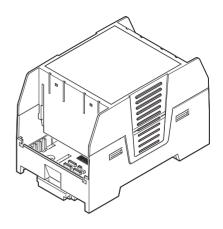
# Series EH...F electronics housings

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.

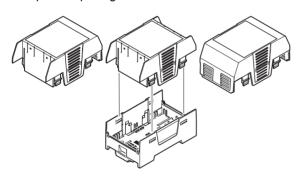


Figure 1 Housing covers and lower housing part

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.



Make sure you always use the latest documentation. It can be downloaded at <a href="https://phoenixcontact.net/products">phoenixcontact.net/products</a>.



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



# **Table of contents**

1	Description			
2	Overview of the EHF products2			
3	Ordering data3			
4	Mate	erial6		
5	Exte	ernal dimensions7		
	5.1	Lower housing part with housing cover7		
	5.2	Housing cover (breakouts and labeling field) 8		
6	PCE	3 arrangement9		
	6.1	PCB, horizontal, L1 – L39		
	6.2	Inner dimensions with L1 – L39		
7	PCE	s, dimensional drawings10		
	7.1	PCB dimensions, horizontal, L1 – L310		
	7.2	Connection technology with housing cover DS 10		
	7.3	Connection technology with housing cover SS 11		
	7.4	Connection technology with housing cover CS 11		
	7.5	Locked areas, lower side11		
8	Con	nection technology12		
	8.1	PCB terminal block base, soldered, pitch 5.08		
		for PCB L2		
	8.2	Plug-in base strip, pitch 5		
	0.0	for PCB L3		
	8.3	Plug-in base strip, pitch 5.08 for PCB L3		
	8.4	PCB terminal block base, soldered, pitch 5		
	0	for PCB L3		
	8.5	Pin strip, pitch 5 for PCB L317		
	8.6	Base strip, pitch 5.08 for PCB L318		
9	Mou	inting the housing19		
	9.1	Mounting on a DIN rail19		
	9.2	Mounting on a mounting surface19		
	9.3	Mounting the housing cover20		
	9.4	Mounting the filler plugs21		

# 2 Overview of the EH...F products

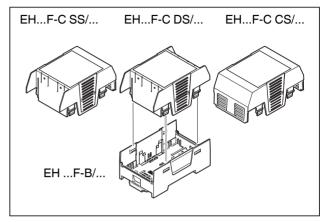


Figure 2 Overview (example, EH 45 F)

106461\_en\_00 PHOENIX CONTACT 2 / 21

# 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

106461\_en\_00 PHOENIX CONTACT 3 / 21

#### **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

106461\_en\_00 PHOENIX CONTACT 4 / 21

#### **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

106461\_en\_00 PHOENIX CONTACT 5 / 21

#### **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

106461\_en\_00 PHOENIX CONTACT 6 / 21

# 5 External dimensions

#### 5.1 Lower housing part with housing cover

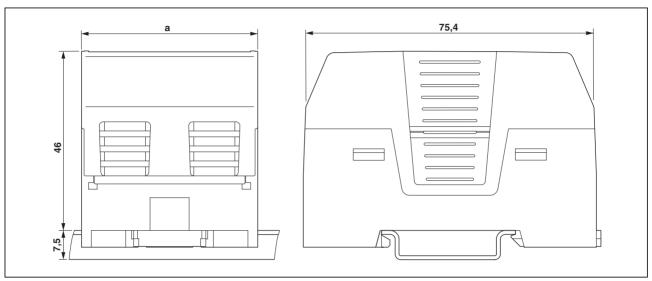


Figure 3 External dimensions of lower housing part with housing cover

<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

106461\_en\_00 PHOENIX CONTACT 7 / 21

# 5.2 Housing cover (breakouts and labeling field)

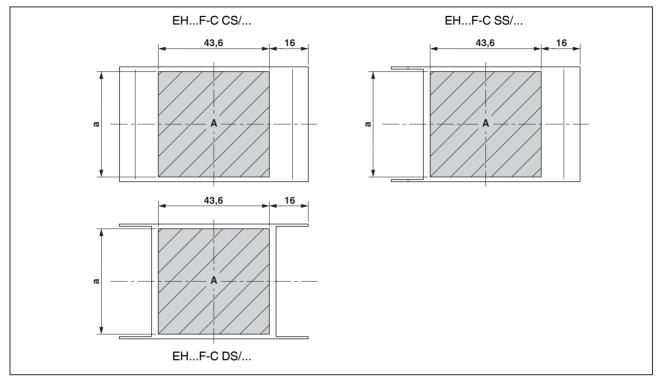


Figure 4 Maximum useable area (A) for breakouts or labels

<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

106461\_en\_00 PHOENIX CONTACT **8 / 21** 

# 6 PCB arrangement

# 6.1 PCB, horizontal, L1 – L3

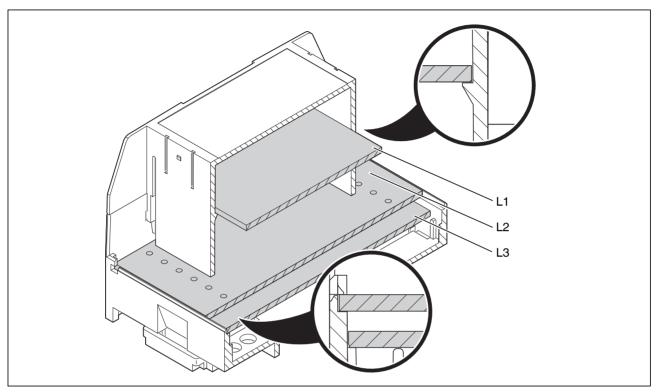


Figure 5 Horizontal installation options for the PCB

#### 6.2 Inner dimensions with L1 – L3

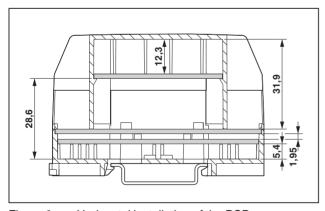


Figure 6 Horizontal installation of the PCB

106461\_en\_00 PHOENIX CONTACT 9 / 21

# 7 PCBs, dimensional drawings

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

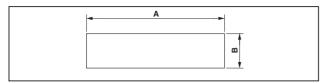


Figure 7 Dimensional drawing of horizontal PCB

	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

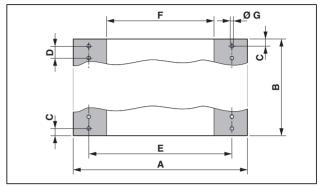


Figure 8 Connection technology with housing cover DS (top side)

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	43.6	1.4
MSTBV 2,5 (5,08)	MVSTBW (5,08)	F 00	63.35		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	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		4.25		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

106461\_en\_00 PHOENIX CONTACT 10 / 21

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

#### 7.3 Connection technology with housing cover SS

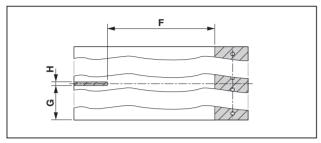


Figure 9 Connection technology with housing cover SS (top side)

# 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

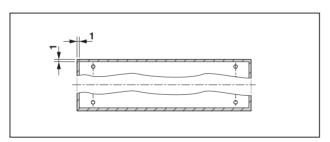


Figure 11 Lower side for all PCBs (locked areas)

Keep-out zone, no components at these positions

106461\_en\_00 PHOENIX CONTACT 11 / 21

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

# 8 Connection technology

Number of positions	-	orizontal	GN = green			PCB connecti	on technology		
Hitch 5.08			BK = Black	PCB term	inal block		Hea	der	
See section	pos	itions	GY7035 = Light gray	Pitch 5.08	Pitch 5	Pitch 5	Pitch 5	Pitch 5.08	Pitch 3.81
See section	1			MKDS	MKKDSH	PST 1,3/	MSTBV	MSTBV	MCV 1,5/
B.1	1						2.5/	2.5/	
EH 22,5 F  H	1			See s	section		See section		
H	1			8.1	8.4	8.5	8.2	8.3	8.6
BK	EH 22	2,5 F							
Temperature	Н	4		1712805	1721045		1753479	1758034	
EH 35 F  H				1729069		1933202		1758801	
H 6 GN 1701144 1721045 1753518 1758050 BK 1750351 1753518 1758050 1758788 GY7035 8 GN 1703841 1803484 EH 45 F  H 8 GN 1712708 1703283 1753550 1758076 BK 1871762 1933244 1755309 1759431 1803507 EH 52,5 F  H 9 GN 1707331 1753576 1758089 BK 1820742 12 GN 1803523 EH 67,5 F  H 12 GN 1714308 1933287 1753631 1758115 BK 1933286 16 GN 1803565 EH 70 F  H 13 GN 1714308 1933299 1753657 1758128 BK 1933299 1753657 1758128 EH 90 F  H 17 GN 1753738 1758160		1	GN						1803455
BK   GY7035   GY703	EH 3	5 F							
B   GY7035   1703841   1803484	Н	6		1701144	1721045				
B   GN						1933228	1755286		
EH 45 F         H       8       GN       1712708       1703283       1753550       1758076         BK       1871762       1933244       1755309       1759431         GY7035       10       GN       1803507         EH 52,5 F       1933257       1758089         BK       1933257       1820742         12       GN       1803523         EH 67,5 F       1758089       1820742         BK       1933257       1820742         BK       1933286       1758115         BK       1933286       1758128         EH 70 F       BK       1933299         H       13       GN       1803565         EH 90 F       H       17       GN       1753738       1758160								1703841	
H 8 GN 1712708 1703283 1753550 1758076  BK 1871762 1933244 1755309 1759431  10 GN 1803507  EH 52,5 F  H 9 GN 1707331 1753576 1758089  BK 1933257 1820742  12 GN 1714308 1933286 1753631 1758115  EH 67,5 F  H 12 GN 1714308 1933286  16 GN 1714308 1933286  EH 70 F  H 13 GN 1803565  EH 70 F  H 17 GN 1753738 1758160		1 -	GN						1803484
BK 1871762 1933244 1755309 1759431  GY7035 10 GN 1803507  EH 52,5 F  H 9 GN 1707331 1753576 1758089  BK 1933257 1820742 1803523  EH 67,5 F  H 12 GN 1714308 1753631 1758115  BK 1933286 1803565  EH 70 F  H 13 GN 1803565  EH 90 F  H 17 GN 1753738 1758160	EH 4	5 F							
GY7035	Н	8			1703283				
10   GN				1871762		1933244	1755309	1759431	
EH 52,5 F         H       9       GN       1707331       1753576       1758089         BK       1933257       1820742       1803523         EH 67,5 F       H       12       GN       1714308       1753631       1758115         BK       16       GN       1803565         EH 70 F       H       13       GN       1933299         16       GN       1933299       1803565         EH 90 F       H       17       GN       1758160									
H 9 GN 1707331 1753576 1758089 BK 1933257 1820742  12 GN 1803523  EH 67,5 F  H 12 GN 1714308 1753631 1758115 BK 1933286 1803565  EH 70 F  H 13 GN 1758128 1803565  EH 90 F  H 17 GN 1758160			GN						1803507
BK									
12   GN	Н	9		1707331			1753576		
EH 67,5 F  H 12 GN 1714308 1753631 1758115  BK 1933286 1803565  EH 70 F  H 13 GN 1753657 1758128  BK 1933299 1803565  EH 90 F  H 17 GN 1753738 1758160						1933257		1820742	
H 12 GN 1714308 1753631 1758115  BK 1933286 1803565  EH 70 F  H 13 GN 1753657 1758128  BK 1933299 1803565  EH 90 F  H 17 GN 1753738 1758160		1 '-	GN						1803523
BK 1933286 1803565  EH 70 F  H 13 GN 1753657 1758128  BK 1933299 1803565  EH 90 F  H 17 GN 1753738 1758160		•							
16   GN   1803565   EH 70 F	Н	12	-	1714308			1753631	1758115	
EH 70 F  H 13 GN  BK 1933299  16 GN  1803565  EH 90 F  H 17 GN  1753738 1758160						1933286			
H 13 GN 1753657 1758128 BK 1933299 1803565 EH 90 F H 17 GN 1758160			GN						1803565
BK 1933299 1803565  EH 90 F  H 17 GN 1753738 1758160									
16   GN   1803565     EH 90 F	Н	13	-				1753657	1758128	
EH 90 F H 17 GN 1753738 1758160						1933299			
H 17 GN 1758160		-	GN						1803565
BK 1935556	Н	17					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.

106461\_en\_00 PHOENIX CONTACT 12 / 21

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

Assembly: soldering

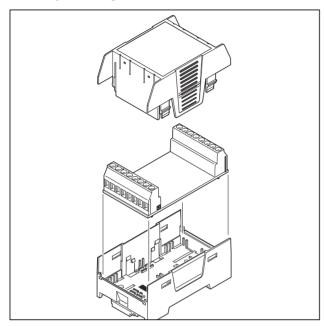


Figure 12 PCB terminal block base (example, 1712708)

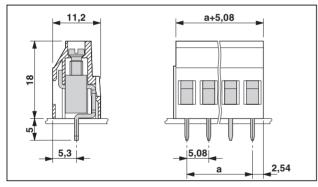


Figure 13 Dimensions of MKDS 3/...-5,08

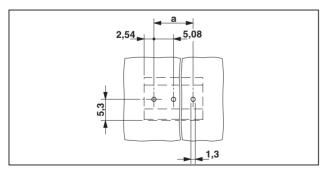


Figure 14 Drilling diagram of MKDS 3/...-5,08

#### 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	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	eccording to	)	V0		
Solder pin surface			Sn		
Internal cylindrical ga	A3				
Stripping length	8 mm				
Screw thread	M3				
Tightening torque			0.5 Nm 0	.6 Nm	

106461\_en\_00 PHOENIX CONTACT 13 / 21

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

Contact surface: tin. Assembly: soldering

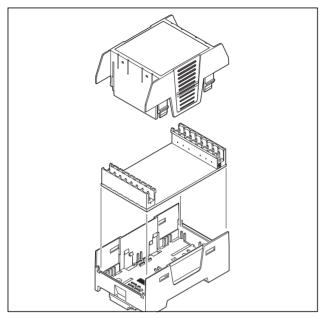


Figure 15 Base strip (example, 1753550)

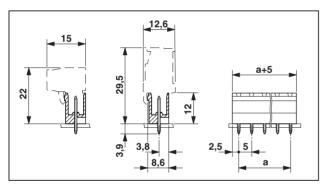


Figure 16 Dimensions of MSTBV 2,5/...-G

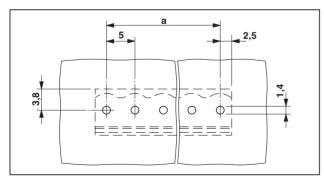


Figure 17 Drilling diagram of MSTBV 2,5/...-G

#### 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

106461\_en\_00 PHOENIX CONTACT 14 / 21

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

Contact surface: tin. Assembly: soldering

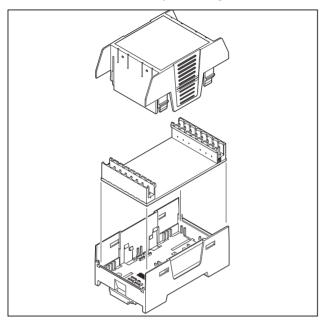


Figure 18 Base strip (example, 1758076)

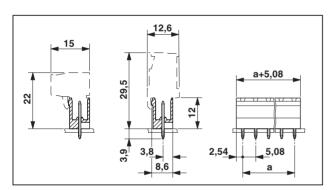


Figure 19 Dimensions of MSTBV 2,5/...-G-5,08

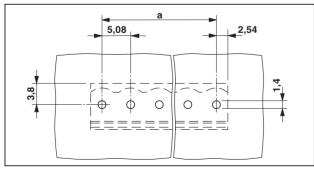


Figure 20 Drilling diagram of MSTBV 2,5/...-G-5,08

#### 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	
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

106461\_en\_00 PHOENIX CONTACT 15 / 21

# 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.

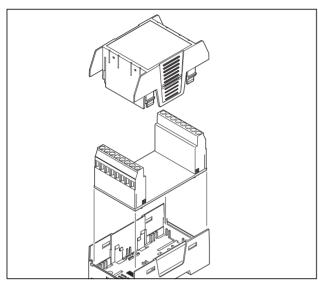


Figure 21 PCB terminal block base (example, 1703283)

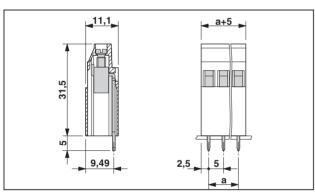


Figure 22 Dimensions of MKKDSH 3/...

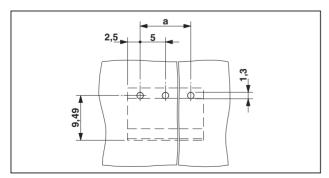


Figure 23 Drilling diagram of MKKDSH 3/...

#### 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 sec	tion		2.5 mm <sup>2</sup>	
Maximum load cur 4 mm <sup>2</sup> conductor of	,	n	24 A	
Insulation material		PA		
Flammability rating UL 94	according	to	V0	
Solder pin surface			Sn	
Internal cylindrical	gauge		A3	
Stripping length			7 mm	

МЗ

0.5 Nm ... 0.6 Nm

106461\_en\_00 PHOENIX CONTACT 16 / 21

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.

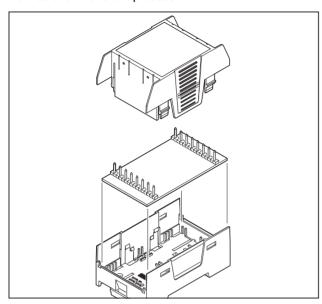


Figure 24 Base strip (example, 1933244)

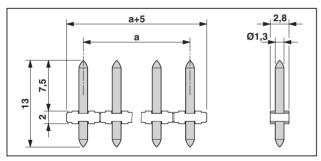


Figure 25 Dimensions PST 1,3/ ...-5,0

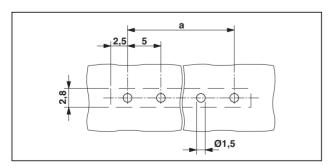


Figure 26 Drilling diagram PST 1,3/ ...-5,0

#### 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)

106461\_en\_00 PHOENIX CONTACT 17 / 21

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

Contact surface: tin. Assembly: soldering

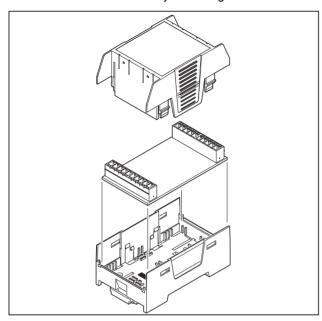


Figure 27 Base strip (example, 1803507)

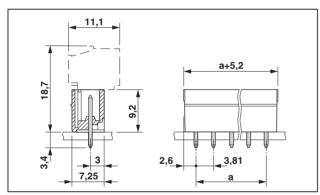


Figure 28 Dimensions PST 1,3/ ...-5,0

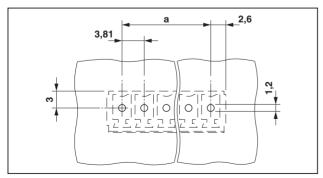


Figure 29 Drilling diagram PST 1,3/ ...-5,0

#### 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

106461\_en\_00 PHOENIX CONTACT 18 / 21

#### 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.

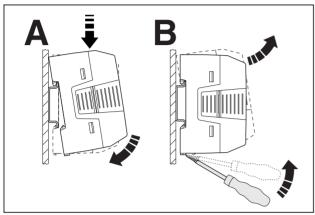


Figure 30 Snapping the housing onto the DIN rail (A), and removing it (B)

#### 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.

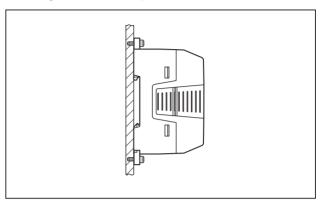


Figure 31 Wall mounting

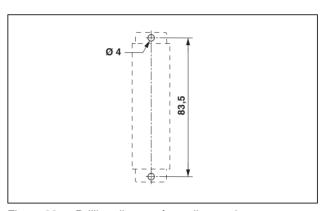


Figure 32 Drilling diagram for wall mounting

106461\_en\_00 PHOENIX CONTACT 19 / 21

# 9.3 Mounting the housing cover

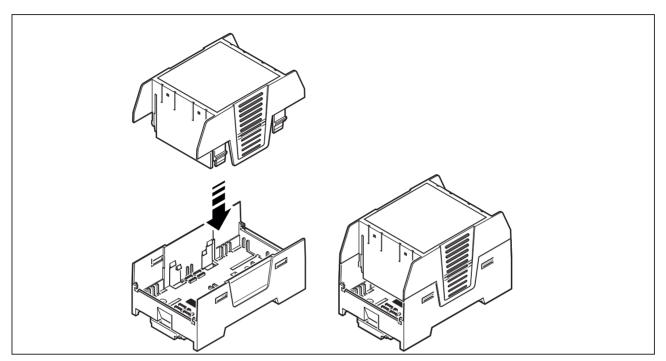


Figure 33 Snapping on the housing cover

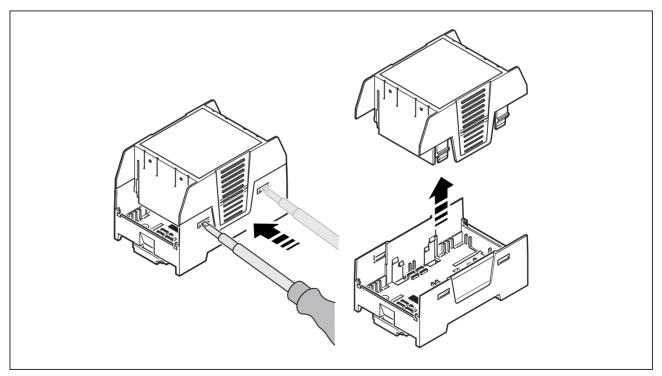


Figure 34 Releasing the housing cover

106461\_en\_00 PHOENIX CONTACT 20 / 21

#### 9.4 Mounting the filler plugs

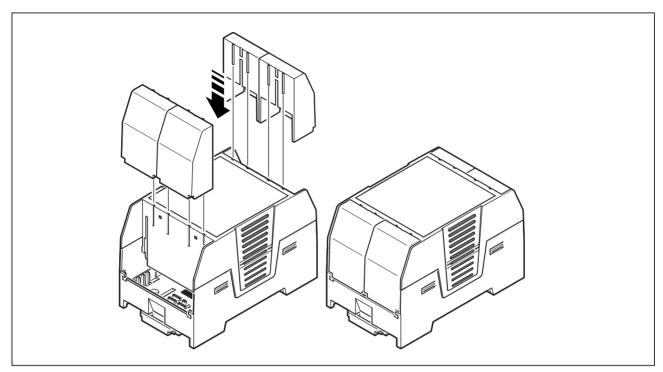


Figure 35 Mounting the filler plugs

#### **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 52,5 F-C DS/ABS GY7035 - 2201829

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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)	22.0 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

#### **ETIM**

ETIM 4.0	EC001031
ETIM 5.0	EC001031

#### Accessories

#### Accessories



# Housing cover - EH 52,5 F-C DS/ABS GY7035 - 2201829

#### 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 52,5 F-B/ABS BK9005 - 2201817



Component housing, Color: black

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



Component housing, Color: gray

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