

## Electronic housing - EH 52,5 F-B/ABS GY7035 - 2201816

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Component housing, Color: gray

#### **Product Features**

- ▼ 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)	24.0 g
Custom tariff number	85472000
Country of origin	India

#### Technical data

Product type	Component housing lower 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



## Electronic housing - EH 52,5 F-B/ABS GY7035 - 2201816

## Classifications

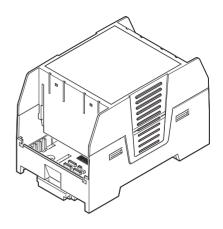
#### **ETIM**

ETIM 4.0	EC001031
ETIM 5.0	EC001031

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## 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.

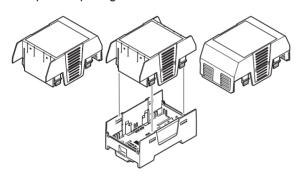


Figure 1 Housing covers and lower housing part

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.



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



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

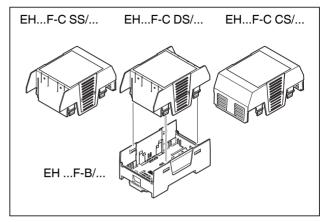


Figure 2 Overview (example, EH 45 F)

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## 3 Ordering data

#### **Electronics housing of width 22.5**

Description	Туре	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	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	2201452	10
Housing cover for PCB connection on two sides, width 22.5 mm			
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	2201456	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**

Liectronics nousing of width 55			
Description	Туре	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	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			
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

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#### **Electronics housing of width 45**

Description	Туре	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
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.
<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
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-C SS/ABS GY7035	2201822	10
Color: black, similar to RAL 9005	EH 52,5 F-C SS/ABS BK9005	2201823	10
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-C DS/ABS GY7035	2201829	10
Color: black, similar to RAL 9005	EH 52,5 F-C DS/ABS BK9005	2201828	10
Housing cover, 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

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#### **Electronics housing of width 67.5**

Description	Туре	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	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.
<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	EH 70 F-F-B/ABS GY7035	2201819	10
Color: black, similar to RAL 9005	EH 70 F-F-B/ABS BK9005	2201818	10
Housing cover for PCB connection on one side, width 70 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 70 F-C SS/ABS GY7035	2201825	10
Color: black, similar to RAL 9005	EH 70 F-C SS/ABS BK9005	2201824	10
Housing cover for PCB connection on two sides, width 70 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 70 F-C DS/ABS GY7035	2201830	10
Color: black, similar to RAL 9005	EH 70 F-C DS/ABS BK9005	2201831	10
Housing cover, closed, width 70 mm			
Material: ABS			
Color: light gray, similar to RAL 7035	EH 70 F-C CS/ABS GY7035	2201836	10
Color: black, similar to RAL 9005	EH 70 F-C CS/ABS BK9005	2201837	10

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#### **Electronics housing of width 90**

Description	Туре	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	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

ΗВ

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## 5 External dimensions

#### 5.1 Lower housing part with housing cover

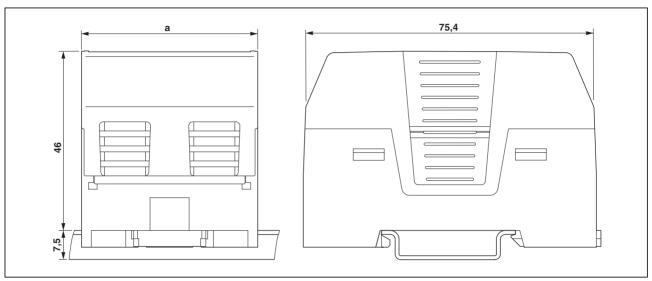


Figure 3 External dimensions of lower housing part with housing cover

<b>Dimensions for</b>	а
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

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

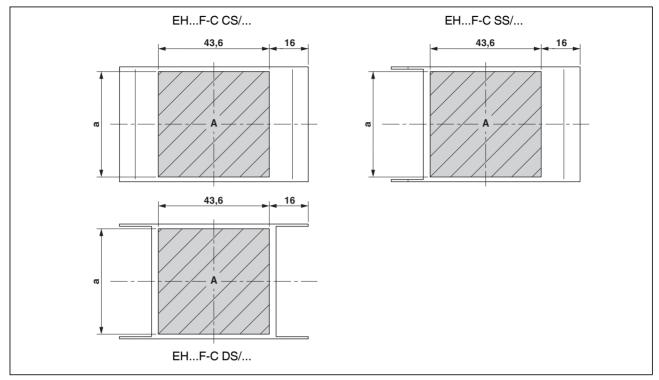


Figure 4 Maximum useable area (A) for breakouts or labels

<b>Dimensions for</b>	а
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

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## 6 PCB arrangement

#### 6.1 PCB, horizontal, L1 – L3

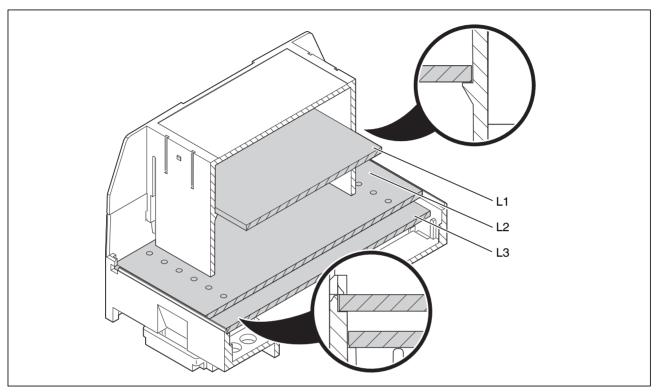


Figure 5 Horizontal installation options for the PCB

#### 6.2 Inner dimensions with L1 – L3

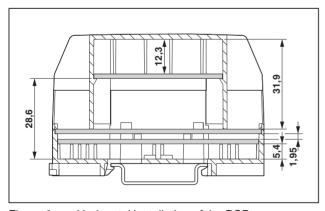


Figure 6 Horizontal installation of the PCB

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## 7 PCBs, dimensional drawings

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

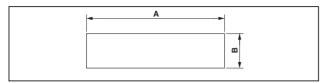


Figure 7 Dimensional drawing of horizontal PCB

	Dimensions for	Α	В
EH 22,5 F	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
EH 35 F	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
EH 45 F	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
EH 52,5 F	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
EH 67,5 F	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
EH 70 F	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
EH 90 F	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

<sup>\*</sup> for connection technology MKDS and PST

#### 7.2 Connection technology with housing cover DS

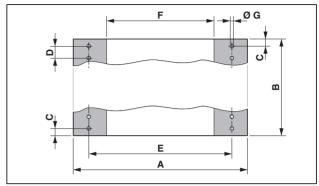


Figure 8 Connection technology with housing cover DS (top side)

Connection technology	for plug	D	E	F	G
MKDS 3/		5.08	60.80		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)	F 00	63.35	43.6	1.4
MSTBV 2,5 (5,08)	MSTB (5,08)	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	5 F	35 F	=	45	F	52,5	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		4.23		4.23		3.00	13	3.30	
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

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 $<sup>^{\</sup>dagger}$  for connection technology MKKDSH, MSTBV, MCV and PST

#### 7.3 Connection technology with housing cover SS

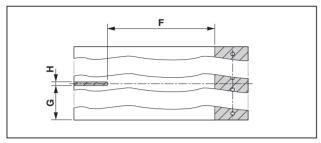


Figure 9 Connection technology with housing cover SS (top side)

# F F

Connection technology with housing cover CS

7.4

Figure 10 Connection technology with housing cover CS (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

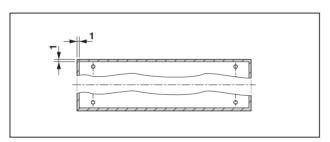


Figure 11 Lower side for all PCBs (locked areas)

Keep-out zone, no components at these positions

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<sup>\*</sup> Maximum no. of pos.

## 8 Connection technology

H = Ho	rizontal	GN = green	PCB connection technology						
	ber of	BK = Black	PCB term	inal block		Hea	der		
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/		
			See s	ection		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	F								
Н	6	GN	1701144	1721045		1753518	1758050		
		BK			1933228	1755286	1758788		
		GY7035					1703841		
	8	GN						1803484	
EH 45	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	) F								
Н	13	GN				1753657	1758128		
		BK			1933299				
	16	GN						1803565	
EH 90	F								
Н	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.

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

Assembly: soldering

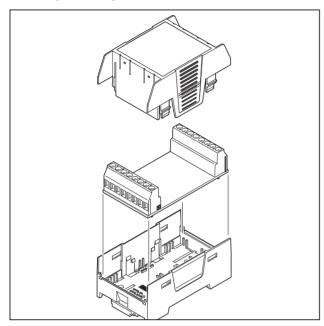


Figure 12 PCB terminal block base (example, 1712708)

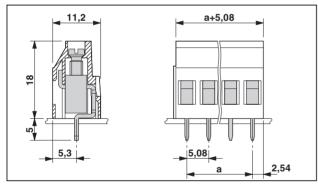


Figure 13 Dimensions of MKDS 3/...-5,08

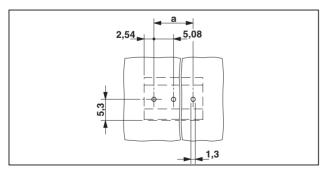


Figure 14 Drilling diagram of MKDS 3/...-5,08

#### 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		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

MKDS 3/ 12-5,08	55	.88 mm	12		
Technical data					
Insulation material g	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)			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	V0				
Solder pin surface	Sn				
Internal cylindrical ga	A3				
Stripping length	8 mm				
Screw thread	M3				
Tightening torque			0.5 Nm 0.6 Nm		

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

Contact surface: tin. Assembly: soldering

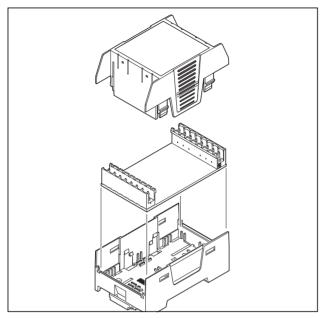


Figure 15 Base strip (example, 1753550)

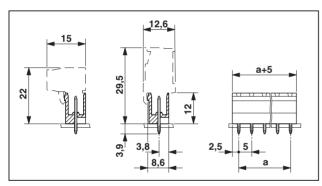


Figure 16 Dimensions of MSTBV 2,5/...-G

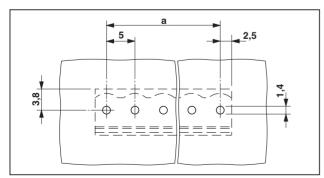


Figure 17 Drilling diagram of MSTBV 2,5/...-G

#### 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

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

Contact surface: tin. Assembly: soldering

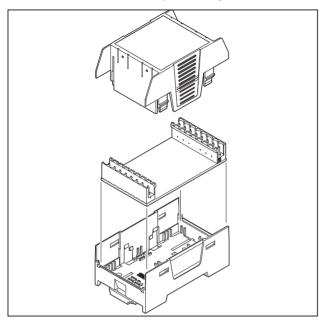


Figure 18 Base strip (example, 1758076)

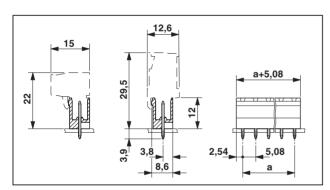


Figure 19 Dimensions of MSTBV 2,5/...-G-5,08

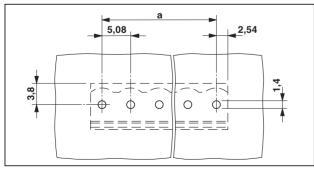


Figure 20 Drilling diagram of MSTBV 2,5/...-G-5,08

#### 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		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

170010	0 01.2011
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 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

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# 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.

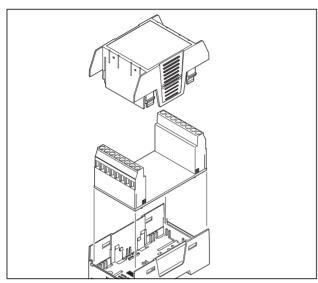


Figure 21 PCB terminal block base (example, 1703283)

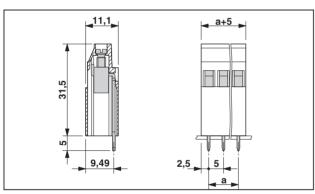


Figure 22 Dimensions of MKKDSH 3/...

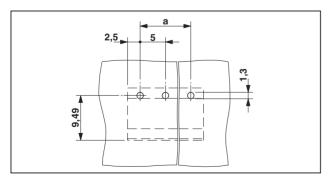


Figure 23 Drilling diagram of MKKDSH 3/...

#### 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		Dim	nension a	No. of pos.
MKKDSH 3/2	1721045	5 m	m	2
MKKDSH 3/8	1703283	35 r	mm	8
Technical data				
Insulation material	group		I	
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	3)		250 V	
Rated voltage (III/2	2)		400 V	
Rated voltage (II/2)		630 V		
Connection acc. to standard		EN-VDE		
Nominal current I <sub>N</sub>		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		

МЗ

0.5 Nm ... 0.6 Nm

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Screw thread

Tightening torque

#### 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.

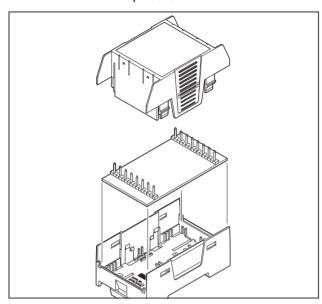


Figure 24 Base strip (example, 1933244)

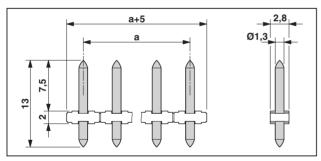


Figure 25 Dimensions PST 1,3/ ...-5,0

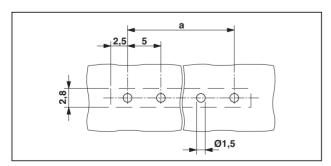


Figure 26 Drilling diagram PST 1,3/ ...-5,0

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

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

Product		Dimen- sion 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	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 standard	EN-VDE
Nominal current I <sub>N</sub>	12 A <sup>*</sup>
Maximum load current	12 A*
Insulation material	PA
Flammability rating according to UL 94	V0

<sup>\*</sup> Depends on the connector used; observe derating

#### **Suitable connectors**

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

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

Contact surface: tin. Assembly: soldering

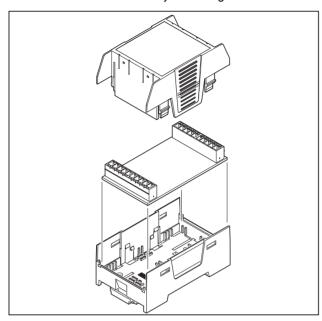


Figure 27 Base strip (example, 1803507)

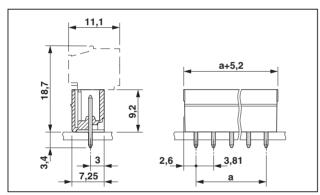


Figure 28 Dimensions PST 1,3/ ...-5,0

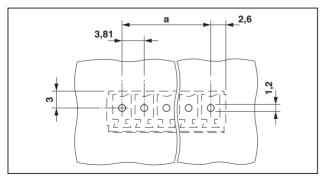


Figure 29 Drilling diagram PST 1,3/ ...-5,0

#### 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		Dimen- sion 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	Illa	
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 <sub>N</sub>	8 A*	
Maximum load current	8 A <sup>*</sup>	
Insulation material	PBT	
Flammability rating according to UL 94	V0	

<sup>\*</sup> 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

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#### 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.

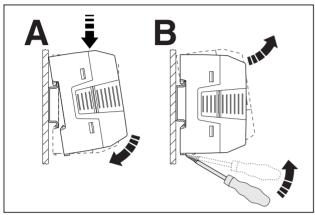


Figure 30 Snapping the housing onto the DIN rail (A), and removing it (B)

#### 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.

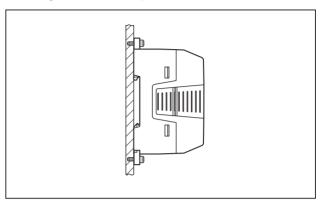


Figure 31 Wall mounting

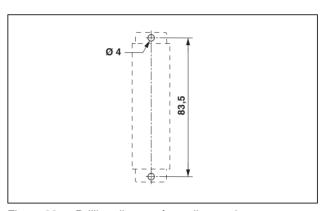


Figure 32 Drilling diagram for wall mounting

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#### 9.3 Mounting the housing cover

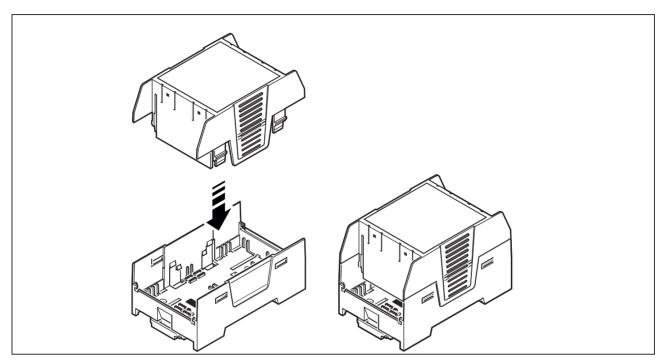


Figure 33 Snapping on the housing cover

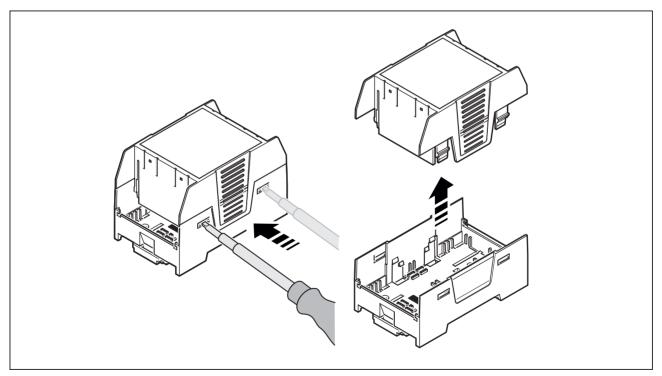


Figure 34 Releasing the housing cover

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#### 9.4 Mounting the filler plugs

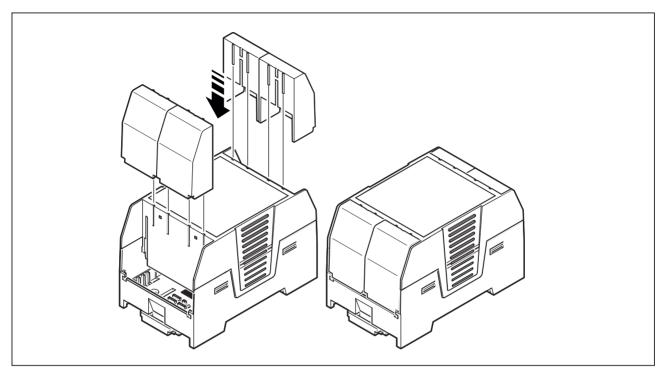


Figure 35 Mounting the filler plugs

#### **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