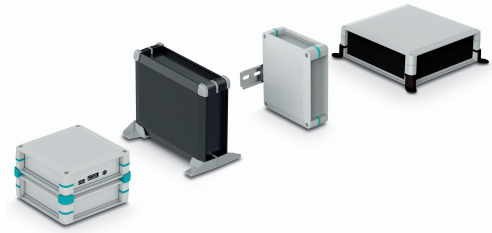


UCS

UCS series universal electronics housings



Data sheet
107750_en_02

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1 Description

The UCS universal electronics housings consist of two identical housing half-shells, four side panels, and color-coded corner inserts.

The corner inserts are available in two versions. Corner inserts with integrated screw boss enable a maximum PCB surface. You can position the PCB flexibly with the version featuring adhesive pads. Both versions are available as complete sets in four sizes, two depths, and two colors.

If the right combination is not available, you can select all the components individually and configure a custom housing solution.

The housings can be selected according to the form factor (e.g., ETX, ITX, etc.) as well as the dimensions of your PCB.

Complete sets with ready-machined side panels are available for the Raspberry Pi single-board computer.

Connection systems as well as display and control elements can be installed in the housings. We can incorporate the necessary recesses for you.

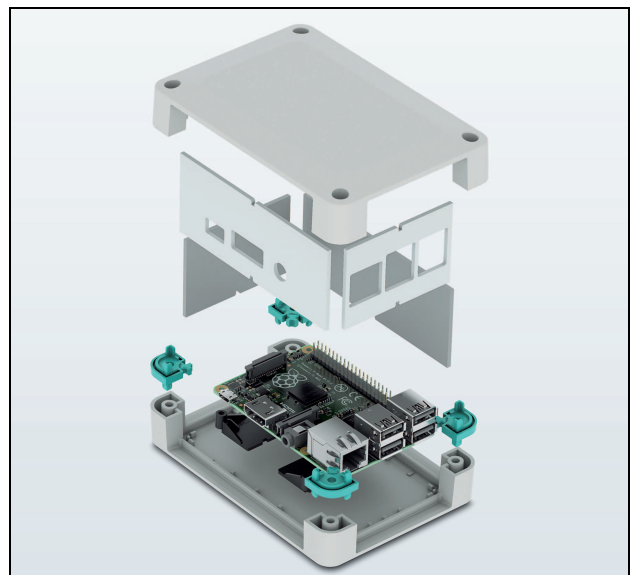


Figure 1 Housing components



A configurator for selecting the products is available at phoenixcontact.com, web code: #0512. You can use it to configure your housing. You will then receive 3D data, order lists, and PCB layouts.



Make sure you always use the latest documentation. It can be downloaded at phoenixcontact.net/products.



This document is valid for the products listed in the “Ordering data” section on [Page 4](#) onwards.

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2 Overview of UCS products

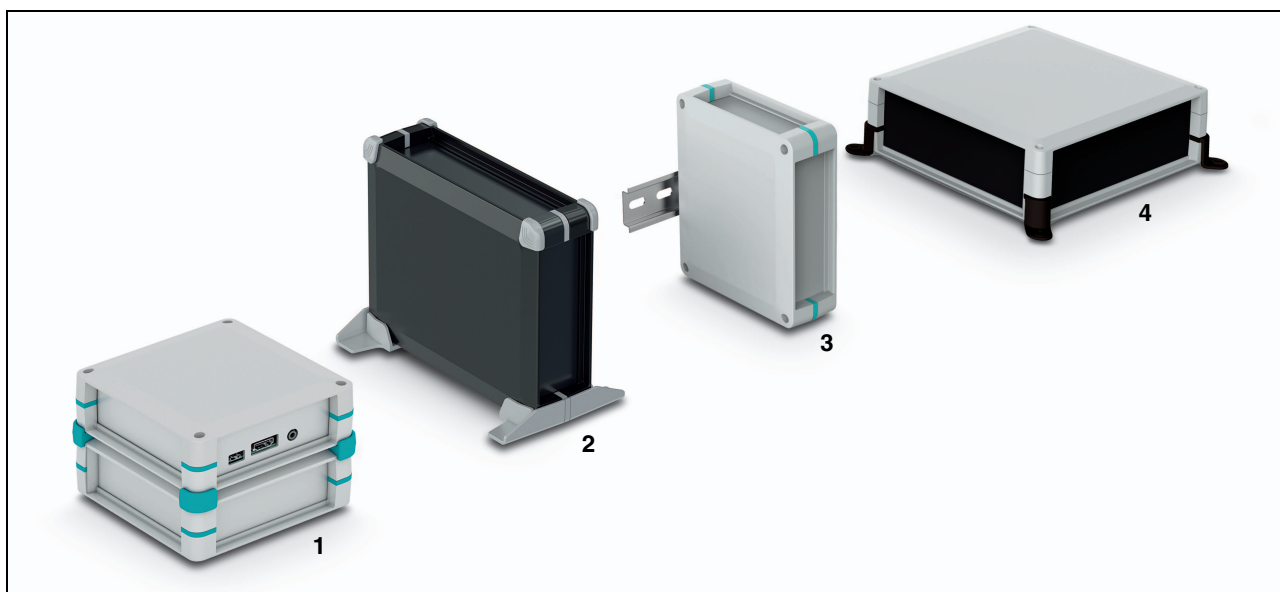


Figure 2 Overview

Accessories are available for setting up the housing.

- 1 **Stacking adapters** for connecting housings of the same size
- 2 **Corner guards**, anti-slip
Stand for upright housings, for the 47 mm version only
- 3 **DIN rail adapter** for these housing sizes (instead of a side panel):
 - 125 mm x 87 mm (for longer side panel only)
 - 145 mm x 125 mm
 - 195 mm x 145 mm (for shorter side panel only)
- 4 **Wall bracket**, special corner inserts with longitudinal hole for wall mounting



The complete product list for UCS modular component housings can be found at phoenixcontact.com, web code: #0854.

3 Ordering data



A configurator for selecting the products is available at phoenixcontact.com, web code: #0512. You can use it to configure your housing. You will then receive 3D data, order lists, and PCB layouts.

3.1 Order key

The designation of UCS series electronics housings consists of the following components:

Complete set

UCS	195	- 145	- F	- CCD	9005
	Length	Width	Depth	PCB mounting	Color
	125 mm	87 mm	F = 47 mm	CCD = corner inserts with screw boss	7035 = similar to RAL 7035
	145 mm	125 mm	H = 67 mm	GD = adhesive pad	9005 = similar to RAL 9005
	195 mm	145 mm		RPI = Raspberry Pi	
	237 mm	195 mm			
		237 mm			

Single parts

UCS	HAC	195	- F	- 9005
	Type	Length	Depth	Color
	CC = corner inserts	125 mm	F = 47 mm	7035 = similar to RAL 7035
	CCD = corner inserts with screw boss	145 mm	H = 67 mm	9005 = similar to RAL 9005
	CP = corner guards	195 mm		
	CS = stack corners	237 mm		
	GD = adhesive pad			
	HAC = height adapter			
	HH = half-shell			
	PED = stand			
	SF = screw set, flat housing			
	SH = screw set, tall housing			
	SW = side panel			
	WM-B = basic wall bracket			

3.2 Product list for complete sets

			UCS 125-87...		... RPI	UCS 145-125...		... RPI	UCS 195 -145...		UCS 237 -195...	
		RAL	47 mm	67 mm	47 mm	47 mm	67 mm	47 mm	47 mm	67 mm	47 mm	67 mm
Complete sets												
With PCB mounting, flexible, suitable for the following form factors	Raspberry Pi	7035 ¹	2203328	2203331	1019724			1019749				
	ETX					2203332	2203334					
	PC/104					2203332	2203334					
	Pico ITX					2203332	2203334					
	EPIC								2203336	2203338		
	Nano ITX								2203336	2203338		
	Mini DTX										2203341	2203344
	Mini ITX										2203341	2203344
	EBX										2203341	2203344
	Raspberry Pi	9005 ¹	2203329	2203330	1019723			1019720				
	ETX					2203333	2203335					
	PC/104					2203333	2203335					
	Pico ITX					2203333	2203335					
	EPIC								2203337	2203340		
	Nano ITX								2203337	2203340		
	Mini DTX										2203342	2203345
	Mini ITX										2203342	2203345
	EBX										2203342	2203345
With PCB mounting, fixed for maximum PCB dimensions	211.8 x 169.8 mm	7035 ¹									2203455	2203457
	169.8 x 120 mm								2203453	2203454		
	120 x 100 mm					2203447	2203450					
	100 x 62 mm		2203443	2203445								
	211.8 x 169.8 mm	9005 ¹									2203456	2203458
	169.8 x 120 mm								2203441	2203442		
	120 x 100 mm					2203448	2203451					
100 x 62 mm		2203444	2203446									
Wall bracket²	UCS WM-B 7035	7035 ¹	2203718	2203718	2203718	2203718	2203718	2203718	2203718	2203718	2203718	2203718
	UCS WM-B 9005	9005 ¹	2203719	2203719	2203719	2203719	2203719	2203719	2203719	2203719	2203719	2203719
	UCS WM-B 5018	5018 ¹	2203391	2203391	2203391	2203391	2203391	2203391	2203391	2203391	2203391	2203391
Stand	UCS PED 7035	7035 ¹	2203392		2203392	2203392		2203392	2203392		2203392	
	UCS PED 9005	9005 ¹	2203393		2203393	2203393		2203393	2203393		2203393	
	UCS PED 5018	5018 ¹	2203394		2203394	2203394		2203394	2203394		2203394	
Corner guards	UCS CP 7035	7035 ¹	2203346	2203346	2203346	2203346	2203346	2203346	2203346	2203346	2203346	2203346
	UCS CP 9005	9005 ¹	2203347	2203347	2203347	2203347	2203347	2203347	2203347	2203347	2203347	2203347
	UCS CP 5018	5018 ¹	2203348	2203348	2203348	2203348	2203348	2203348	2203348	2203348	2203348	2203348
Stacking adapters	UCS CS 7035	7035 ¹	2203720	2203720	2203720	2203720	2203720	2203720	2203720	2203720	2203720	2203720
	UCS CS 9005	9005 ¹	2203721	2203721	2203721	2203721	2203721	2203721	2203721	2203721	2203721	2203721
	UCS CS 5018	5018 ¹	1029039	1029039	1029039	1029039	1029039	1029039	1029039	1029039	1029039	1029039

¹ Color similar to the specified RAL color

² Only in conjunction with UCS GD 9005

3.3 Product list for single parts

UCS HH... housing half-shells				Size	...125-87...	...145-125...	...195-145...	...237-195...	
				RAL 7035 ¹	2203349	2203351	2203353	2203356	
				RAL 9005 ¹	2203350	2203352	2203354	2203357	
Custom configuration from single parts									
Side panel	Length	Material	Product						
Flat (47 mm)	87	RAL 7035 ¹	PC	UCS SW 87-F 7035	2203358	X			
	87	RAL 9005 ¹	PC	UCS SW 87-F 9005	2203359	X			
	87	Aluminum		UCS SW 87-F AL	2203360	X			
	125	RAL 7035 ¹	PC	UCS SW 125-F 7035	2203364	X	X		
	125	RAL 9005 ¹	PC	UCS SW 125-F 9005	2203365	X	X		
	125	Aluminum		UCS SW 125-F AL	2203366	X	X		
	145	RAL 7035 ¹	PC	UCS SW 145-F 7035	2203372		X	X	
	145	RAL 9005 ¹	PC	UCS SW 145-F 9005	2203373		X	X	
	145	Aluminum		UCS SW 145-F AL	2203374		X	X	
	195	RAL 7035 ¹	PC	UCS SW 195-F 7035	2203378			X	X
	195	RAL 9005 ¹	PC	UCS SW 195-F 9005	2203379			X	X
	195	Aluminum		UCS SW 195-F AL	2203380			X	X
	237	RAL 7035 ¹	PC	UCS SW 237-F 7035	2203385				X
	237	RAL 9005 ¹	PC	UCS SW 237-F 9005	2203386				X
237	Aluminum		UCS SW 237-F AL	2203387				X	
Tall (67 mm)	87	RAL 7035 ¹	PC	UCS SW 87-H 7035	2203361	X			
	87	RAL 9005 ¹	PC	UCS SW 87-H 9005	2203362	X			
	87	Aluminum		UCS SW 87-H AL	2203363	X			
	125	RAL 7035 ¹	PC	UCS SW 125-H 7035	2203367	X	X		
	125	RAL 9005 ¹	PC	UCS SW 125-H 9005	2203369	X	X		
	125	Aluminum		UCS SW 125-H AL	2203370	X	X		
	145	RAL 7035 ¹	PC	UCS SW 145-H 7035	2203375		X	X	
	145	RAL 9005 ¹	PC	UCS SW 145-H 9005	2203376		X	X	
	145	Aluminum		UCS SW 145-H AL	2203377		X	X	
	195	RAL 7035 ¹	PC	UCS SW 195-H 7035	2203381			X	X
	195	RAL 9005 ¹	PC	UCS SW 195-H 9005	2203382			X	X
	195	Aluminum		UCS SW 195-H AL	2203383			X	X
	237	RAL 7035 ¹	PC	UCS SW 237-H 7035	2203388				X
	237	RAL 9005 ¹	PC	UCS SW 237-H 9005	2203389				X
237	Aluminum		UCS SW 237-H AL	2203390				X	
Height adapter , required in conjunction with tall side panels, four pieces incl. four longer screws									
		RAL 7035 ¹		UCS HAC 7035	2203399	X	X	X	X
		RAL 9005 ¹		UCS HAC 9005	2203400	X	X	X	X
Corner inserts , 4 pieces in a PE bag									
		RAL 7035 ¹		UCS CC 7035	2203395	X	X	X	X
		RAL 9005 ¹		UCS CC 9005	2203396	X	X	X	X
		RAL 5018 ¹		UCS CC 5018	2203398	X	X	X	X
Corner inserts , with screw boss incl. four screws for PCB mounting, 4 pieces									
		RAL 7035 ¹		UCS CCD 7035	2203479	X	X	X	X
		RAL 9005 ¹		UCS CCD 9005	2203477	X	X	X	X
		RAL 5018 ¹		UCS CCD 5018	2203404	X	X	X	X
		RAL 5015 ¹		UCS CCD 5015	1056065	X	X	X	X
DIN rail adapter , for mounting on an NS 35 DIN rail									
		RAL 7035 ¹		UCS DIN 125-F 7035	2203838	X	X		
		RAL 7035 ¹		UCS DIN 125-H 7035	2203841	X	X		
		RAL 7035 ¹		UCS DIN 145-F 7035	2203839		X	X	
		RAL 7035 ¹		UCS DIN 145-H 7035	2203840		X	X	
Screw set , for housing half-shells, 4 pieces									
Flat (47 mm)				UCS SF 3,5X20	2203402	X	X	X	X
Tall (67 mm)				UCS SF 3,5X40	2203403	X	X	X	X
Adhesive pads , incl. screws for PCB mounting, 4 pieces									
				UCS GD 9005	2203401	X	X	X	X

¹ Color similar to the specified RAL color

4 Technical data

Housing design

Insulation material	
Side panels (UCS HH..., UCS SW..., UCS DIN...)	Polycarbonate PC
Fixing elements (UCS CC..., UCS GD..., UCS WM-B..., UCS PED...)	Polyamide PA
Corner guards and stacking adapters (UCS CS..., UCS CP...)	TPE-U

Flammability rating UL 94

Polycarbonate PC, polyamide PA	V0
TPE-U	V2

Degree of protection in accordance with DIN EN 60259 IP40

Power dissipation, at 20°C, horizontal mounting position

	F variant (47 mm deep)	H variant (67 mm deep)
UCS 125-87-F...	9.7 W	10.7 W
UCS 145-125-F...	11 W	13.5 W
UCS 195-145-F...	19 W	31.1 W
UCS 237-195-F...	31 W	41.9 W

Temperature range

Ambient temperature	
Storage/transport	-40°C ... +55°C (80% relative humidity)
Mounting	-5°C ... +100°C
Operation	-40°C ... +100°C (depending on power dissipation)

Mounting

	Housing	PCB
Tightening torque	1.2 Nm ... 1.4 Nm	0.4 Nm ... 0.5 Nm
Speed	500 rpm ... 1000 rpm	500 rpm ... 1000 rpm
Bit	T10	T7

PCB mounting

Affixing UCS GD... adhesive pads	
Temperature range	+18°C ... +30°C
Press-down force/press-down time	60 N/3 s
PCB surface, maximum per PCB, single side	6000 mm ² ... 35,800 mm ²
PCB thickness	0.8 mm ... 3 mm

Mounting, maximum weight

	UCS DIN...	UCS PED...	UCS WM-B...
UCS 125-87...	0.5 kg	0.5 kg	0.5 kg
UCS 145-125...	0.7 kg	0.7 kg	0.7 kg
UCS 195-145...	0.9 kg	0.9 kg	0.9 kg
UCS 237-195...	–	1.2 kg	1.2 kg
Recommended screws, for wall mounting	–	Ø 4 mm; S5 dowel	Ø 4 mm; S5 dowel

Tests¹

Vibration test ²	DIN EN 60068-2-6:2008-10
Shock ²	DIN EN 60068-2-27:2010-02
Thermostability (ball thrust test)	DIN EN 60695-10-2:2016-01
Test for assessing the risk of fire (glow wire)	DIN EN 60695-2-11:2014-11
Test for substances that would hinder coating with paint or varnish	VW PV 3.10.7:2005-02

¹ Detailed information can be found in the data sheets for the relevant product

² Additional storage over 1000 h at +85°C/85% relative humidity, to test the adhesive strength of UCS GD... adhesive pads

5 Housing dimensions

5.1 Outer and inner dimensions

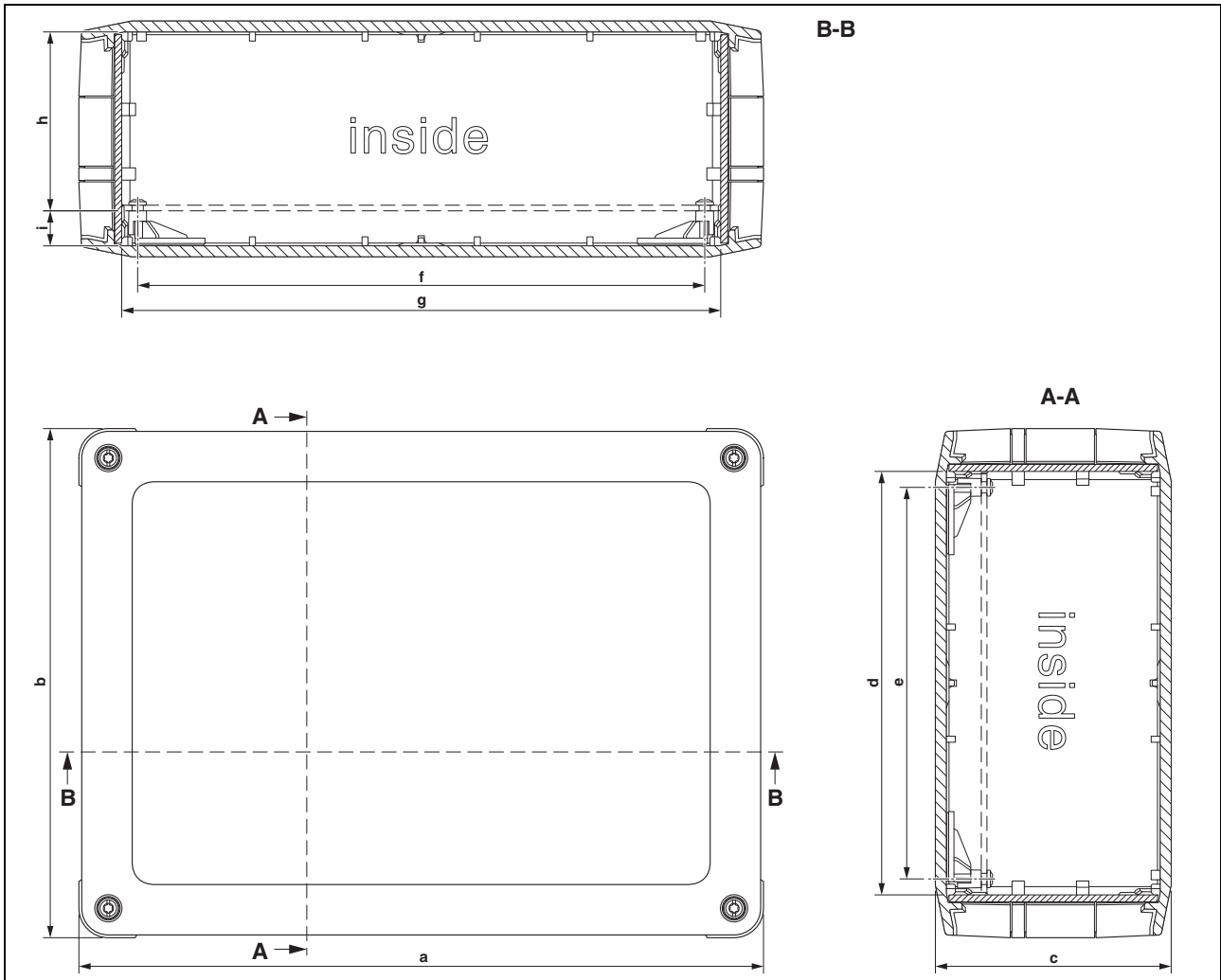


Figure 3 Housing dimensions

Outer dimensions			Inner dimensions					
a	b	c	Narrow side		Wide side		Height	
			d	e	f	g	h	i
125 mm	87 mm	47 mm	62.7 mm	≤ 57 mm	≤ 95 mm	100.7 mm	31 mm	10 mm
125 mm	87 mm	67 mm	62.7 mm	≤ 57 mm	≤ 95 mm	100.7 mm	51 mm	10 mm
145 mm	125 mm	47 mm	100.7 mm	≤ 95 mm	≤ 115 mm	120.7 mm	31 mm	10 mm
145 mm	125 mm	67 mm	100.7 mm	≤ 95 mm	≤ 115 mm	120.7 mm	51 mm	10 mm
195 mm	145 mm	47 mm	120.7 mm	≤ 115 mm	≤ 165 mm	170.7 mm	31 mm	10 mm
195 mm	145 mm	67 mm	120.7 mm	≤ 115 mm	≤ 165 mm	170.7 mm	51 mm	10 mm
237 mm	195 mm	47 mm	170.7 mm	≤ 163.2 mm	≤ 205 mm	212.7 mm	31 mm	10 mm
237 mm	195 mm	67 mm	170.7 mm	≤ 163.2 mm	≤ 205 mm	212.7 mm	51 mm	10 mm

5.2 Space for printing

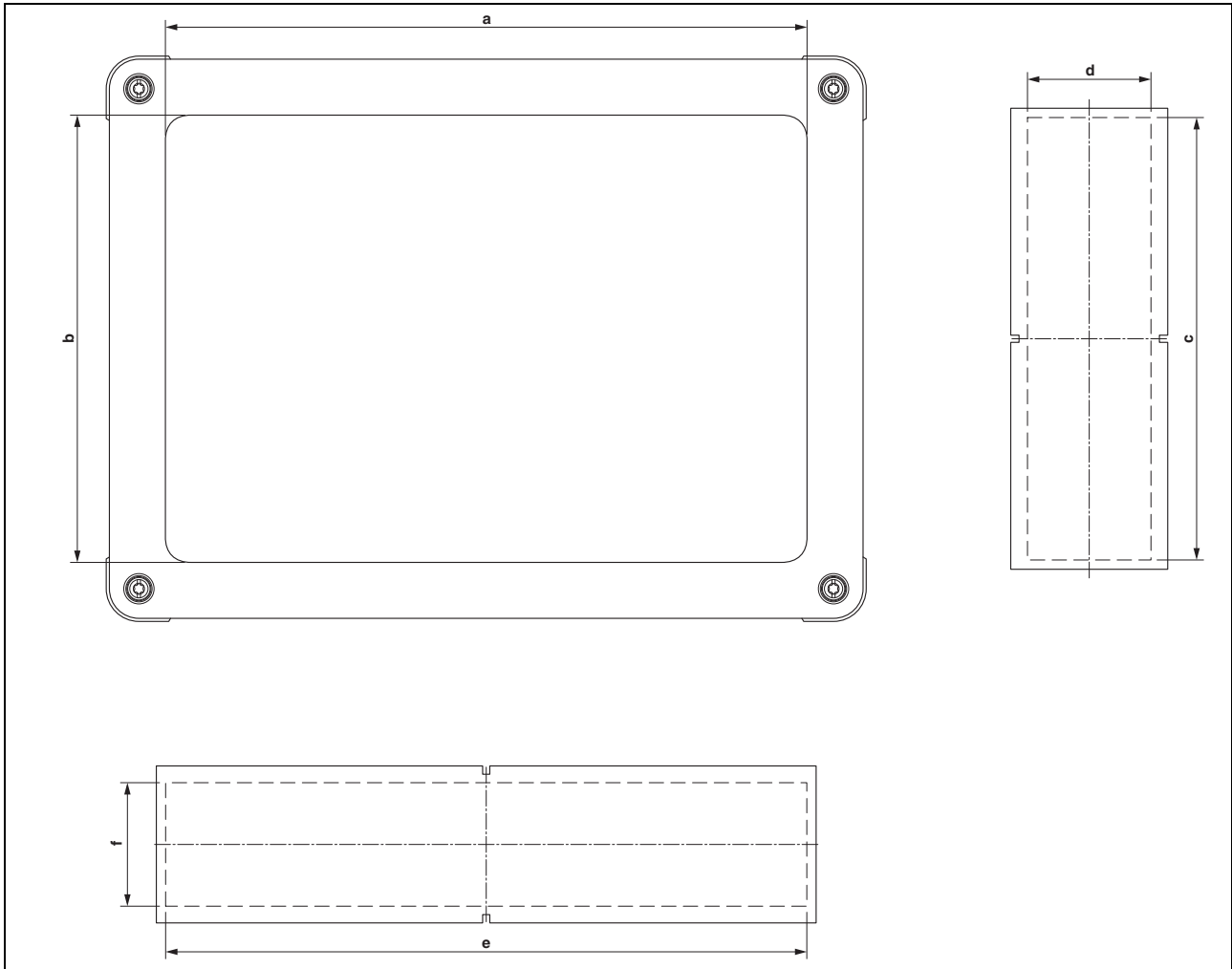


Figure 4 Maximum space for printing

This maximum amount of space available for printing is as follows.

Outer dimensions			Space for printing					
			Top		Narrow side		Wide side	
			a	b	c	d	e	f
125 mm	87 mm	47 mm	94.8 mm	56.8 mm	53.3 mm	31.1 mm	91.3 mm	31.1 mm
125 mm	87 mm	67 mm	94.8 mm	56.8 mm	53.3 mm	50.6 mm	91.3 mm	50.6 mm
145 mm	125 mm	47 mm	114.8 mm	94.8 mm	91.3 mm	31.1 mm	111.3 mm	31.1 mm
145 mm	125 mm	67 mm	114.8 mm	94.8 mm	91.3 mm	50.6 mm	111.3 mm	50.6 mm
195 mm	145 mm	47 mm	164.8 mm	114.8 mm	111.3 mm	31.1 mm	161.3 mm	31.1 mm
195 mm	145 mm	67 mm	164.8 mm	114.8 mm	111.3 mm	50.6 mm	161.3 mm	50.6 mm
237 mm	195 mm	47 mm	206.8 mm	164.8 mm	161.3 mm	31.1 mm	202.4 mm	31.1 mm
237 mm	195 mm	67 mm	206.8 mm	164.8 mm	161.3 mm	50.6 mm	202.4 mm	50.6 mm

5.3 Space for cutouts

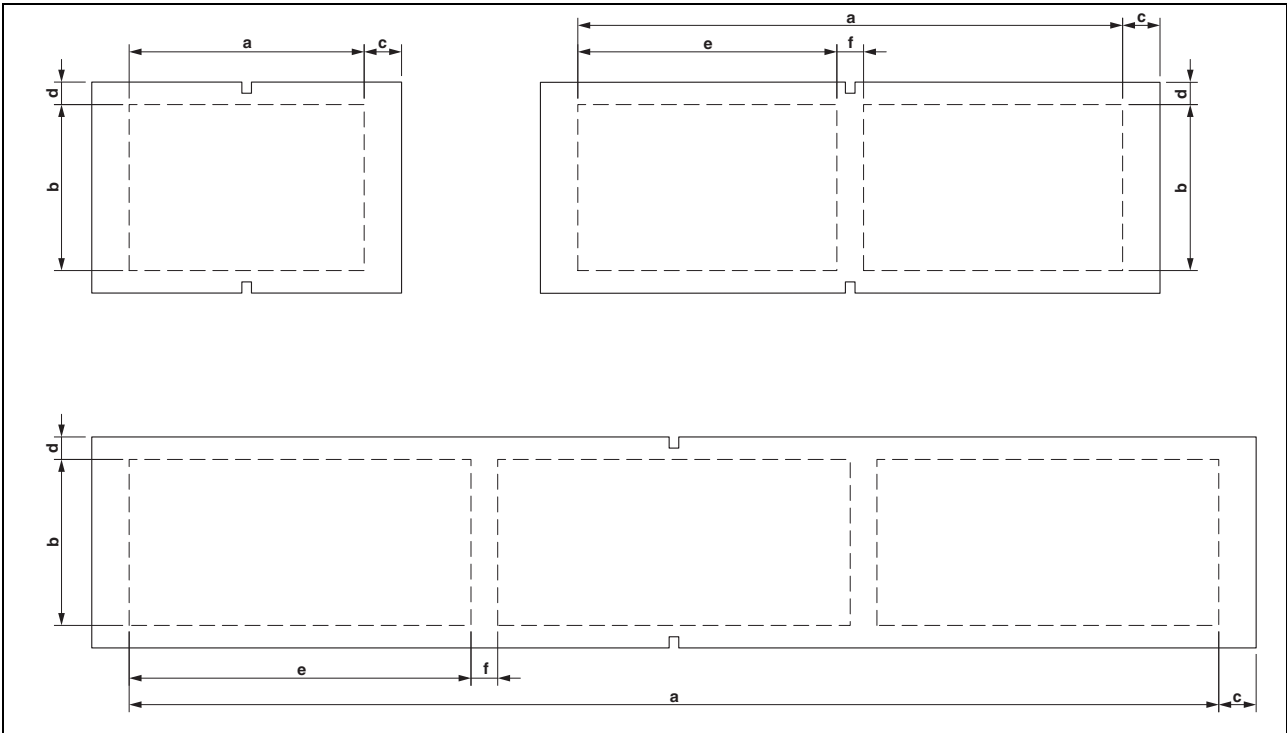


Figure 5 Maximum space for cutouts

In order to absorb the forces produced during milling, segments must be provided for cutouts. When the cutout length is reduced significantly, the outer and middle segments can

be made thinner. This applies for all side panel variants (UCS SW... and UCS SW...AL).

Housing side dimensions		Space for recesses		Minimum width of outer segment		Maximum length of cutout	Minimum width of middle segment	Number of middle segments
		a	b	c	d			
87 mm	47 mm	44 mm	31.1 mm	7 mm	4.2 mm	–	–	–
125 mm	47 mm	82 mm	31.1 mm	7 mm	4.2 mm	–	–	–
145 mm	47 mm	102 mm	31.1 mm	7 mm	4.2 mm	70 mm	5 mm	1
195 mm	47 mm	152 mm	31.1 mm	7 mm	4.2 mm	73.5 mm	5 mm	1
237 mm	47 mm	194 mm	31.1 mm	7 mm	4.2 mm	70 mm	5 mm	2
87 mm	67 mm	38 mm	39.4 mm	10 mm	10 mm	–	–	–
125 mm	67 mm	76 mm	39.4 mm	10 mm	10 mm	–	–	–
145 mm	67 mm	96 mm	39.4 mm	10 mm	10 mm	70 mm	10 mm	1
195 mm	67 mm	146 mm	39.4 mm	10 mm	10 mm	70 mm	10 mm	1
237 mm	67 mm	188 mm	39.4 mm	10 mm	10 mm	70 mm	10 mm	2

5.4 PCB dimensions

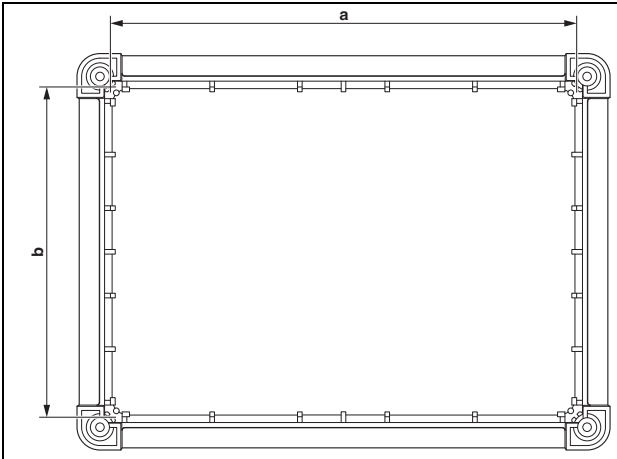


Figure 6 Maximum assembly area

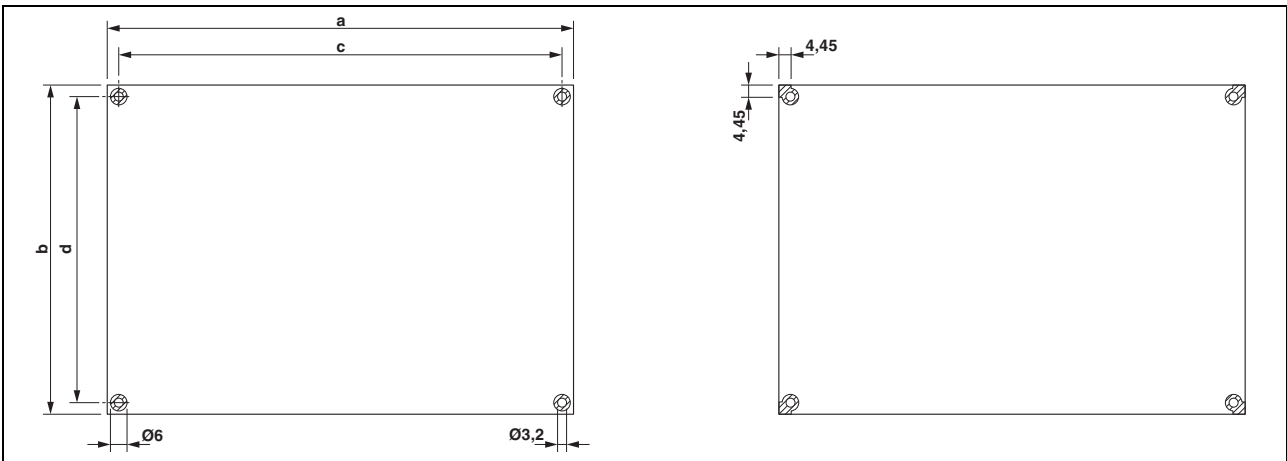



Figure 7 Maximum PCB dimensions

For housing		Maximum assembly area			Distance between fixing holes		PCB thickness
		a	b		c	d	
125	87	100 mm	62 mm	6000 mm ²	91.6 mm	53.6 mm	0.8 mm ... 3 mm
145	125	120 mm	100 mm	12,000 mm ²	111.6 mm	91.6 mm	0.8 mm ... 3 mm
195	145	170 mm	120 mm	20,400 mm ²	161.6 mm	111.6 mm	0.8 mm ... 3 mm
237	195	212 mm	170 mm	36,040 mm ²	203.6 mm	161.6 mm	0.8 mm ... 3 mm

 Keep-out zone, no components at these positions

6 Mounting the housing

6.1 Mounting PCBs

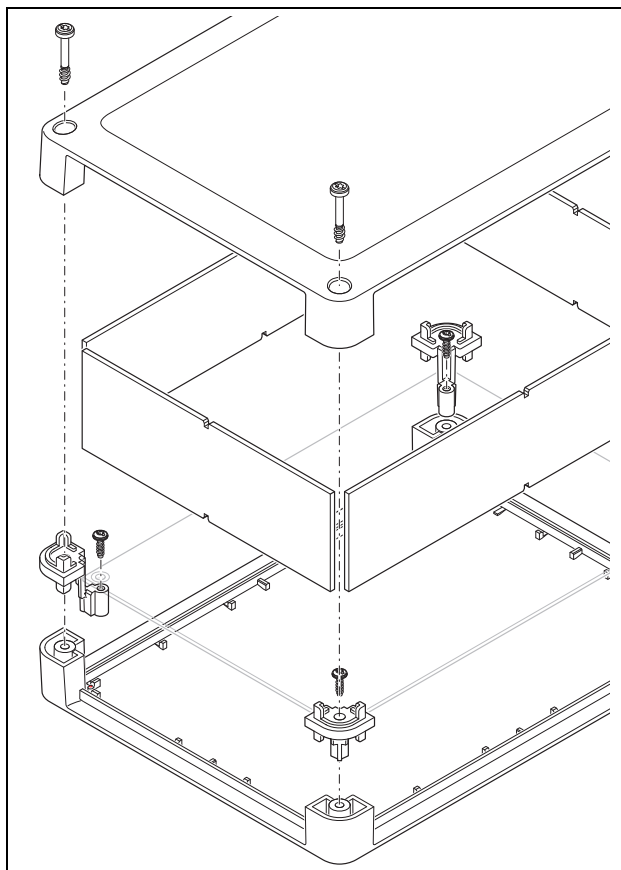


Figure 8 Mounting the housing (with UCS CCD...)

- Insert the four corner inserts into the lower part of the housing half-shells.
 - Corner inserts with screw boss for PCB mounting (UCS CCD...)
 - Corner inserts without screw boss for PCB mounting (UCS CC...)
- Insert the side panels and the PCBs. The sequence depends on how the connections are routed outwards. The inside of the side panels is marked "Inside".
- Screw the PCBs into the UCS CCD... corner inserts or the UCS GD adhesive pads with 0.4 Nm ... 0.5 Nm. Only use the T7 Torx screws provided for this. We recommend a torque screwdriver with a T7 bit (500 rpm ... 1000 rpm).

6.2 Screw on the housing

Use the self-tapping T10 Torx screws provided to attach the housing. We recommend a torque screwdriver with a T10 bit (500 rpm ... 1000 rpm).

The screws are designed in such a way that they cannot be lost when the cover is released.



NOTE: The housing can be opened a maximum of 10 times.

- Screw the upper part of the housing half-shells on with 1.2 Nm ... 1.4 Nm.

6.3 Inserting height adapters

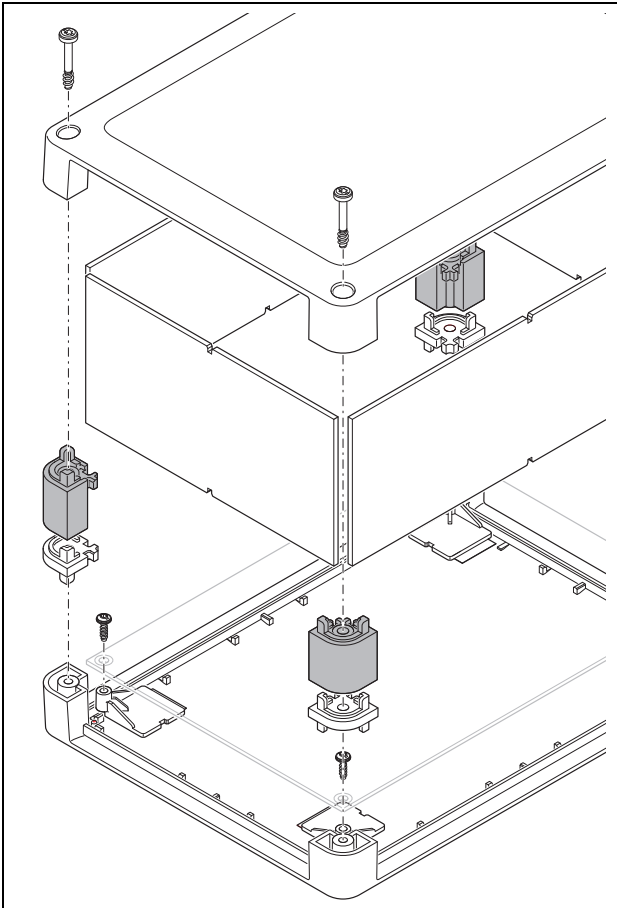


Figure 9 UCS HAC... height adapters

- When using tall housings, insert the UCS HAC... height adapter in the correct direction. The pins must point upwards.

6.4 Stacking adapters

You can connect two housings using the UCS CS... stacking adapter.

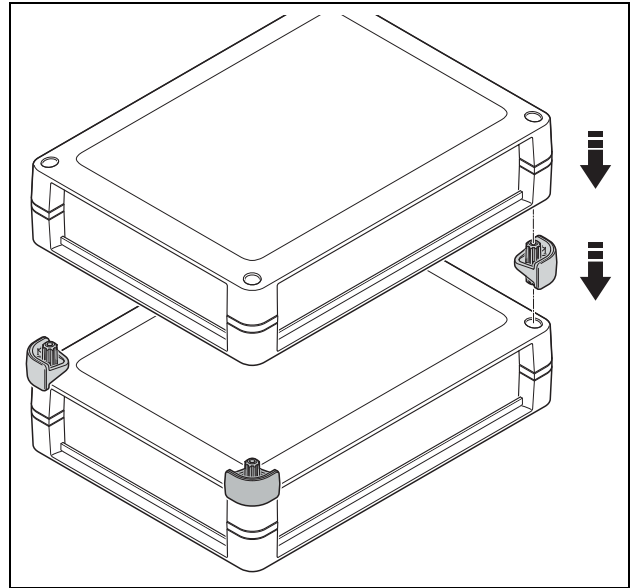


Figure 10 Mounting UCS CS... stacking adapters

- Snap the stacking adapter into the screw holes in the housing.



When using UCS CS... stacking adapters and UCS CP... corner guards, flammability rating UL 94 is reduced to V2.

6.5 Attaching adhesive pads

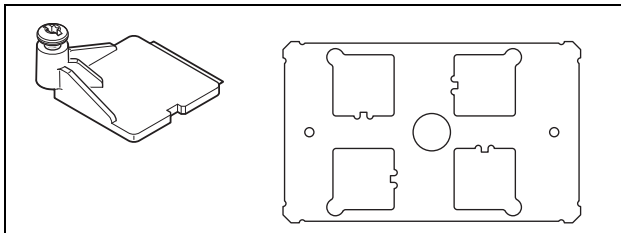


Figure 11 UCS GD... adhesive pad with adhesive template

- Make sure that the surface of the housing is clean, dry, and free from grease.
Temperature range: +18°C ... +30°C
- Attach the UCS GD... adhesive pads to the housing half-shell using the appropriate template.

- Press-down force: 60 N
- Press-down time: 3 s

We can produce adhesive templates for you on request.

Adhesive templates for PCBs with form factor can be found at phoenixcontact.net/products.



When using UCS CS... stacking adapters and UCS CP... corner guards, flammability rating UL 94 is reduced to V2.

6.6 Mounting corner guards

UCS CP... corner guards are available for protecting the housing against impact and providing an anti-slip function.

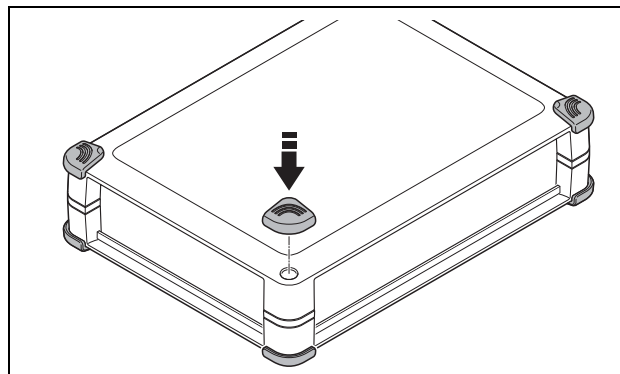


Figure 12 Mounting UCS CP... corner guards

- Snap the corner guards into the screw holes in the housing.



When using UCS CS... stacking adapters and UCS CP... corner guards, flammability rating UL 94 is reduced to V2.

6.7 Mounting the housing with Raspberry Pi

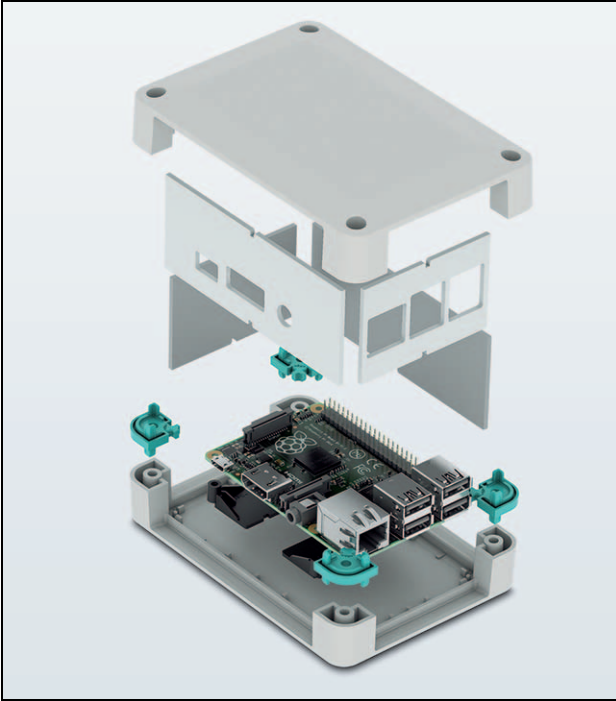


Figure 13 Mounting the housing with Raspberry Pi

Variants with ready-machined side panels are available for the Raspberry Pi single-board computer.

We recommend using the UCS TEMP...RPI B2/3 adhesive template to mount the single-board computer (see [“Attaching adhesive pads” on page 14](#)).

- Position the adhesive pads in a half-shell.
- Insert the UCS CC... corner inserts.
- Insert the side panels.
- Secure the single-board computer in place using the screws provided.
- Screw on the upper part of the half-shell.

7 Attaching the housing

7.1 Mounting the housing on a wall

The UCS WM-B... wall bracket is available for wall mounting

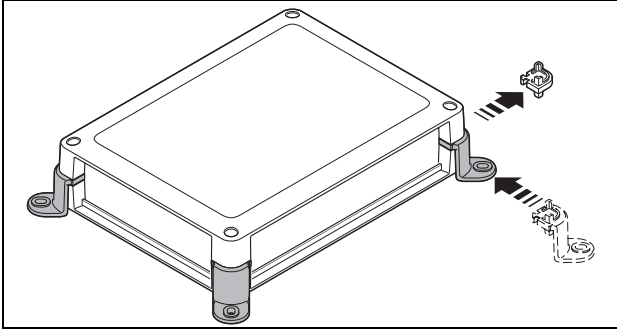


Figure 14 UCS WM-B... wall bracket

- Replace the corner inserts with corner inserts that have longitudinal holes.

They can only be used in conjunction with UCS GD... adhesive pads.

Recommended screws for wall mounting:
S5 dowel, screw \varnothing 4.0 mm



NOTE: Observe the maximum permissible total weight (see ["Technical data" on page 7](#)).

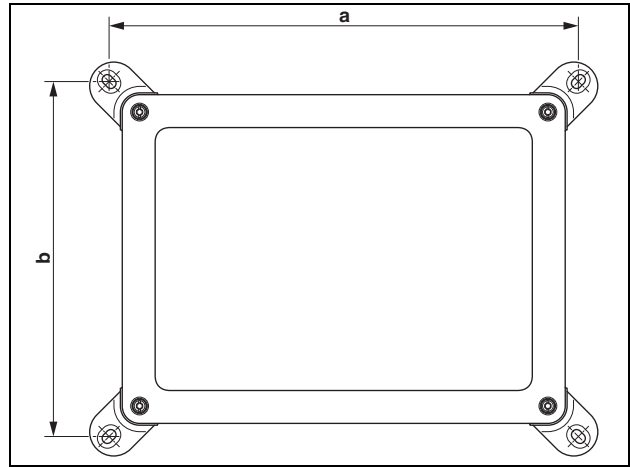


Figure 15 UCS WM-B... wall bracket, drilling diagram

For housing		Drill hole spacing	
		a	b
125	87	135	97
145	125	155	135
195	145	205	155
237	195	247	205

7.2 Mounting the stand

Snapping on the stand

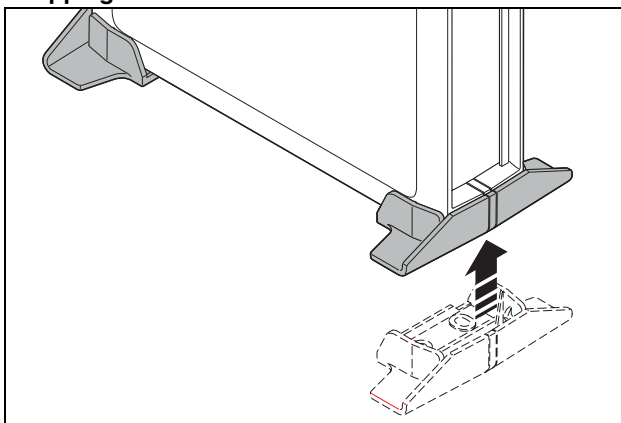


Figure 16 Snapping on the UCS PED... stand

- Snap the stand into the screw holes in the housing.

Removing the stand

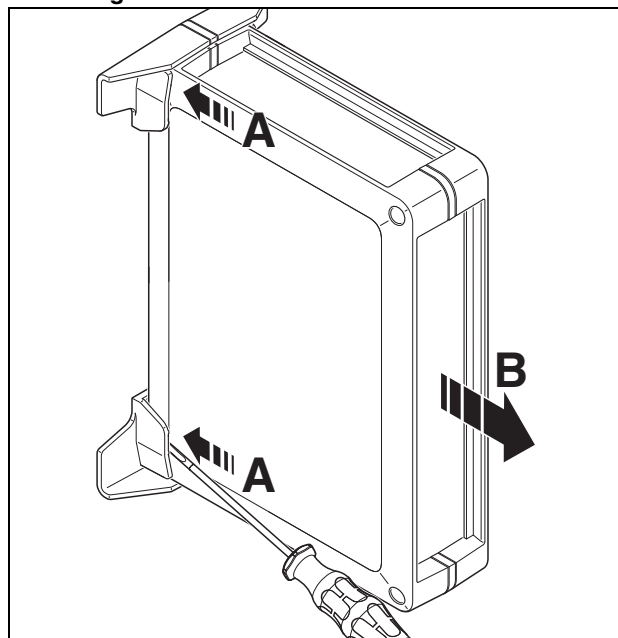


Figure 17 Detaching the UCS PED... stand

7.3 Mounting the housing on a wall using the stand

The UCS PED... stand has drill holes that are also suitable for wall mounting.

Recommended screws for wall mounting:
S5 dowel, screw \varnothing 4.0 mm.

Drilling template for wall mounting the stand

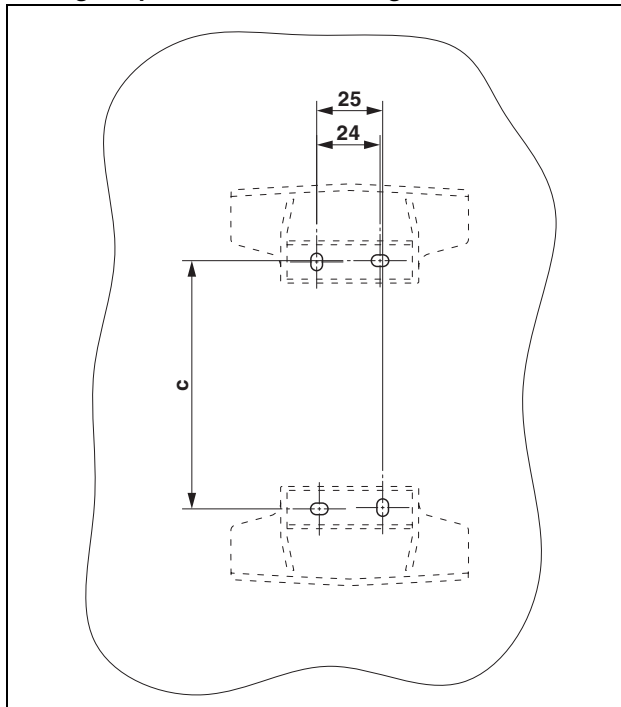


Figure 18 Drilling template for wall mounting

Dimensions for drilling template

Drill hole spacing c	Short side	Long side
UCS 125-87-F...	36 mm	74 mm
UCS 145-125-F...	74 mm	94 mm
UCS 195-145-F...	94 mm	144 mm
UCS 237-195-F...	144 mm	186 mm

Snapping on the stand for wall mounting

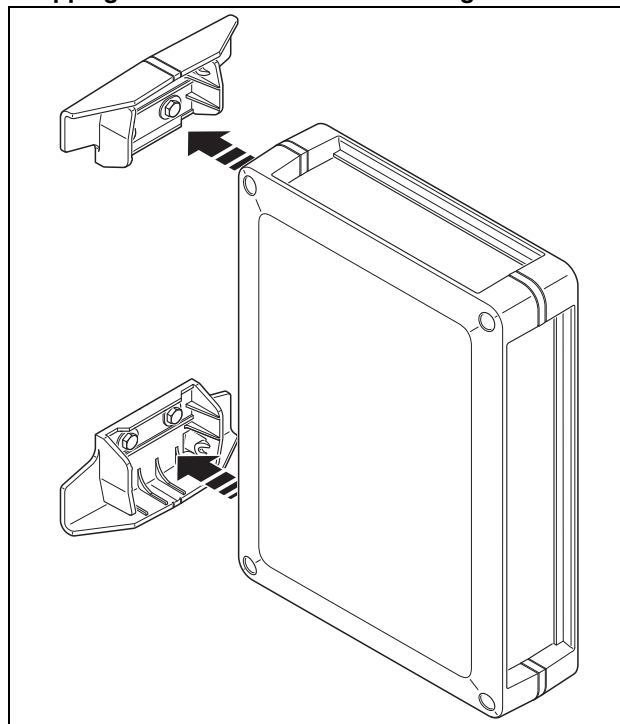


Figure 19 Snapping on the UCS PED... stand for wall mounting



NOTE: Observe the maximum permissible total weight (see [“Technical data”](#) on page 7).

7.4 Mounting the housing on DIN rails

UCS housings can also be mounted on NS35/7,5 and NS35/15 DIN rails in accordance with DIN EN 60715. For this, replace an appropriate side panel with the UCS DIN... DIN rail adapter.

DIN rail adapters are available for the following housings:

- UCS 125-87... (for longer side panel only)
- UCS 145-125...
- UCS 195-145... (for shorter side panel only)



NOTE: Observe the maximum permissible total weight (see [“Technical data” on page 7](#)).

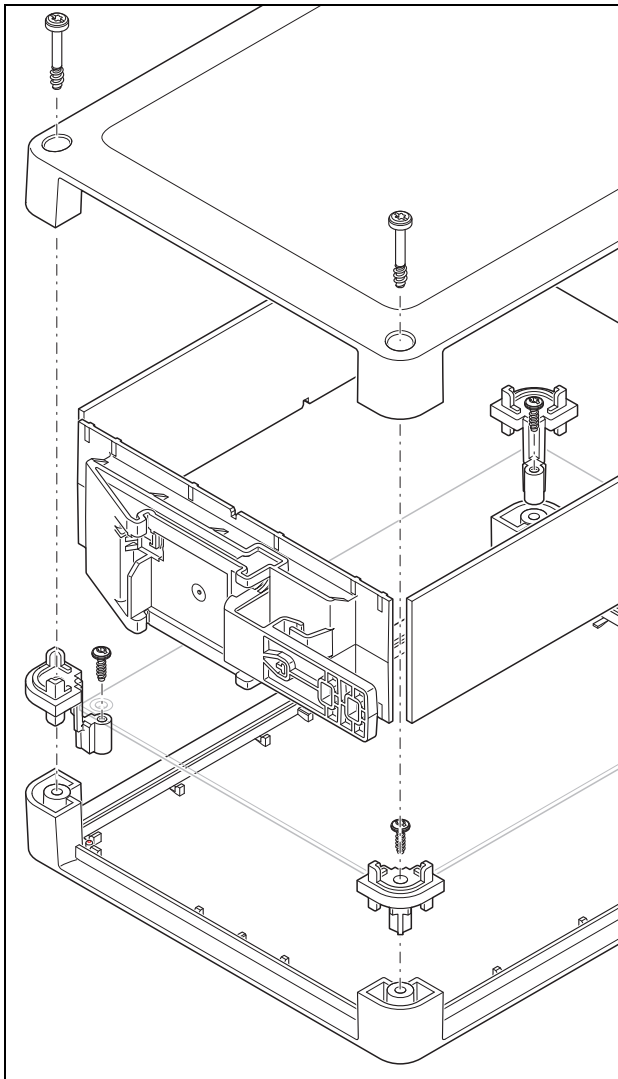


Figure 20 Housing with DIN rail adapter (example)

Mounting

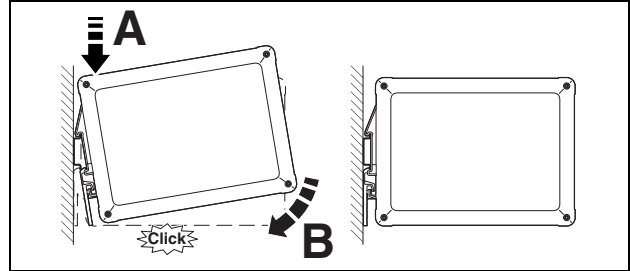


Figure 21 Mounting

- Place the device onto a 35 mm DIN rail from above. The upper housing keyway hooks onto the top edge of the DIN rail (A).
- Holding the device by the housing cover, carefully push it toward the mounting surface.
- Once the snap-on foot has audibly snapped onto the DIN rail, check that it is attached securely.

Removal

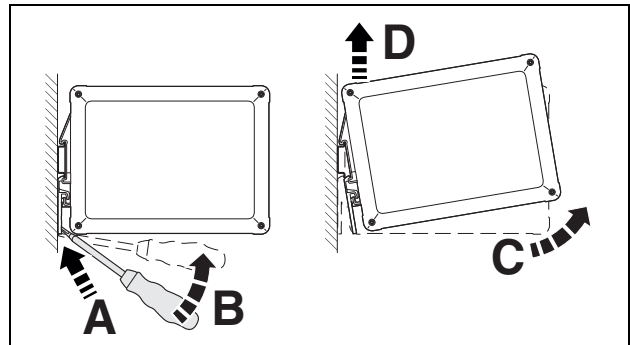


Figure 22 Removal

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

8 Accessories and customization

8.1 Accessories

Functional ground contact



Figure 23 ME BUS FE CONTACT, 2278076

When you snap the housing onto a DIN rail, you can establish a conductive connection between the PCB and DIN rail. For this, you need the ME BUS FE CONTACT functional ground contact (2278076) and the UCS DIN... DIN rail adapter.

HS LC light guide

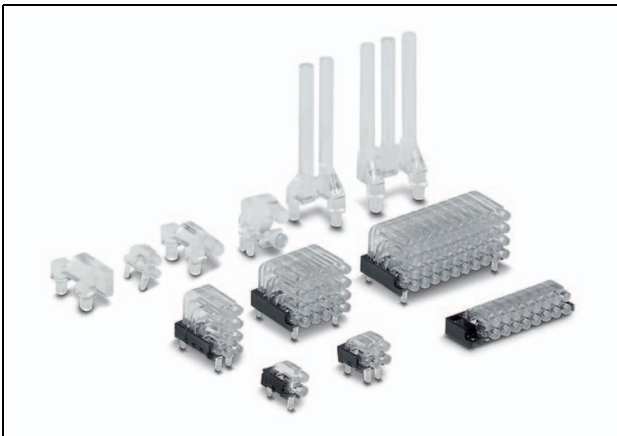


Figure 24 HS LC... light guide

Light guides for visualization are available in a variety of designs. HS LC... light guides are fixed to the PCB.



The complete list of accessories can be found at phoenixcontact.com, web code: #0853.

8.2 Tools

Combined Torx/slotted screws are used to screw on the housing half-shells. Phoenix Contact offers various tools:

- SF-ASD 21 cordless torque screwdriver, 1212532
- TSD-M 1,2NM torque screwdriver, 1212224
- SF-BIT-TX 10-50 bit, 1212573

8.3 Housing customization

Customer-specific solutions are available in addition to the standard range.

- **Color variants**
- **Markings** using different printing technologies
 - Pad printing: ideal for single-color or two-color printing
 - Screen printing: for multi-color markings on larger surfaces
 - Laser marking: particularly suitable for content that changes on a regular basis, e.g., serial numbers
- **Mechanical processing** of the housing parts.



Further information can be found under web code #0685.