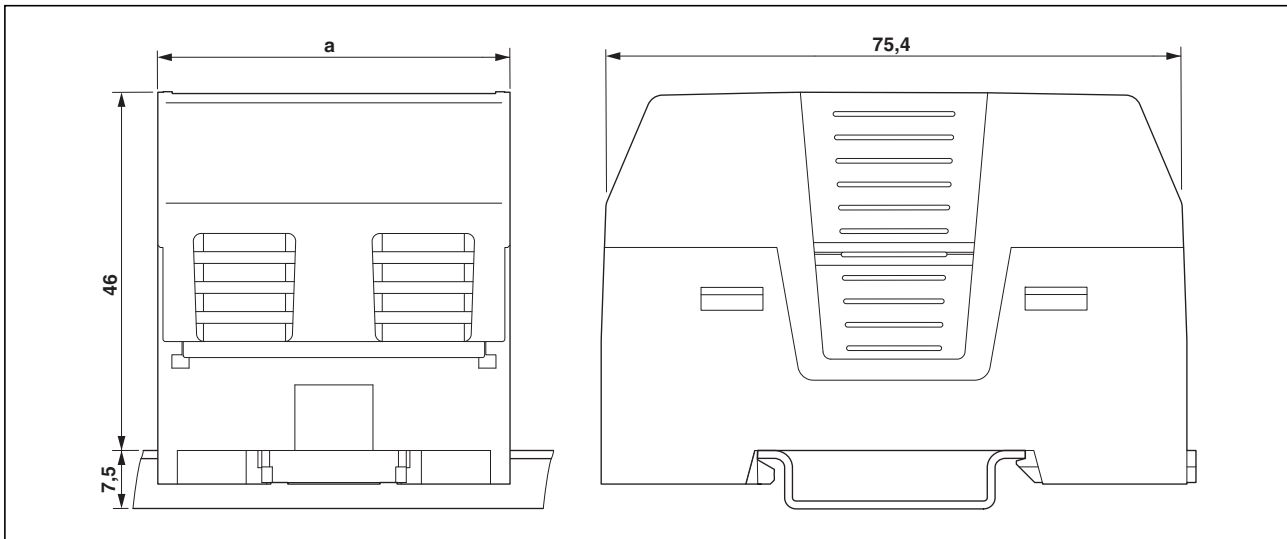


Figure 3 External dimensions of lower housing part with housing cover

#### 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)

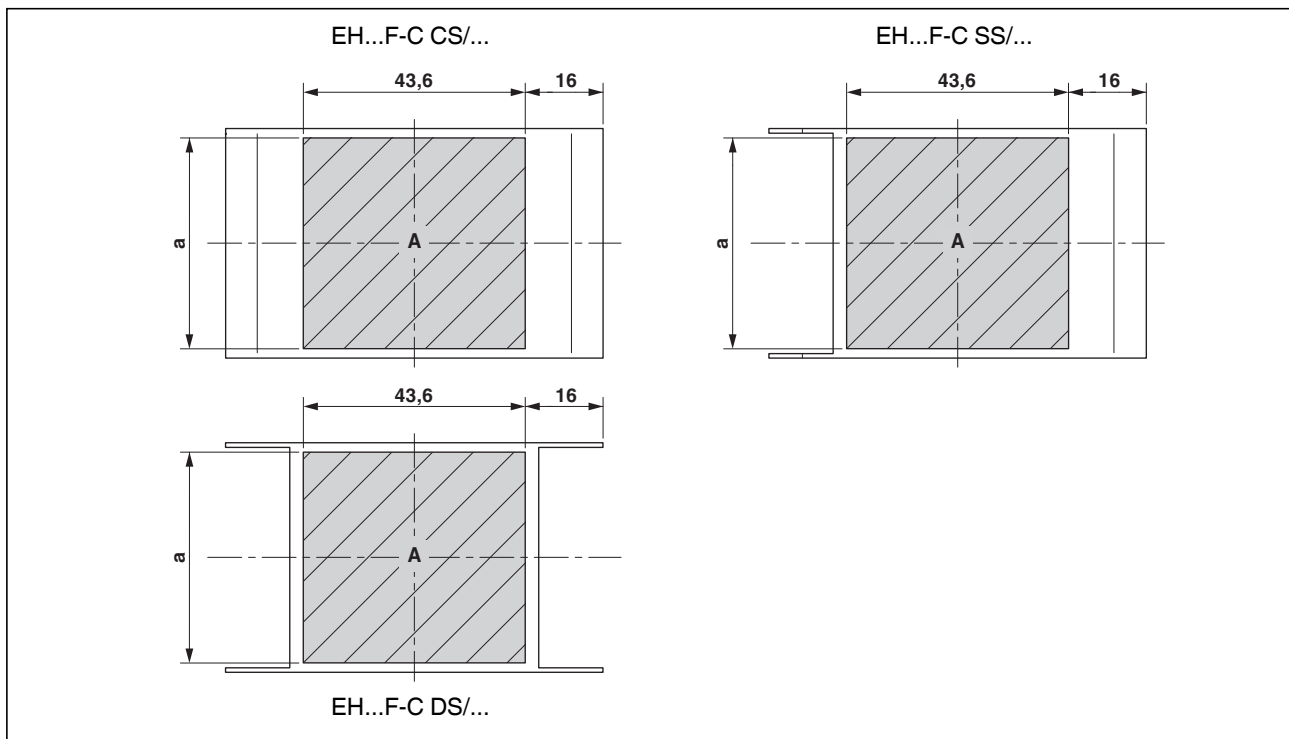


Figure 4 Maximum useable area (A) for breakouts or labels

**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

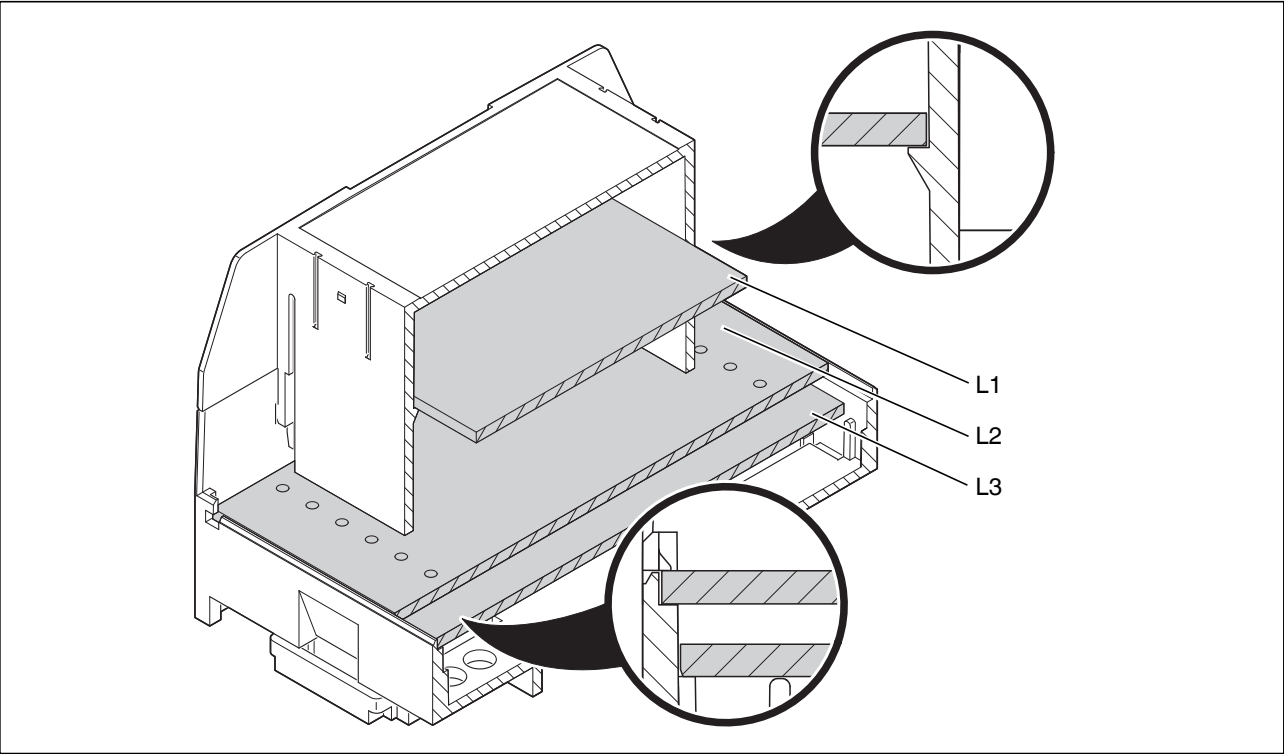


Figure 5 Horizontal installation options for the PCB

### 6.2 Inner dimensions with L1 – L3

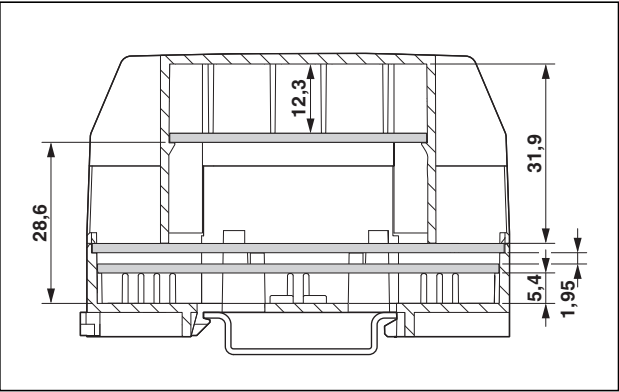


Figure 6 Horizontal installation of the PCB

## 7 PCBs, dimensional drawings

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

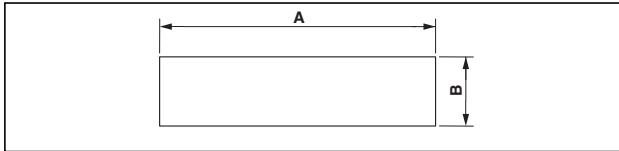


Figure 7 Dimensional drawing of horizontal PCB

	Dimensions for	A	B
EH 22,5 F	PCB L1	45.6 mm	18.3 mm
	PCB L2*	73.1 mm	18.5 mm
	PCB L3†	71.0 mm	18.5 mm
EH 35 F	PCB L1	45.6 mm	30.7 mm
	PCB L2*	73.1 mm	31.0 mm
	PCB L3†	71.0 mm	31.0 mm
EH 45 F	PCB L1	45.6 mm	40.7 mm
	PCB L2*	73.1 mm	41.0 mm
	PCB L3†	71.0 mm	41.0 mm
EH 52,5 F	PCB L1	45.6 mm	48.2 mm
	PCB L2*	73.1 mm	48.5 mm
	PCB L3†	71.0 mm	48.5 mm
EH 67,5 F	PCB L1	45.6 mm	63.2 mm
	PCB L2*	73.2 mm	63.5 mm
	PCB L3†	71.0 mm	63.5 mm
EH 70 F	PCB L1	45.6 mm	65.7 mm
	PCB L2*	73.2 mm	66.0 mm
	PCB L3†	71.0 mm	66.0 mm
EH 90 F	PCB L1	45.6 mm	85.7 mm
	PCB L2*	73.2 mm	86.0 mm
	PCB L3†	71.0 mm	86.0 mm

\* for connection technology MKDS and PST

† for connection technology MKKDSH, MSTBV, MCV and PST

### 7.2 Connection technology with housing cover DS

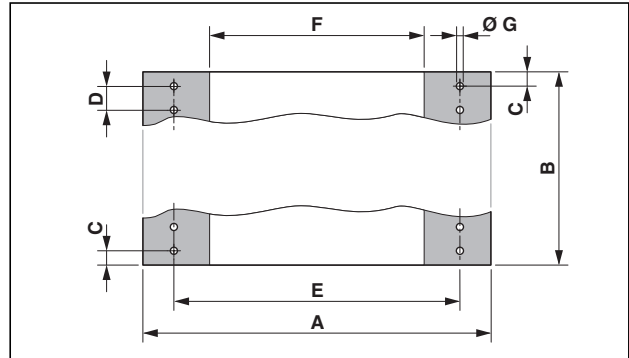


Figure 8 Connection technology with housing cover DS (top side)

Connection technology for plug	D	E	F	G
MKDS 3/...	5.08	60.80	43.6	1.4
MKKDSH 3/...	5	52.90		1.3
MSTBV 2,5 (5) MVSTBW (5)		63.35		1.4
MSTBV 2,5 (5,08) MVSTBW (5,08)	5.08	63.35	43.6	1.4
MSTBV 2,5 (5,08) MSTB (5,08)		58.00		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

EH...	22,5 F	35 F	45 F	52,5 F	67,5 F	70 F	90 F							
Connection technology for plug	C	C	C	C	C	C	C							
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)	1.63	2.80	2.72	3.93	3.81	2.52	4.90							
MSTBV 2,5 (5,08) MVSTBW (5,08)								4	6	8	9	12	13	
MSTBV 2,5 (5,08) MSTB (5,08)														
MSTBV 2,5 (5,08) FKCT (5,08)	1.63	2.80	2.72	3.93	3.81	2.52	4.90							
PST 1,3/...-5,0	1.75	3.00	3.00	4.25	4.25	5.50	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**

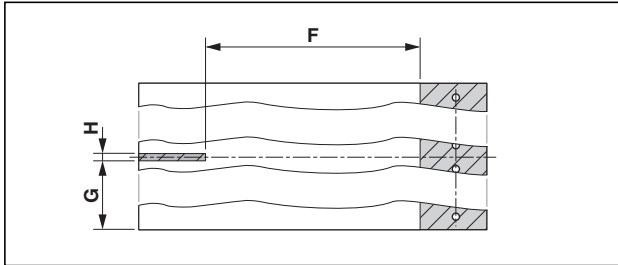


Figure 9 Connection technology with housing cover SS (top side)

**7.4 Connection technology with housing cover CS**

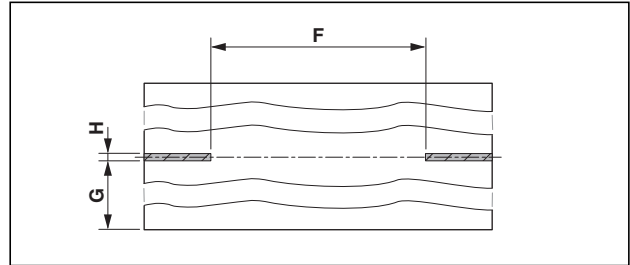


Figure 10 Connection technology with housing cover CS (top side)

	<b>F</b>	<b>G</b>	<b>H</b>
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**

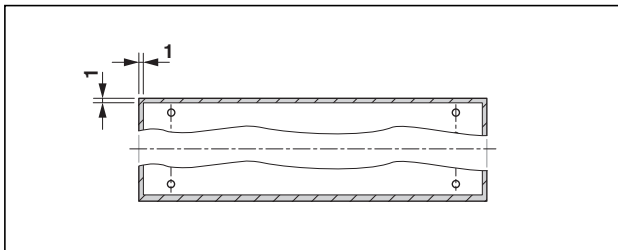



Figure 11 Lower side for all PCBs (locked areas)

 Keep-out zone, no components at these positions

## 8 Connection technology

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



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

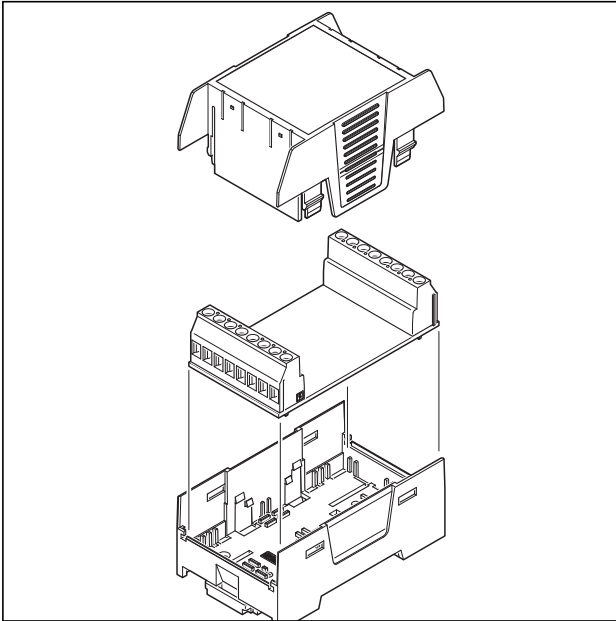


Figure 12 PCB terminal block base (example, 1712708)

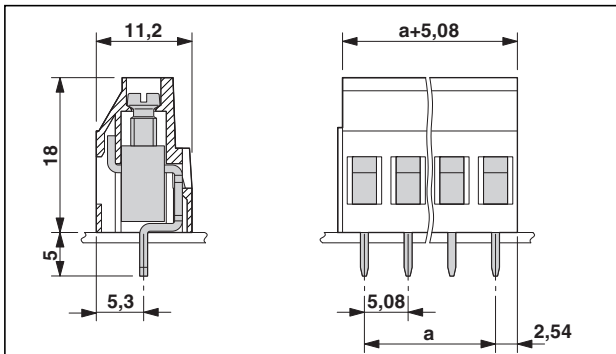


Figure 13 Dimensions of MKDS 3/...-5,08

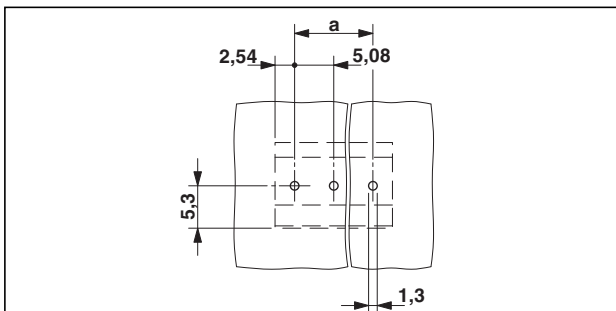


Figure 14 Drilling diagram of MKDS 3/...-5,08

### MKDS 3/...-5,08

#### 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

Product	Dimension 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 group	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 standard	EN-VDE
Nominal current $I_N$	24 A
Nominal cross section	2.5 mm <sup>2</sup>
Maximum load current, with a 4 mm <sup>2</sup> conductor cross section	28 A
Insulation material	PA
Flammability rating according to UL 94	V0
Solder pin surface	Sn
Internal cylindrical gauge	A3
Stripping length	8 mm
Screw thread	M3
Tightening torque	0.5 Nm ... 0.6 Nm

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

Contact surface: tin. Assembly: soldering

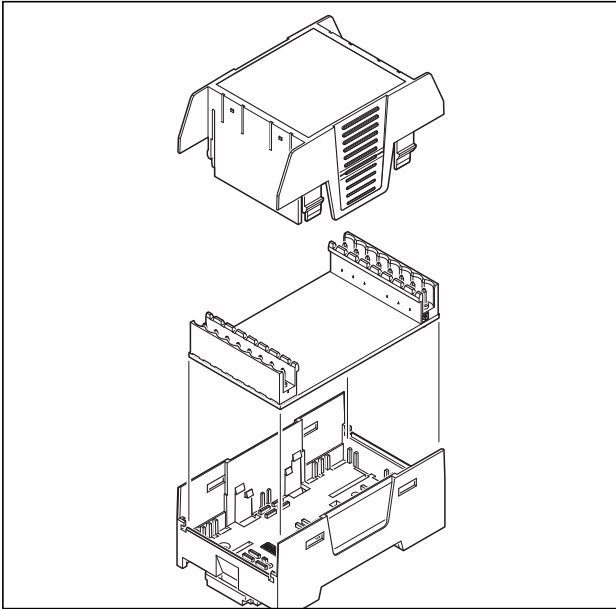


Figure 15 Base strip (example, 1753550)

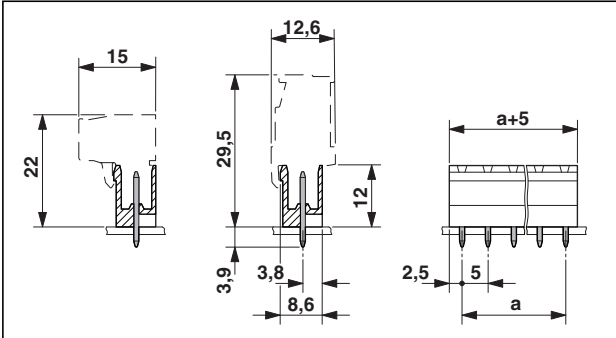


Figure 16 Dimensions of MSTBV 2,5/...-G

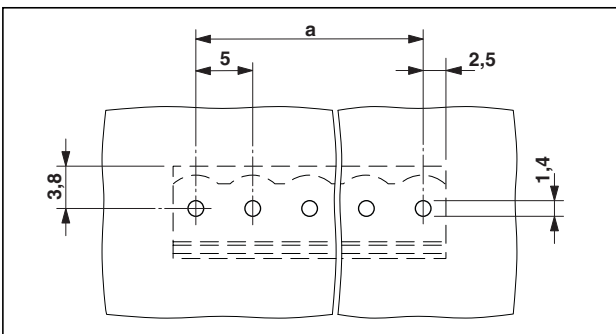


Figure 17 Drilling diagram of MSTBV 2,5/...-G

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

**Dimensions**

Length	8.6 mm
Pitch	5 mm
Pin dimensions	1 mm x 1 mm
Hole diameter	1.4 mm

Product		Dimension a	No. of pos.
MSTBV 2,5/ 4-G	1753479	15 mm	4
MSTBV 2,5/ 6-G	1753518	25 mm	6
MSTBV 2,5/ 6-G BK	1755286	25 mm	6
MSTBV 2,5/ 8-G	1753550	35 mm	8
MSTBV 2,5/ 8-G BK	1755309	35 mm	8
MSTBV 2,5/ 9-G	1753576	40 mm	9
MSTBV 2,5/12-G	1753631	55 mm	12
MSTBV 2,5/13-G	1753657	60 mm	13
MSTBV 2,5/17-G	1753738	80 mm	17

**Technical data**

Insulation material group	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)	320 V
Rated voltage (II/2)	400 V
Connection acc. to standard	EN-VDE
Nominal current I <sub>N</sub>	12 A
Maximum load current	12 A
Insulation material	PA
Flammability rating according to UL 94	V0

**Suitable connectors**

PCB connector with screw connection

MVSTBW 2,5/...-ST (pitch 5)

MVSTBW 2,5/...-STEH (pitch 5)

PCB connector with spring connection

FKCT 2,5/...-ST (pitch 5)

**Accessories**

Coding tab for header 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

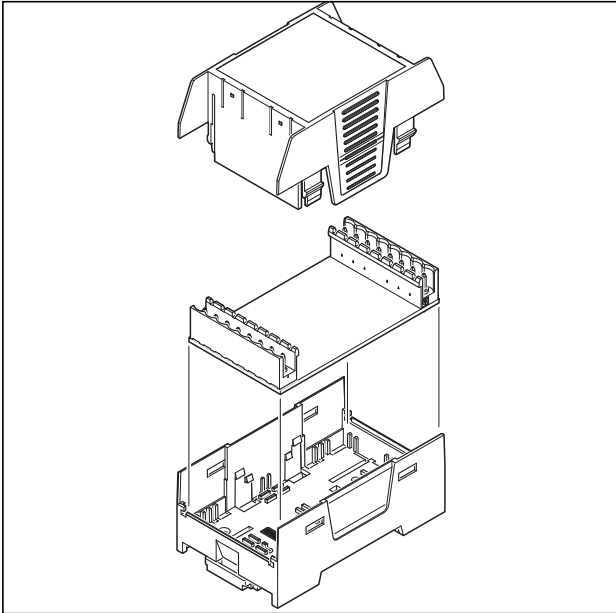


Figure 18 Base strip (example, 1758076)

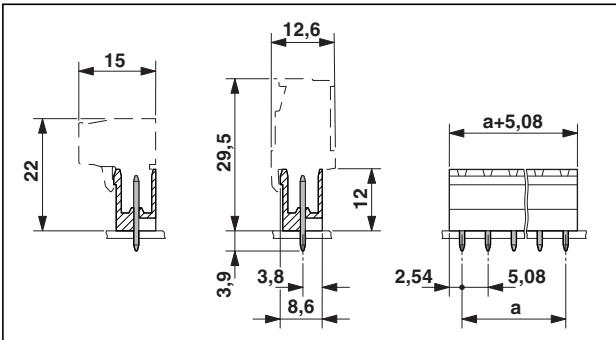


Figure 19 Dimensions of MSTBV 2,5/...-G-5,08

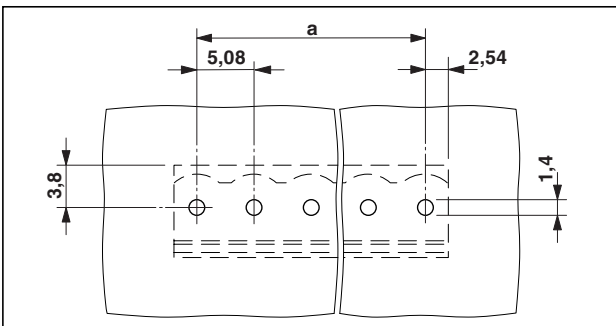


Figure 20 Drilling diagram of MSTBV 2,5/...-G-5,08

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

#### Dimensions

Length	8.6 mm
Pitch	5.08 mm
Pin dimensions	1 mm x 1 mm
Hole diameter	1.4 mm

#### Product

Product	Dimension 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)	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 standard	EN-VDE
Nominal current $I_N$	12 A
Maximum load current	12 A
Insulation material	PA
Flammability rating acc. to UL 94	V0

#### Suitable connectors

PCB connector with screw connection

MVSTBW 2,5/...-ST-5,08

MVSTBW 2,5/...-STEH-5,08

PCB connector with spring connection

FKCT 2,5/...-ST-5,08

#### Accessories

Coding tab for header pin	MSTB-BL, 1755477
Coding section	CR-MSTB, 1734401
Coding profile	CP-MSTB, 1734634

#### 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.

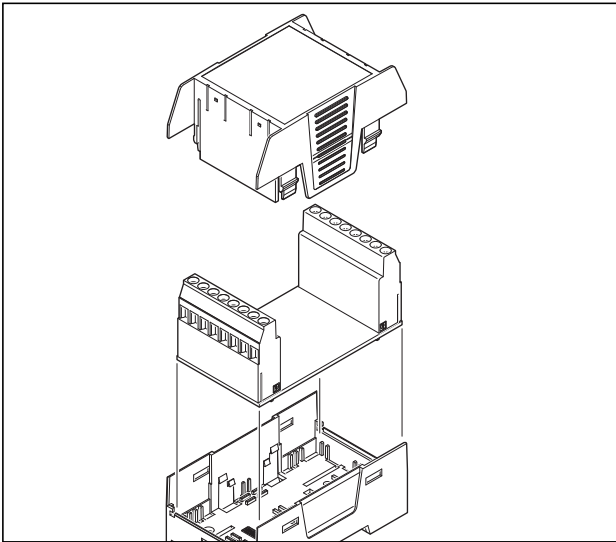


Figure 21 PCB terminal block base (example, 1703283)

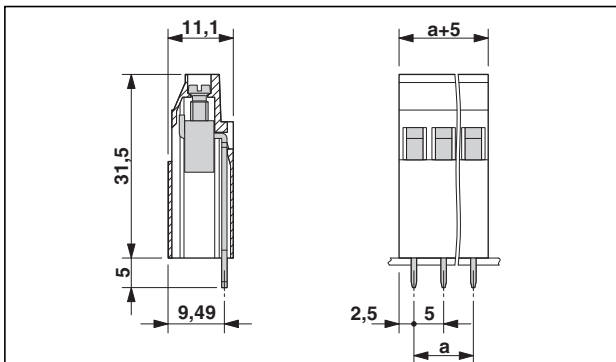


Figure 22 Dimensions of MKKDSH 3/...

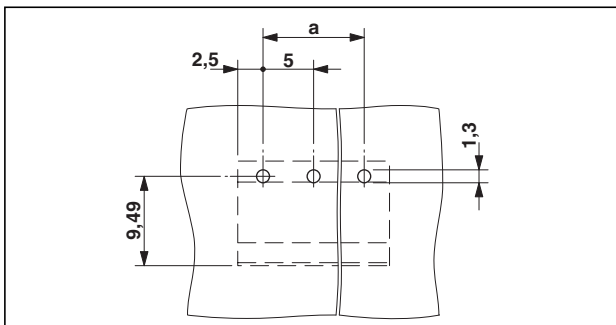


Figure 23 Drilling diagram of MKKDSH 3/...

#### MKKDSH 3/...

##### Dimensions

Length	11.1 mm
Pitch	5 mm
Number of positions	2
Pin dimensions	0.9 mm x 0.9 mm
Hole diameter	1.3 mm

Product		Dimension a	No. of pos.
MKKDSH 3/ 2	1721045	5 mm	2
MKKDSH 3/ 8	1703283	35 mm	8

##### Technical data

Insulation material group	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 standard	EN-VDE
Nominal current $I_N$	24 A
Nominal cross section	2.5 mm <sup>2</sup>
Maximum load current, with a 4 mm <sup>2</sup> conductor cross section	24 A
Insulation material	PA
Flammability rating according to UL 94	V0
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.

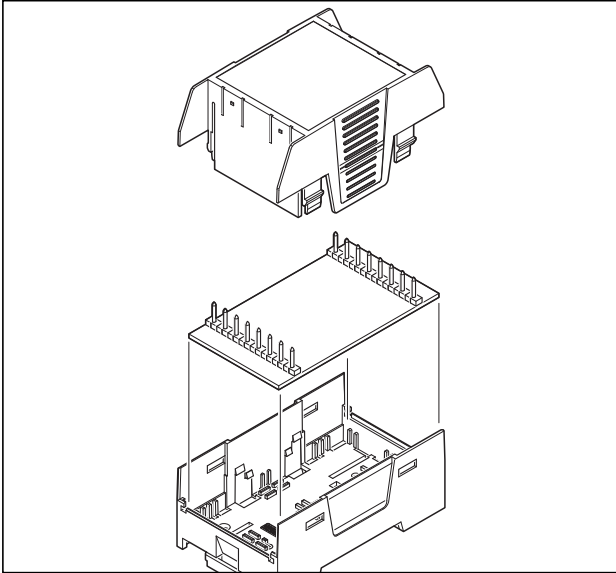


Figure 24 Base strip (example, 1933244)

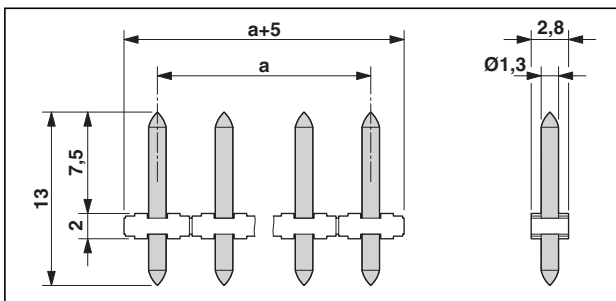


Figure 25 Dimensions PST 1,3/ ...-5,0

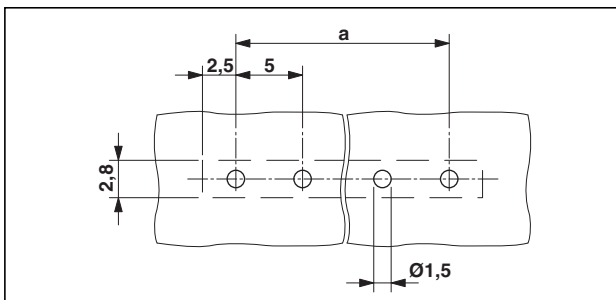


Figure 26 Drilling diagram PST 1,3/ ...-5,0

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

Dimensions	
Length	2.8 mm
Pitch	5 mm
Pin dimensions	1.3 mm
Hole diameter	1.5 mm

Product		Dimension a	No. of pos.
PST 1,3/ 4-5,0	1933202	15 mm	4
PST 1,3/ 6-5,0	1933228	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	IIIa
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 standard	EN-VDE
Nominal current $I_N$	12 A*
Maximum load current	12 A*
Insulation material	PA
Flammability rating according to UL 94	V0

\* Depends on the connector used; observe 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

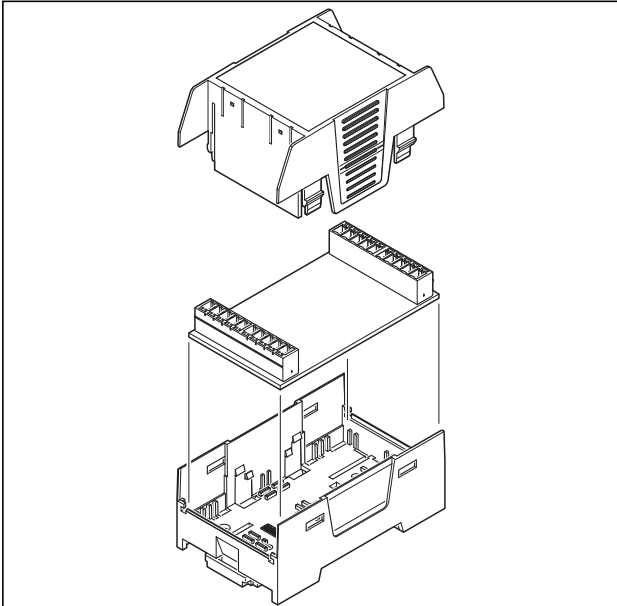


Figure 27 Base strip (example, 1803507)

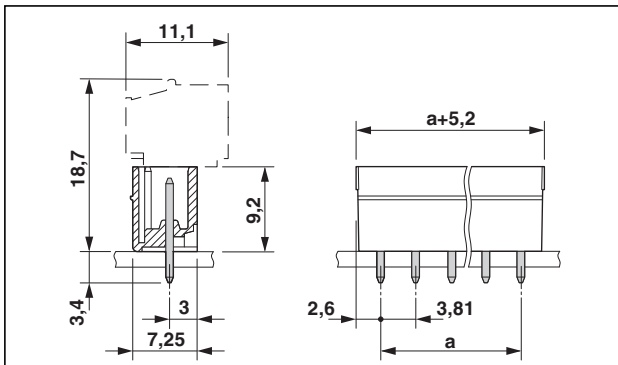


Figure 28 Dimensions PST 1,3/ ...-5,0

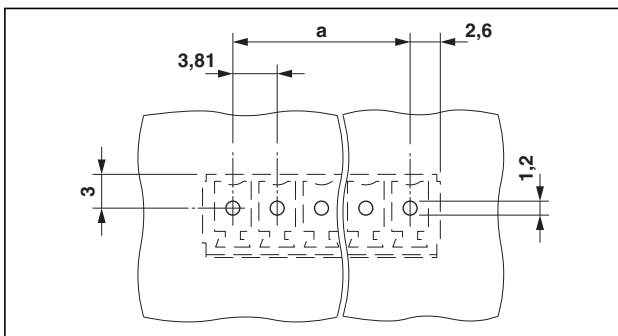


Figure 29 Drilling diagram PST 1,3/ ...-5,0

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

### Dimensions

Length	7.25 mm
Pitch	3.81 mm
Pin dimensions	0.8 mm x 0.8 mm
Hole diameter	1.2 mm

### Product

Product	Part No.	Dimension a	No. of pos.
MCV 1,5/ 5-G-3,81	1803455	15.24 mm	5
MCV 1,5/ 8-G-3,81	1803484	26.67 mm	8
MCV 1,5/10-G-3,81	1803507	34.29 mm	10
MCV 1,5/12-G-3,81	1803523	41.91 mm	12
MCV 1,5/16-G-3,81	1803565	57.15 mm	13

### Technical data

Insulation material group	IIIa
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)	160 V
Rated voltage (III/2)	160 V
Rated voltage (II/2)	250 V
Connection acc. to standard	EN-VDE
Nominal current $I_N$	8 A*
Maximum load current	8 A*
Insulation material	PBT
Flammability rating according to UL 94	V0

\* Observe derating

### Suitable connectors

PCB connector with screw connection

MCVR 1,5/... (e.g., 1827156)

PCB connector with spring connection

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.

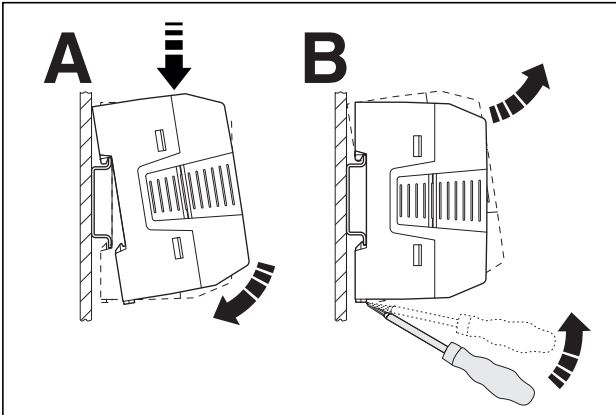


Figure 30 Snapping the housing onto the DIN rail (A), and removing it (B)

#### 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.

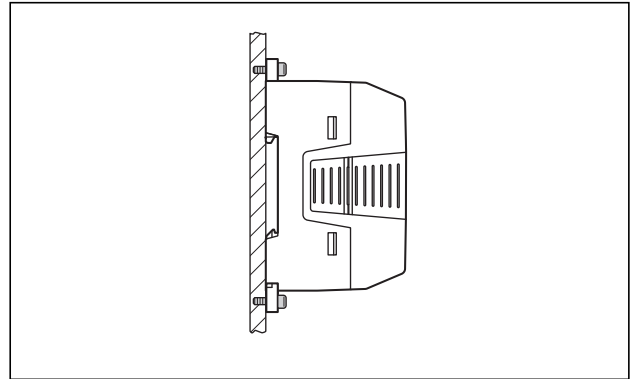


Figure 31 Wall mounting

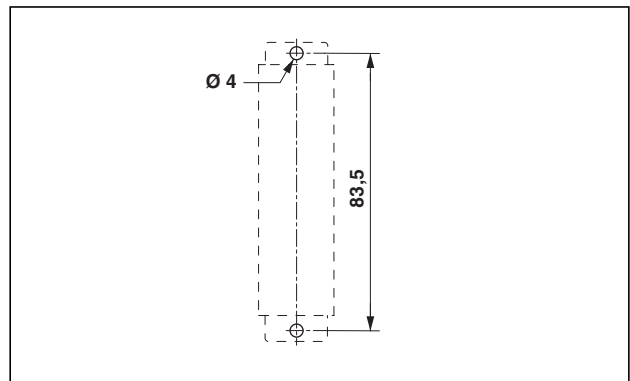


Figure 32 Drilling diagram for wall mounting

9.3 Mounting the housing cover

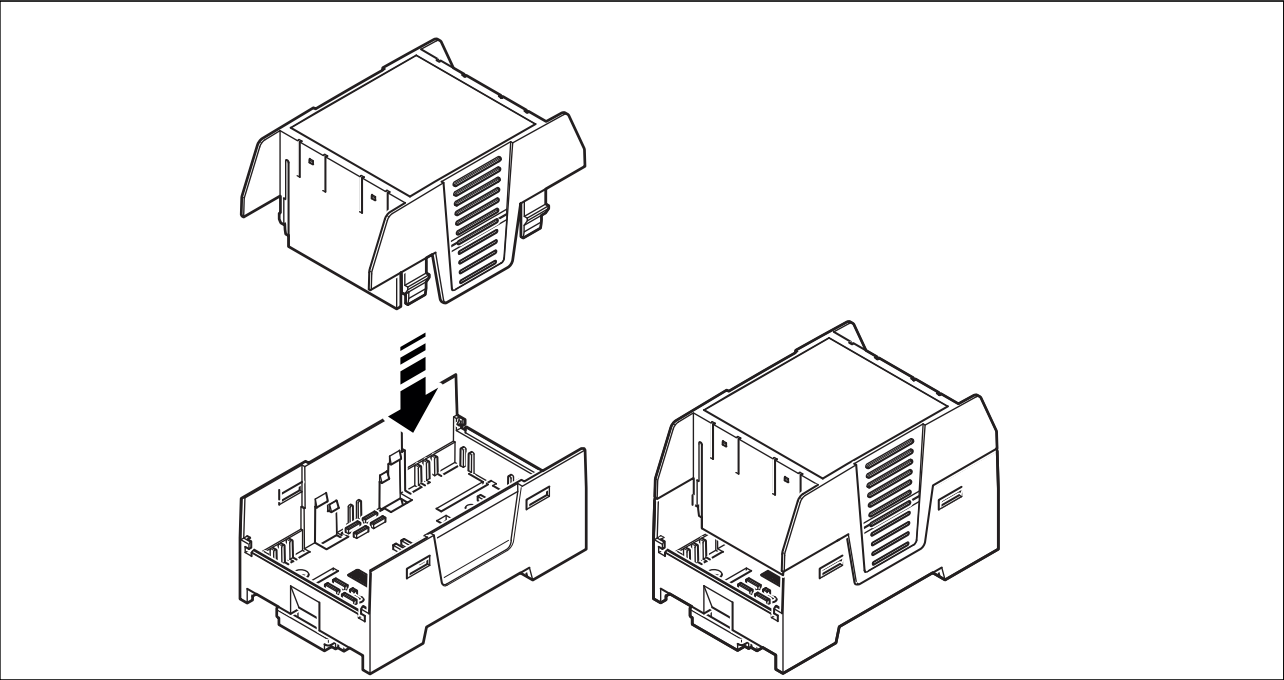


Figure 33 Snapping on the housing cover

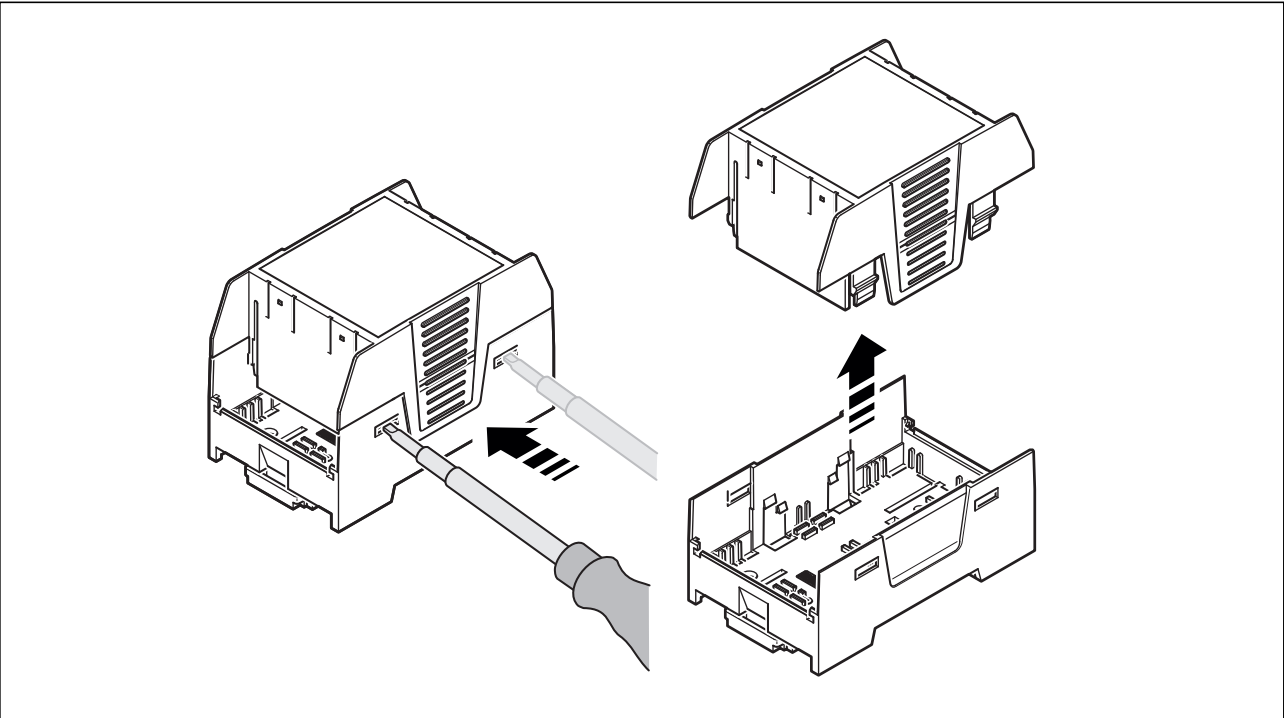


Figure 34 Releasing the housing cover

## 9.4 Mounting the filler plugs

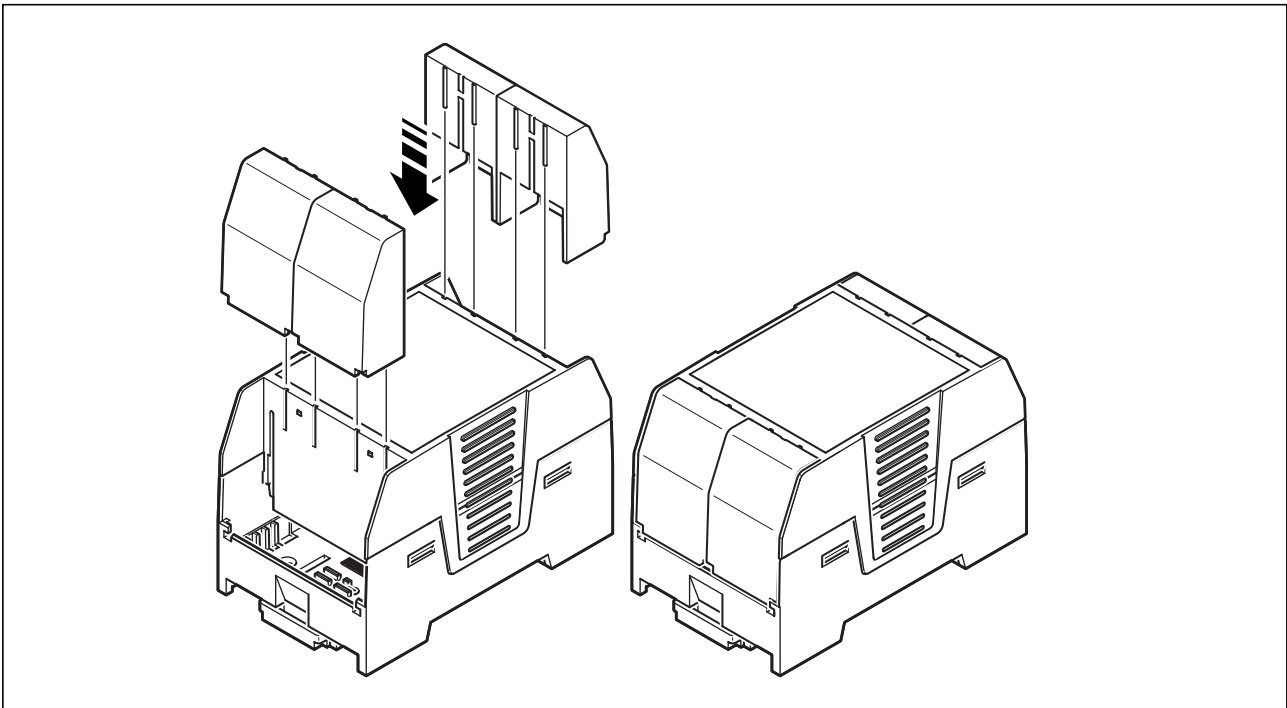


Figure 35 Mounting the filler plugs

### Accessories

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