

Overview 0

Cabinets 1

Wall mounted
cases 2

Accessories for
cabinets and wall
mounted cases 3

Climate control 4

Desk-top cases 5

Subracks/
19" chassis ... 6

Front panels,
plug-in units .. 7

Systems 8

Power supply
units 9

Backplanes .. 10

Connectors, front
panel component
system 11

Appendix 12

Plug-in units



04612001

Plug-in units as kits or from individual parts

- Handles in different designs for various applications
- Inserter/extractor handles for forces up to 1500 N
- Upgradable EMC shielding

Standards

- IEC 60297-3-101 / IEEE 1101.1/11
- IEC 60297-3-102 / IEEE 1101.10
- IEC 60297-3-103
- IEC 1296



30407004

SERIES

- e.g. individual configuration and assembly
- e.g. modifications (special colours or sizes)
- e.g. custom solutions with modification to the plug-in units

www.frontpanelexpress.eu



Downloads and further important information can be found
on the Internet under www.c-box-tech.com

Plug-in units

Overview 7.17

Handles for plug-in units



04603002

For CompactPCI and VME64x applications

Inserter/extractor handle, type IEL/IET, allows keying/coding and insertion/extraction forces up to 700 N per pair

Kit
Page
Individual
components
Page

7.18 7.19

Plug-in units with injector and extractor handles

For CompactPCI and VME64x applications ... 7.18



04605005

For VPX, VXS, CompactPCI and VME64x applications

Inserter/extractor handle, type XL, allows keying/coding and insertion/extraction forces up to 1500 N per pair

– 7.29

For VPX, VXS, CompactPCI and VME64x applications ... 7.29



04604059

For e.g. VMEbus applications

Trapeziform extractor handle, type 2

7.31 7.33

For e.g. VMEbus applications type 2 7.31



04692008

For e.g. VMEbus applications

Trapeziform extractor handle, type 1

7.38 7.40

For e.g. VMEbus applications type 1 7.38



04692011

For Multibus® II applications

Extractor handle, multibus type II, IEC 60297

– 7.44

For Multibus® II applications 7.44



04692008

For plug-in units in accordance with IEC 60297

Extractor handle in key form 1

– 7.46

For plug-in units in accordance with IEC 60297 .. 7.46



04692010

For plug-in units in accordance with IEC 60297

Extractor handle in key form 2

– 7.49

For plug-in units in accordance with IEC 60297 .. 7.49



04692003

For plug-in units in accordance with IEC 60297

Static handle

7.52 7.54

For plug-in units in accordance with IEC 60297 .. 7.52



04692004

Accessories for plug-in units

Mechanical protection for static trapeziform handle and fixing materials kit

7.62 –

Accessories for plug-in units 7.60

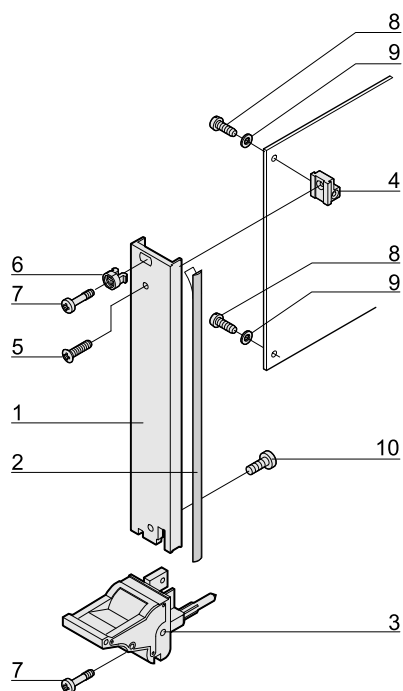
PCB cover 7.62

Plug-in units – for CompactPCI, VME64x

Kits

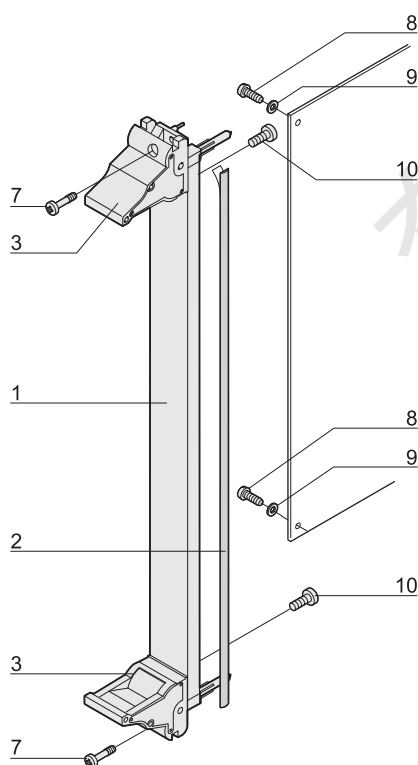
Plug-in units with IEL inserter/extractor handle for CompactPCI/VME64x applications

3 U



04602073

6 U



04602074

- In accordance with IEEE 1101.10 and IEC 60297-3-102
- Codable to IEC 60297-3-103/ IEEE 1101.10
- Front panel shielded
- Suitable for insertion and extraction forces up to 700 N (per pair)
- Suitable for fitting microswitches

Delivery comprises (kit)

Item	3 U		6 U		Description
	<8HP	≥8HP	<8HP	≥8HP	
1	1	1	1	1	Front panel (U profile), Al, front anodised, rear conductive
2	1	1	1	1	EMC sealing (textile), core: foam, sleeve: textile cladding, CuNi coated
3	1	1	2	2	Handle with integrated alignment pin for perforated strips and guide rails, lever: plastic, PC, black, RAL 9005 key: plastic, PC, light grey, RAL 7035
4	1	1	-	-	Board support, die-cast zinc
5	1	1	-	-	Raised Pozidrive countersunk screw M2.5 × 8, St, nickel-plated
6	1	3	-	2	Sleeve, PA, grey
7	2	4	2	4	Pozidrive collar screw, M2.5 × 12.3, St, nickel-plated
8	2	2	2	2	Panhead screw with Torx/slot, M2.5 × 6, St, zinc-plated, self-locking
9	2	2	2	2	Washer A2.7, DIN 125, St, nickel-plated
10	1	1	2	2	Panhead screw with Torx, M2.5 × 7, St, nickel-plated

Order Information

Width HP	Part no. Rear I/O	Part no. Front assembly
3 U Height		
4	20848-751	20848-585
6	-	20848-587
8	20848-752	20848-589
10	-	20848-590
12	-	20848-591
6 U Height		
4	-	20848-592
6	-	20848-594
8	-	20848-596
10	-	20848-597
12	-	20848-598

Accessories

Microswitch for handles, CompactPCI/VME64x application	PU 10 pieces	20817-606
---	--------------	-----------

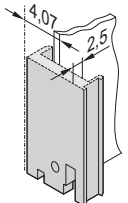
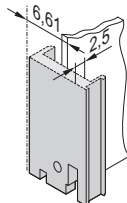
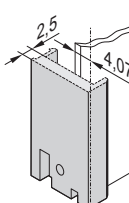
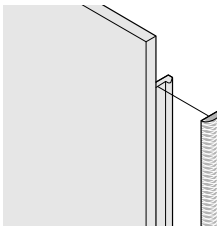
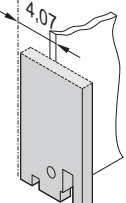
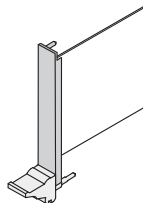
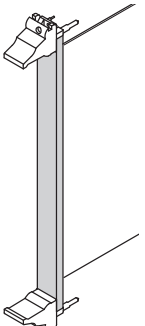
- Dimension drawing of front profile see page 7.25
- Description of microswitch see page 7.29

Plug-in units – for CompactPCI, VME64x

Individual
components

Front panels, U-profiles, for extractor handles, type IEL, IET

Order Information

	Front panel, U profile, shieldable			Textile EMC gasket		Front panel, flat, unshielded, front mounting	
	Front mounting  04608060	Front mounting, PCB fixing with 0.1" offset  04608062	Rear I/O mounting  04608061	 BGA45760	 04608063		
	Al extrusion, 2.5 mm, front anodised, rear conductive; alignment pin pressed-in (3 U only), stainless steel; manufacturing process causes various surface structures to appear between 4 to 12 HP and 14 to 16 HP			always fixed laterally on the front panel, in the groove of the profile, textile gasket, core: foam, sleeve: textile cladding with CuNi coating, UL 94 V-0, temperature range -40 ... 70 °C		front panel, Al, 2.5 mm, front anodised, rear iridescent green chromated	
Width HP	1 piece (SPQ 5) ¹⁾	1 piece (SPQ 5) ¹⁾	1 piece (SPQ 5) ¹⁾	PU 10 pieces	PU 100 pieces	1 piece (SPQ 5) ¹⁾	
3 U Height							
 04608067	4	30848-312	30848-426	21101-853	21101-854	30848-327	
	5	30848-300	30848-427			—	30848-328
	6	30848-313	30848-428			—	30848-329
	7	30848-301	30848-429			—	30848-330
	8	30848-314	30848-430			30848-869	30848-331
	9	20848-227	—			—	—
	10	30848-315	30848-431			—	30848-333
	11	20848-228	—			—	—
	12	30848-316	30848-432			30848-985	30848-335
	14	20848-230	—			—	—
	16	20848-232	—			—	—
6 U Height							
 04608066	4	30848-317	30848-317	21101-855	21101-856	30848-336	
	5	30848-304	30848-304			30848-304	30848-337
	6	30848-318	30848-318			30848-318	30848-338
	7	30848-305	30848-305			30848-305	30848-339
	8	30848-319	30848-319			30848-319	30848-340
	9	20848-243	20848-243			20848-243	—
	10	30848-320	30848-320			30848-320	30848-342
	11	20848-244	20848-244			20848-244	—
	12	30848-321	30848-321			30848-321	30848-344
	14	20848-246	20848-246			20848-246	—
	16	20848-248	20848-248			20848-248	—
Fixing material see page	7.22	7.22	7.22			7.22	
Dimensions see page	7.25	7.25	7.24			7.26	

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

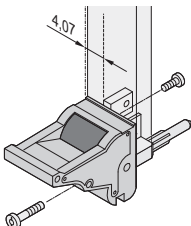
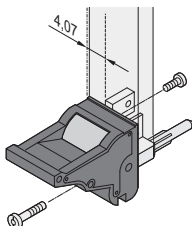
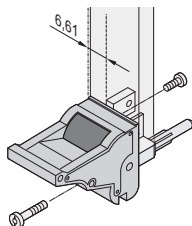
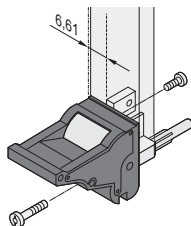
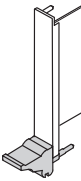
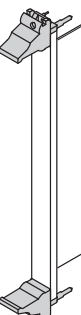
Part no. includes one packing unit (PU); delivery is exclusively made in PU

Plug-in units – for CompactPCI, VME64x

Individual
components

Insertor/extractor handle, type IEL

Order Information

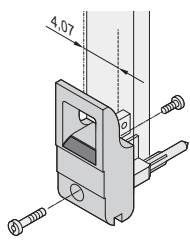
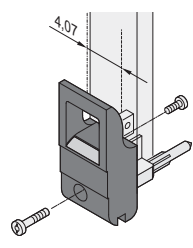
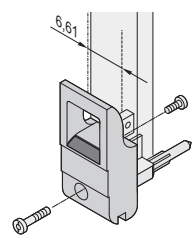
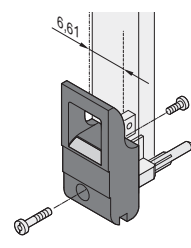
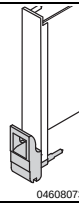
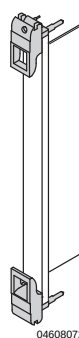
	Insertor/extractor handle, type IEL, board fixing without offset				Insertor/extractor handle, type IEL, board fixing with 0.1" offset				
	lever: light grey, RAL 7035 key: black, RAL 9005		lever: black, RAL 9005 key: light grey, RAL 7035		lever: light grey, RAL 7035 key: black, RAL 9005		lever: black, RAL 9005 key: light grey, RAL 7035		
	 04608050		 04608052		 04608051		 04608074		
	in accordance with IEEE 1101.10 and IEC 60297-3-102, with locking, suitable for insertion and extraction forces up to 700 N (per pair), suitable for fitting of microswitches; block die-cast zinc, nickel-plated, with integrated alignment pin for perforated strip, codable to IEEE 1101.10 and IEC 60297-3-103, lever/key UL 94 V-0, slotted Pozidrive collar screw, M2.5 x 12.3, St, nickel-plated, panhead screw with Torx, M2.5 x 7, St, nickel-plated				in accordance with IEEE 1101.10 and IEC 60297-3-102, with locking, suitable for insertion and extraction forces up to 700 N (per pair), suitable for fitting of microswitches; 0.1" offset is used for PSUs with SMD Plus, block die-cast zinc, nickel plated; with integrated alignment pin for perforated strip, codable to IEEE 1101.10 and IEC 60297-3-103, lever/key UL 94 V-0, slotted Pozidrive collar screw, M2.5 x 12.3, St, nickel-plated, panhead screw with Torx, M2.5 x 7, St, nickel-plated				
Assembly	PU 10 pieces	PU 100 pieces	PU 10 pieces	PU 100 pieces	PU 10 pieces	PU 100 pieces	PU 10 pieces	PU 100 pieces	
 04608071	3 U Height bottom								
	Front side	20817-620	20817-621	20817-612	20817-613	20817-690	20817-691	20817-682	20817-683
	Rear I/O	20817-622	20817-623	20817-614	20817-615	—	—	—	—
 04608070	6 U Height top								
	Front side	20817-622	20817-623	20817-614	20817-615	20817-692	20817-693	20817-684	20817-685
	Rear I/O	20817-620	20817-621	20817-612	20817-613	—	—	—	—
	bottom								
	Front side	20817-620	20817-621	20817-612	20817-613	20817-690	20817-691	20817-682	20817-683
	Rear I/O	20817-622	20817-623	20817-614	20817-615	—	—	—	—
Dimensions see page	7.27				7.27				

Plug-in units – for CompactPCI, VME64x

Individual
components

Insertor/extractor handle, type IET

Order Information

	Insertor/extractor handle, type IET, board fixing without offset				Insertor/extractor handle, type IET, board fixing with 0.1" offset				
	lever: light grey, RAL 7035 key: black, RAL 9005		lever: black, RAL 9005 key: light grey, RAL 7035		lever: light grey, RAL 7035 key: black, RAL 9005		lever: black, RAL 9005 key: light grey, RAL 7035		
	 04608054		 04608055		 04608055		 04608074		
	in accordance with IEEE 1101.10 and IEC 60297-3-102, with locking, suitable for insertion and extraction forces up to 700 N (per pair), suitable for fitting of microswitches; block die-cast zinc, nickel-plated, with integrated alignment pin for perforated strip, codable to IEEE 1101.10 and IEC 60297-3-103, lever/key UL 94 V-0, Slotted Pozidrive collar screw, M2.5 x 12.3, St, nickel-plated, panhead screw with Torx, M2.5 x 7, St, nickel-plated				in accordance with IEEE 1101.10 and IEC 60297-3-102, with locking, suitable for insertion and extraction forces up to 700 N (per pair), suitable for fitting of microswitches; 0.1" offset is used for PSUs with SMD Plus: block die-cast zinc, nickel plated; with integrated alignment pin for perforated strip, codable to IEEE 1101.10 and IEC 60297-3-103, lever/key UL 94 V-0, slotted Pozidrive collar screw, M2.5 x 12.3, St, nickel-plated, panhead screw with Torx, M2.5 x 7, St, nickel-plated				
Assembly	PU 10 pieces	PU 100 pieces	PU 10 pieces	PU 100 pieces	PU 10 pieces	PU 100 pieces	PU 10 pieces	PU 100 pieces	
 04608073	3 U Height bottom								
	Front side	20817-660	20817-661	20817-652	20817-653	20817-714	20817-715	20817-706	20817-707
	Rear I/O	20817-662	20817-663	20817-654	20817-655	—	—	—	—
 04608072	6 U Height top								
	Front side	20817-662	20817-663	20817-654	20817-655	20817-716	20817-717	20817-708	20817-709
	Rear I/O	20817-660	20817-661	20817-652	20817-653	—	—	—	—
	bottom								
	Front side	20817-660	20817-661	20817-652	20817-653	20817-714	20817-715	20817-706	20817-707
	Rear I/O	20817-662	20817-663	20817-654	20817-655	—	—	—	—
Fixing material see page	7.22				7.22				
Dimensions see page	7.28				7.28				

Plug-in units – for CompactPCI, VME64x

Individual
components

insertor/extractor handles, type IEL/IET, fixing material

Order Information

3 U

3 / 3a
4
7 / 7a
6
5 / 5a
3 / 3a / 8
4
9
6

04609050

6 U

top

3
8
4
6
9
3 / 3a / 8
4
9
6

bottom

3
8
4
6
9
3 / 3a / 8
4
9
6

04609051

Fixing material	Item	3 U	Required quantity				Qty/PU	Part no.		
			3 U		6 U					
			< 8 HP	≥ 8 HP	< 8 HP	≥ 8 HP				
Printed board bracket Zn die-cast	1	 06707050	1	1	—	—	1 piece (SPG 10) ¹⁾	60807-181		
Pozidrive panhead screw M2.5 × 6, St, nickel-plated , not for 0.1" offset	3	 AZA45177	2	2	2	2	100	21101-219		
Slotted panhead screw with Torx 8 M2.5 × 6, St, zinc-plated, self-securing thread not for 0.1" offset	3a	 aza45940	2	2	2	2	100	24560-159		
Washer 2.7, DIN 125, St, nickel-plated	4	 AZA46586	2	2	2	2	100	21100-721		
Raised Pozidrive countersunk panhead screw M2.5 × 8, St, nickel-plated	5	 06702056	1	1	—	—	100	21100-429		
Raised countersunk panhead screw with Torx 8 M2.5 × 8, St, nickel-plated	5a	 06708050	1	1	—	—	100	24560-164		
Pozidrive/slotted collar screw M2.5 × 12.3, St, nickel-plated	6	 AZA46586	1	3	—	2	100	21101-101		
Plastic sleeve, for form hole 5.9 x 3.3 PA, UL 90 V-2, grey	7	 aza45933	1	3	—	2	100	21100-464		
Metal sleeve, for form hole 5.9 x 3.3, press-in Stainless steal	7a	 aza45933	1	3	—	2	100	21100-662		
Pozidrive panhead screw for IEL/IET handle with 0.1" offset M2.5 × 10, nickel-plated steel	8	 AZA45177	2	2	2	2	100	21101-220		
Torx panhead screw M2.5 × 7, St, nickel-plated, Torx 8,	9	 aza45940	1	1	2	2	100	24560-147		

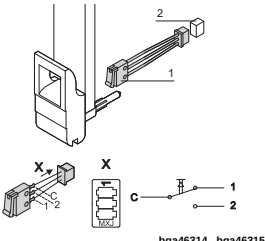
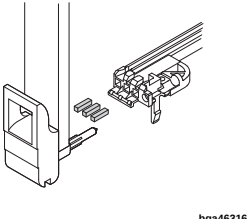
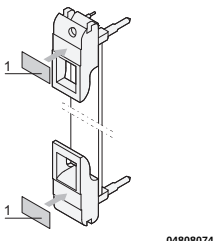
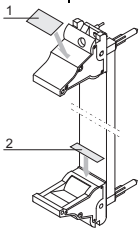
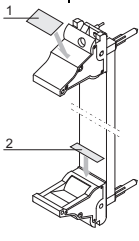
1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Plug-in units – for CompactPCI, VME64x

Individual
components

Insertion/extraction handles, type IEL/IET, accessories

Order Information

Microswitch	Keying/coding	Label strips	Label strips	
with cable and plug  bga46314 bga46315 Molex connector housing 51021-0300, Molex crimp contact 50058-8000 and fixing clip (item 3), plastic, PC, UL 94 V-0, max. switched current 50 mA, operating range -25 °C to +70 °C, mech. life ≥ 20,000 switching cycles, electr. life ≥ 20,000 switching cycles; suitable mating connectors (item 2) e.g. Molex 53261-0319, 53048-0310, 53047-0310, 53398-0319, 51047-0300 not included in scope of delivery PU 10 pieces	in accordance with IEC 60297-3-103  bga46316 The keying/coding pegs prevent plug-in units to be mounted in wrong slots. They are inserted in the chambers of the codable card guides as well as in the insertion/extraction handles IEL or IET (4 possible positions), resulting in 64 codings per card guide; when coding the upper and lower card guide, 4096 codings will result; guide rails for coding see page 6.38 PU 100 pieces	19 x 9.5 mm  04808074 Polyester, self-adhesive, white, 1 sheet 210 pieces (Item 1) PU 210 pieces	19 x 9.5 mm  04808074 Polyester, self-adhesive, white, 1 sheet 210 pieces (item 1) PU 210 pieces	19 x 4.8 mm  04808074 Polyester, self-adhesive, white, 1 sheet 320 pieces (item 2) PU 320 pieces
3 U Height				
bottom				
20817-606	20817-501	60817-340	60817-340	60817-341
6 U Height				
top				
20817-606	20817-501	60817-340	60817-340	60817-341
bottom				
20817-606	20817-501	60817-340	60817-340	60817-341

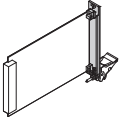
Plug-in units – for CompactPCI, VME64x

Dimensions

Front panels, U-profiles, inserter/extractor handles, type IEL/IET, rear I/O, shieldable

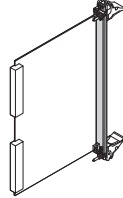
PCB fixing without offset

3 U

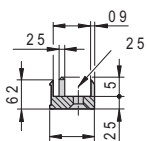
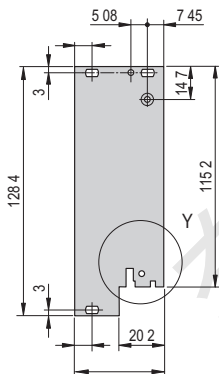
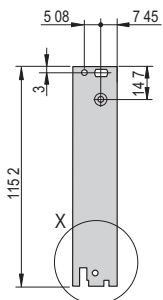
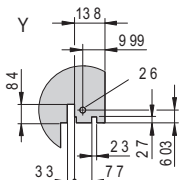
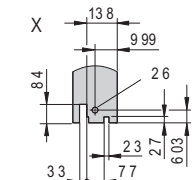


04608068

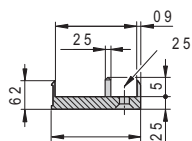
6 U



04608076

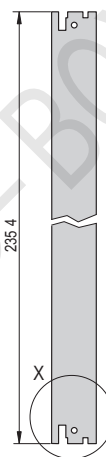
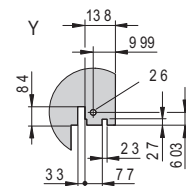
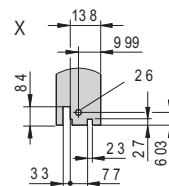


4 HP

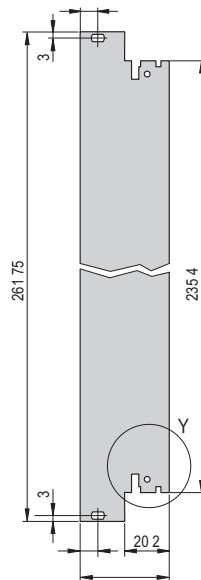


≥5 HP

04608069



4 HP



≥5 HP

04608075

Dimensions table

Width	b	c	d
HP	mm	mm	mm
4	19.98	17.45	—
5	25.06	22.53	—
6	30.14	27.61	—
7	35.22	32.69	—
8	40.30	37.77	7.45
9	45.38	42.85	7.45
10	50.46	47.93	7.45
11	55.54	53.01	7.45
12	60.62	58.09	7.45
14	70.78	68.25	7.45
16	80.94	78.41	7.45

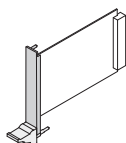
Plug-in units – for CompactPCI, VME64x

Dimensions

Front panels, U-profiles, inserter/extractor handles, type IEL, IET, shieldable

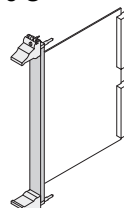
PCB fixing without offset / with 0.1" offset

3 U

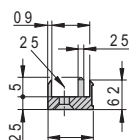
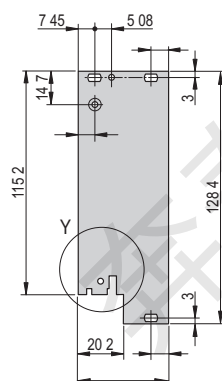
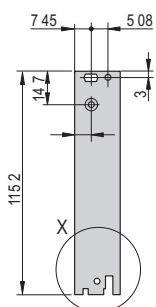
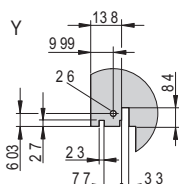
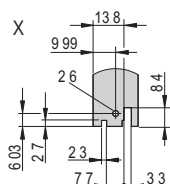


04608067

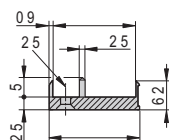
6 U



04608066

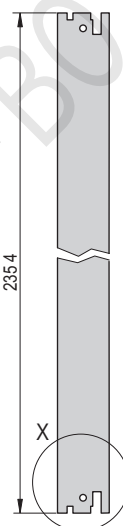
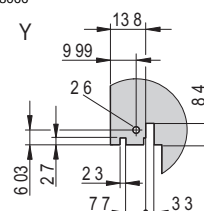
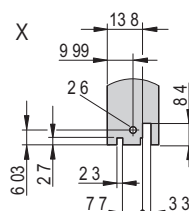


4 HP

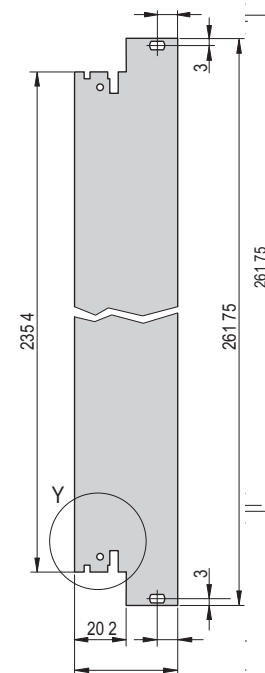


≥5 HP

04608064



4 HP



≥5 HP

04608065

Dimensions table

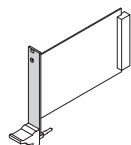
Width HP	b mm	c mm	d mm	without offset e mm	with 0.1" offset e mm
4	19.98	17.45	—	7.45	9.99
5	25.06	22.53	—	7.45	9.99
6	30.14	27.61	—	7.45	9.99
7	35.22	32.69	—	7.45	9.99
8	40.30	37.77	7.45	7.45	9.99
9	45.38	42.85	7.45	7.45	9.99
10	50.46	47.93	7.45	7.45	9.99
11	55.54	53.01	7.45	7.45	9.99
12	60.62	58.09	7.45	7.45	9.99
14	70.78	68.25	7.45	7.45	9.99
16	80.94	78.41	7.45	7.45	9.99

Plug-in units – for CompactPCI, VME64x

Dimensions Front panels, inserter/extractor handles, type IEL/IET, unshielded

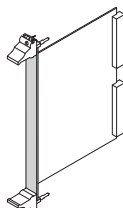
PCB fixing without offset

3 U

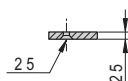
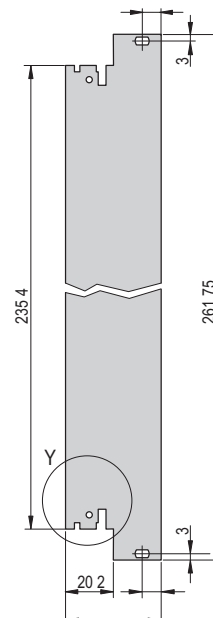
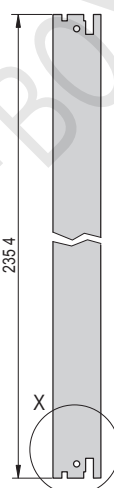
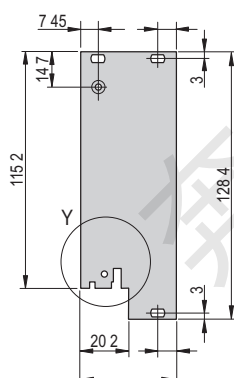
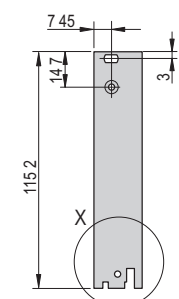
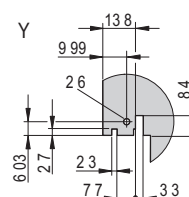
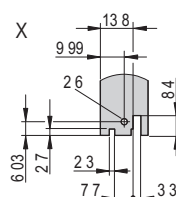
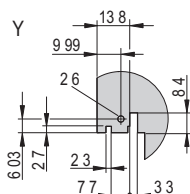
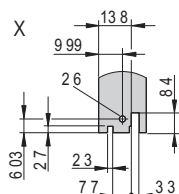


04608080

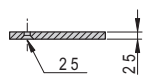
6 U



04608079



4 HP



≥5 HP

04608077



4 HP



≥5 HP

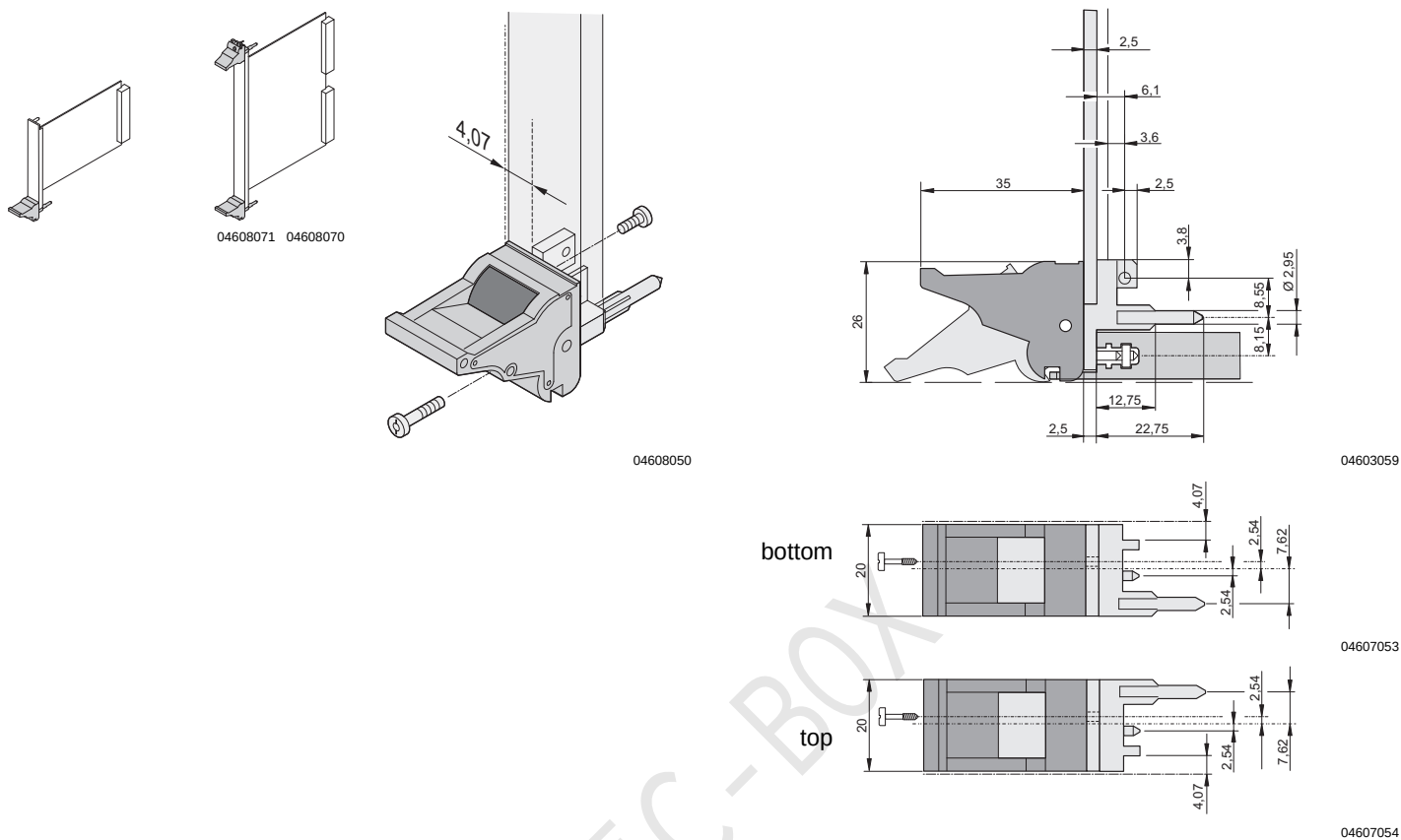
04608078

Dimensions table

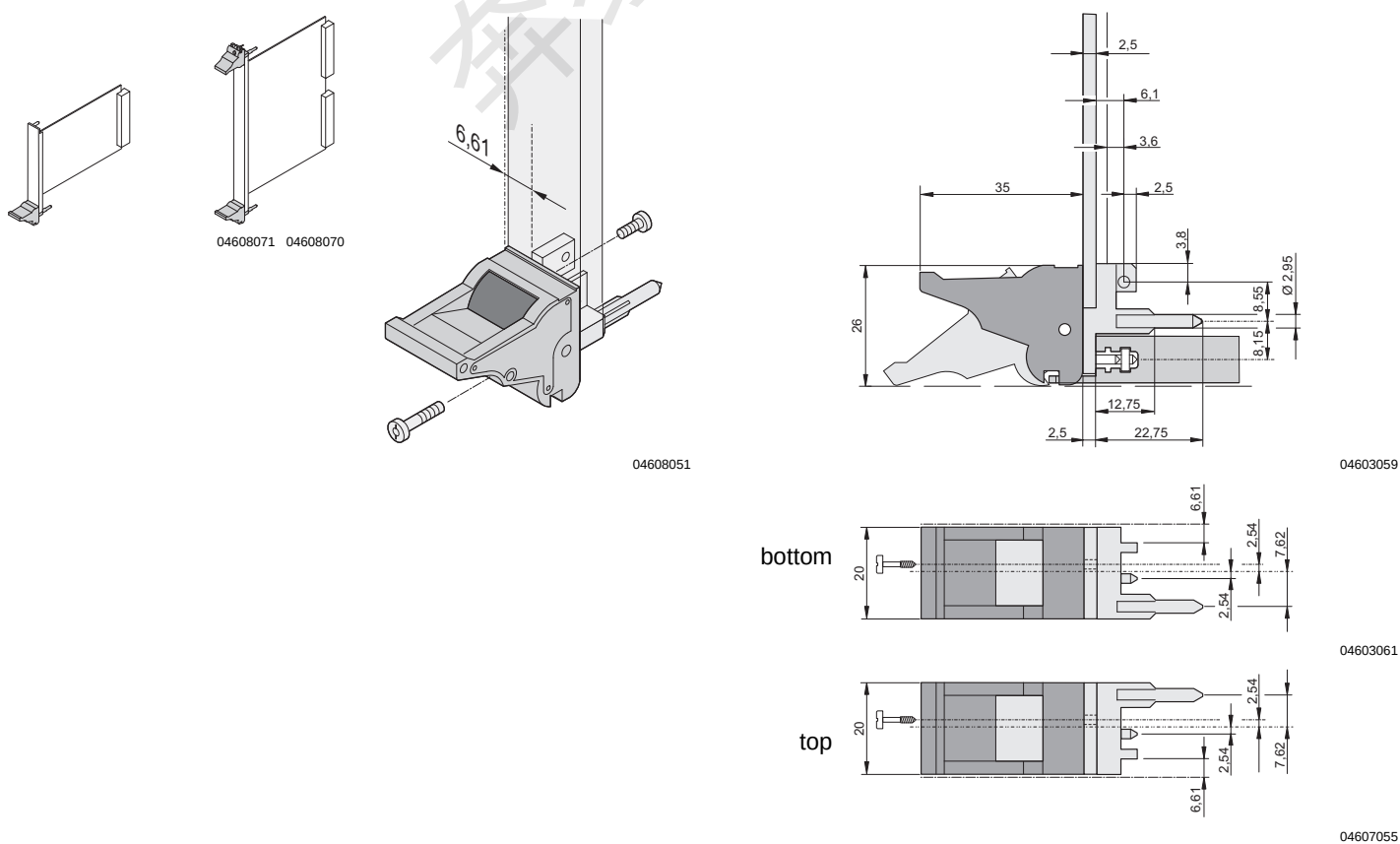
Width HP	b mm	d mm
4	19.98	—
5	25.06	—
6	30.14	—
7	35.22	—
8	40.30	7.45
9	45.38	7.45
10	50.46	7.45
11	55.54	7.45
12	60.62	7.45
14	70.78	7.45
16	80.94	7.45

Plug-in units – for CompactPCI, VME64x

Dimensions Inserter/extractor handle, type IEL

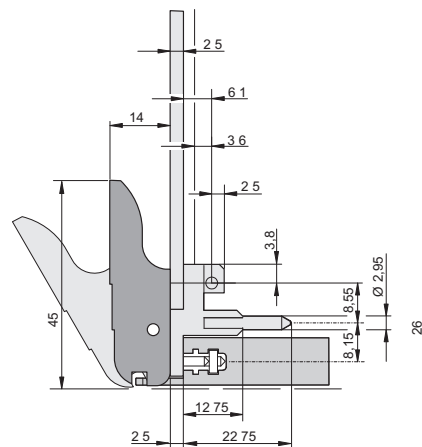
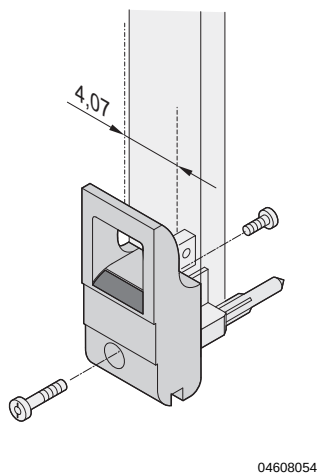
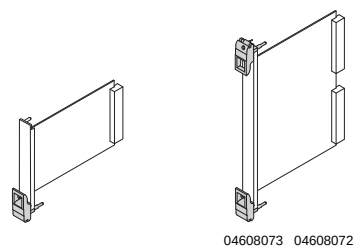


Dimensions Inserter/extractor handle, type IEL, 0.1" offset

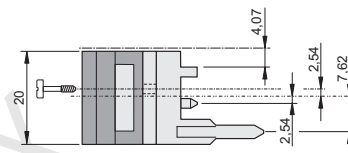


Plug-in units – for CompactPCI, VME64x

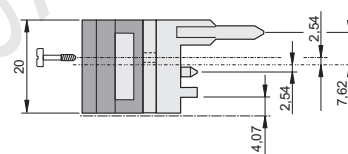
Dimensions Inserter/extractor handle, type IET



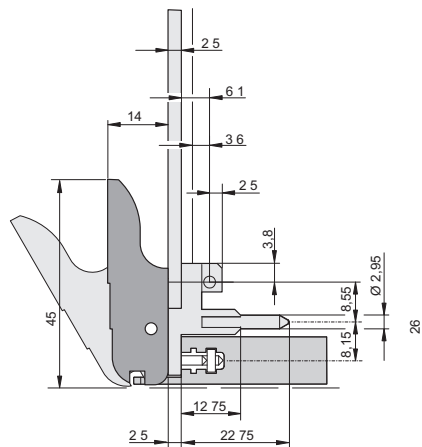
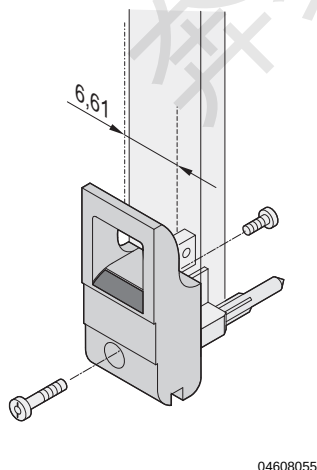
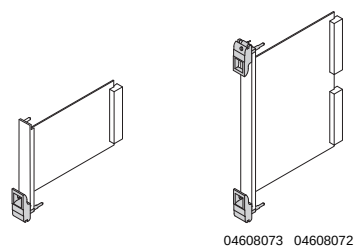
bottom



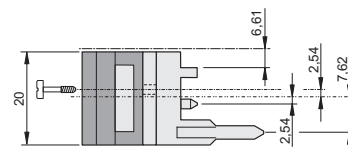
top



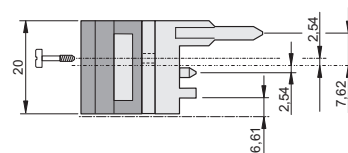
Dimensions Inserter/extractor handle, type IET, 0.1" offset



bottom



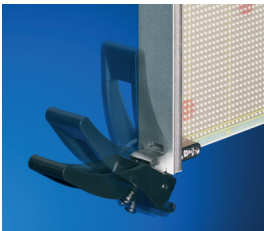
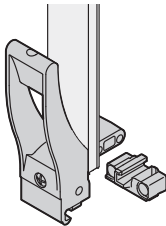
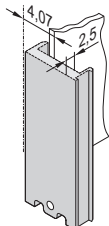
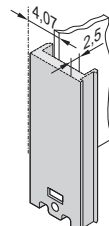
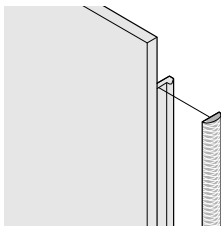
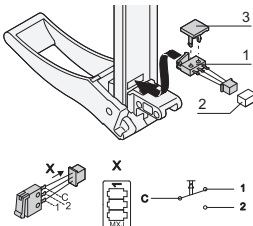
top



Plug-in units – for CompactPCI, VME64x, VXS, VPX

Individual components

Insertor/extractor handle, type XL, front panels, microswitch

 04805008	Insertor/extractor handle, type XL  04608081 kit, incl. die-cast bearing and assembly kit; insertion and extraction force up to 1500 Nm per pair; handle in PA, fibreglass reinforced, UL 94V 0; robust board fixing with double bolt fixing, microswitches can be fitted	U front profile, shieldable, for insertor/extractor handle, type XL		EMC gasket (textile)		Microwswitch item 1 with cable and plug
		without cut-out for microswitch  04608082 Al, front anodised, sides and rear conductive, for sleeve and collar screw see page 7.35	with cut-out for microswitch  04608083 Al, front anodised, sides and rear conductive for sleeve and collar screw see page 7.35	 BGA45760 always fixed laterally on the front panel, in the groove of the profile, textile gasket, core: foam, sleeve: textile cladding with CuNi coating, UL 94 V-0		 04608084 bga46315 Molex connector housing 51021-0300, Molex crimp contact 50058-8000 and fixing clip (item 3), plastic, PC, UL 94 V-0, max. switched current 50 mA, operating range -25 °C to +70 °C, mech. life ≥ 20,000 switching cycles, electr. life ≥ 20,000 switching cycles; suitable mating connector (item 2) e.g. Molex 53261-0319, 53048-0310, 53047-0310, 53398-0319, 51047-0300, not included in scope of delivery
		Width HP	PU 10 pieces	1 piece (SPQ 5)¹⁾	1 piece (SPQ 5)¹⁾	PU 10 pieces PU 100 pieces

	6 U Height					
4	20817-874	30849-153	30849-154	21101-855	21101-856	20817-877
8		30849-155	30849-156			
12		30849-157	30849-158			
Dimensions see page	7.30	7.30	7.30			

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Part no. includes one packing unit (PU); delivery is exclusively made in PU

Note

- Please order front panels separately

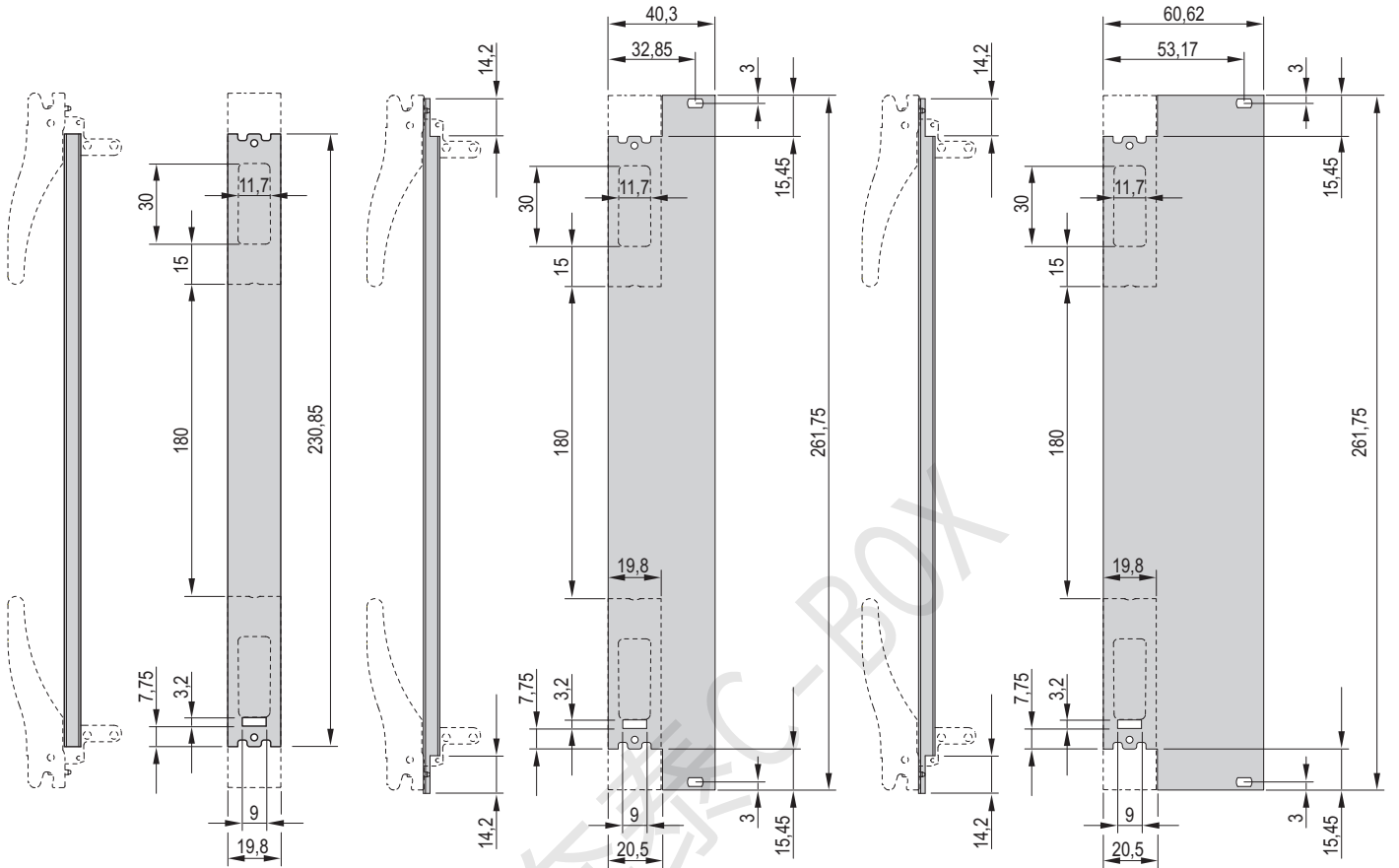
Plug-in units – for CompactPCI, VME64x, VXS, VPX

Dimensions U front profile for extractor handle type XL, shieldable

6 U/4 HP

6 U/8 HP

6 U/12 HP

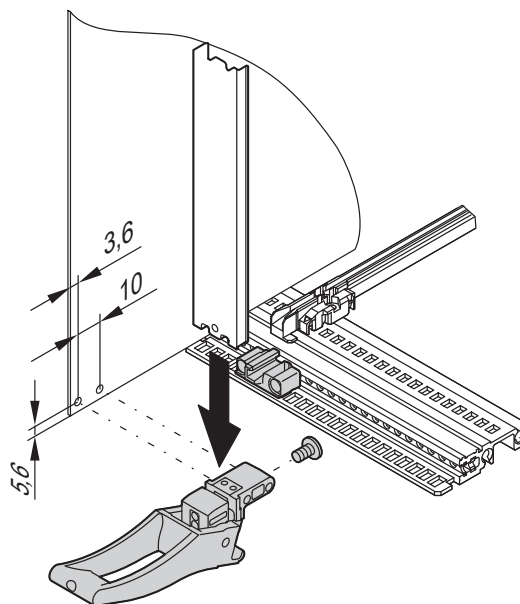


04605053

04605054

04605055

Dimensions Inserter/extractor handle, type XL



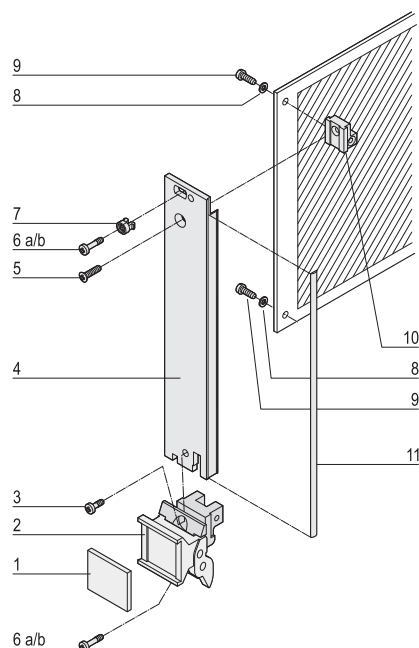
04608113

Plug-in units – for VME

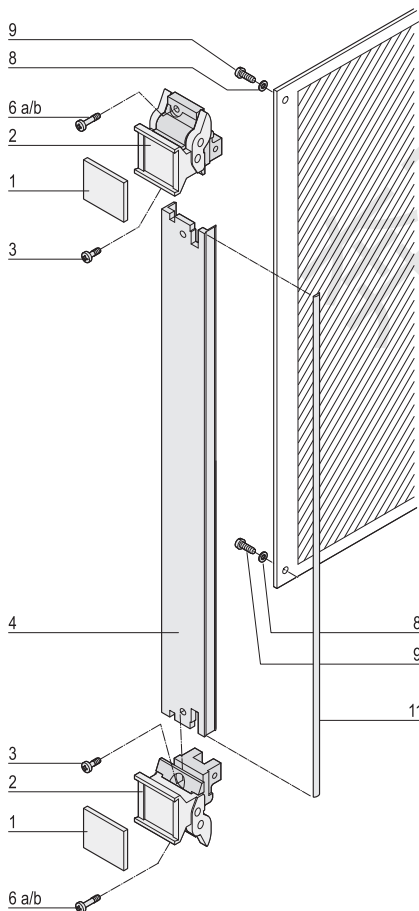
Kits

Plug-in units with trapeziform extractor handle, type 2

3 U



6 U



■ Shielded

Delivery comprises (kit)

Item	Qty				Description
	3 U		6 U		
	<8HP	≥8HP	<8HP	≥8HP	
1	1	1	2	2	Identification plate, Al, 1.5 mm, anodised, cut edges untreated
2	1	1	2	2	Extractor handle, trapeziform, type 2, lever: PPE, light grey, RAL 7035, block die-cast zinc, nickel-plated, with integrated alignment pin for perforated strip
3	1	1	2	2	Pozidrive flathead screw, St, M2.5 x 6, nickel-plated
4	1	1	1	1	Front panel, U profile, Al, front anodised, rear conductive
5	1	1	—	—	Raised Pozidrive countersunk screw M2.5 × 8, St, nickel-plated
6a	2	4	2	4	Pozidrive collar screw, M2.5 × 12.3, St, nickel-plated,
6b	2	4	2	4	collar screw, Pozidrive/slot, M2.5 × 11, St, nickel-plated,
7	1	3	—	2	Sleeve, PA, grey
8	2	2	2	2	Washer A 2.7, DIN 125
9	2	2	2	2	Panhead screw with Torx/slot, M2.5 x 6, St, zinc-plated, self-locking
10	1	1	—	—	Board support, die-cast zinc
11	1	1	1	1	EMC sealing (textile), core: foam, sleeve: textile cladding, Cu-Ni coated

Order Information

Height	Width	Part no.
U	HP	
3	4	20848-686
3	6	20848-687
3	8	20848-688
3	10	20848-689
3	12	20848-690
6	4	20848-691
6	6	20848-692
6	8	20848-693
6	10	20848-694
6	12	20848-695

■ Dimension drawings of front profile see page 7.36

■ Description of microswitch see page 7.29



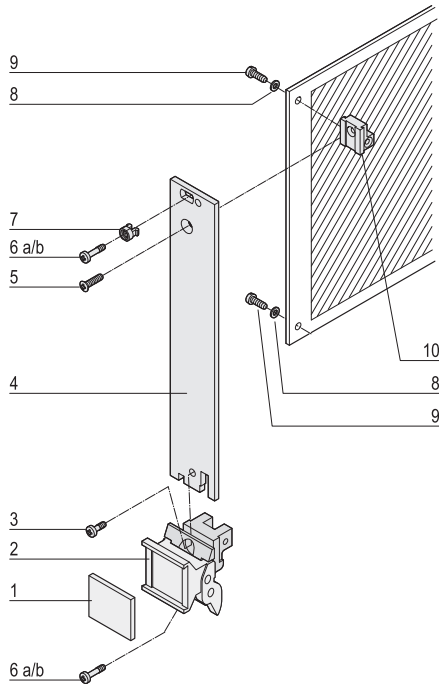
For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.

Plug-in units – for VME

Kits

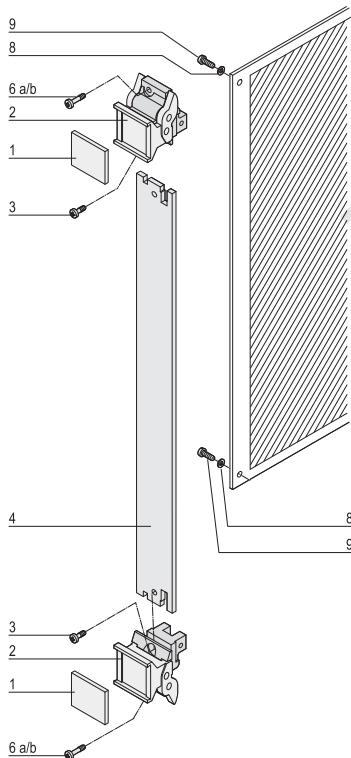
Plug-in units with trapeziform extractor handle, type 2

3 U



04604052

6 U



04604053

■ Unshielded

Delivery comprises (kit)

Item	3 U		6 U		Description
	<8HP	≥8HP	<8HP	8 HP	
1	1	1	2	2	Identification plate, Al, 1.5 mm, anodised, cut edges plain
2	1	1	2	2	Extractor handle, trapeziform, type 2, lever: PPE, light grey, RAL 7035, block: die-cast zinc, nickel-plated
3	1	1	2	2	Flathead screw M2.5 x 6, nickel-plated
4	1	1	1	1	Front panel, Al, 2.5 mm, front: anodised, rear: iridescent green chromated
5	1	1	—	—	Raised Pozidrive countersunk screw, M2.5 x 8, St, nickel-plated
6a	2	4	2	4	Slotted Pozidrive collar screw, M2.5 x 12.3, St, nickel-plated,
6b	2	4	2	4	slotted Pozidrive collar screw, M2.5 x 11, St, nickel-plated
7	1	3	—	2	Sleeve, PA, grey
8	2	2	2	2	Washer A 2.7, DIN 125
9	2	2	2	2	Slotted Torx panhead screw, M2.5 x 6, St, zinc-plated, self-locking
10	1	1	—	—	Board support, die-cast zinc

Order Information

Height U	Width HP	Part no.
3	4	20817-860
3	5	20817-861
3	6	20817-862
3	7	20817-863
3	8	20817-864
3	10	20817-865
3	12	20817-866
6	4	20817-867
6	5	20817-868
6	6	20817-869
6	7	20817-870
6	8	20817-871
6	10	20817-872
6	12	20817-873

■ Dimension drawing of front profile see page 7.36

■ Description of microswitch see page 7.29



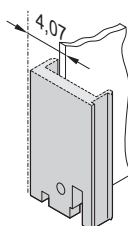
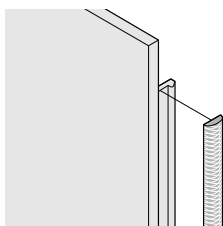
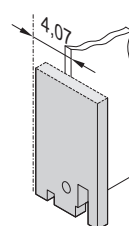
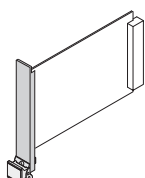
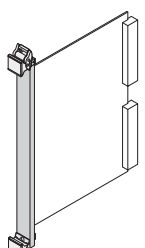
For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.

Plug-in units – for VME

Individual components

U front profiles/front panels for trapeziform extractor handle, type 2

Order Information

	Front panel, U profile, shieldable  04608060 Al extrusion, 2.5 mm, front anodised, rear conductive; alignment pin pressed-in (3 U only), stainless steel; manufacturing process causes various surface structures to appear between 4 to 12 HP and 14 to 16 HP Width HP 1 piece (SPQ 5)¹⁾	Textile EMC gasket  BGA45760 always fixed laterally on the front panel, in the groove of the profile, textile gasket, core: foam, sleeve: textile cladding with CuNi coating, UL 94 V-0, temperature range -40 ... 70 °C PU 10 pieces PU 100 pieces	Front panel, flat, unshielded  04608063 Front panel, Al, 2.5 mm, front anodised, rear iridescent green chromated 1 piece (SPQ 5)¹⁾		
 04608109	3 U Height				
	4	30848-312	21101-853	21101-854	30848-327
	5	30848-300			30848-328
	6	30848-313			30848-329
	7	30848-301			30848-330
	8	30848-314			30848-331
	10	30848-315			30848-333
12	30848-316	30848-335			
 04608107	6 U Height				
	4	30848-317	21101-855	21101-856	30848-336
	5	30848-304			30848-337
	6	30848-318			30848-338
	7	30848-305			30848-339
	8	30848-319			30848-340
	10	30848-320			30848-342
12	30848-321	30848-344			
Dimensions see page		7.36		7.36	

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

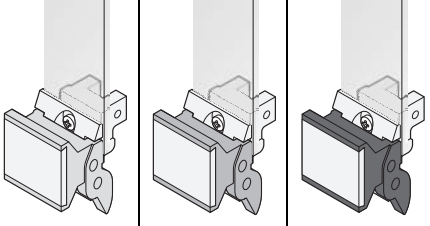
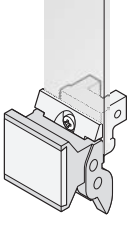
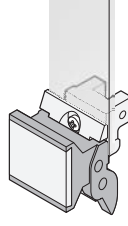
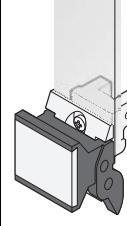
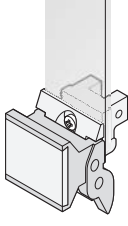
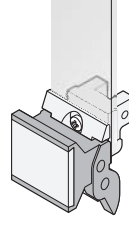
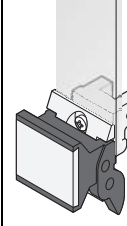
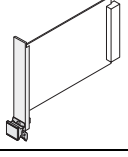
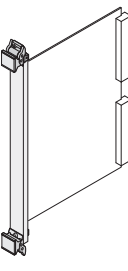
Part no. includes one packing unit (PU); delivery is exclusively made in PU

Plug-in units – for VME

Individual
components

Extractor handle, trapeziform, type 2

Order Information

	Trapeziform extractor handle, type 2 without alignment pin			Trapeziform extractor handle, type 2 with alignment pin		
	lever, light grey, RAL 7035	lever, dark grey, RAL 7032	lever, black, RAL 9005	lever, light grey, RAL 7035	lever, dark grey, RAL 7032	lever, black, RAL 9005
 04608085 BGA45760 04608087						
	Extractor handle, PPE; block, die-cast zinc, zinc-plated; identification plate, Al, 1.5 mm, anodised, cut edges plain; Pozidrive flat-head screw, M2.5 x 6, nickel-plated; slotted Pozidrive collar screw, M2.5 x 12.3, St, nickel-plated; slotted Pozidrive collar screw, M2.5 x 11, St, nickel-plated,			Extractor handle, PPE; block, die-cast zinc, zinc-plated; identification plate, Al, 1.5 mm, anodised, cut edges plain; Pozidrive flat-head screw, M2.5 x 6, nickel-plated; slotted Pozidrive collar screw, M2.5 x 12.3, St, nickel-plated; slotted Pozidrive collar screw, M2.5 x 11, St, nickel-plated,		
Width HP	1 piece (SPQ 10) ¹⁾	1 piece (SPQ 10) ¹⁾	1 piece (SPQ 10) ¹⁾	1 piece (SPQ 10) ¹⁾	1 piece (SPQ 10) ¹⁾	1 piece (SPQ 10) ¹⁾
 04608114	3 U Height bottom					
	20817-858	20817-854	20817-856	20817-833	20817-829	20817-831
 04608115	6 U Height top					
	20817-858	20817-854	20817-856	20817-833	20817-829	20817-831
	bottom					
	20817-858	20817-854	20817-856	20817-833	20817-829	20817-831
Dimensions see page	7.37			7.37		

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

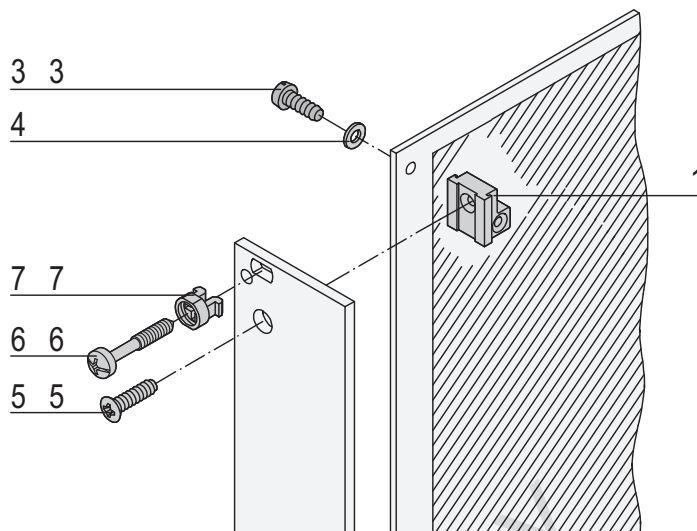
Part no. includes one packing unit (PU); delivery is exclusively made in PU

Plug-in units – for VME

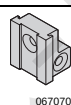
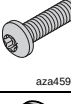
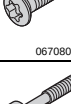
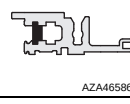
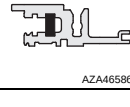
Individual
components

Fixing material for trapeziform extractor handle, type 2

Order Information



bga46045

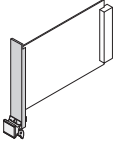
Fixing material	Item		Required quantity				Qty/PU	Part no.
			3 U		6 U			
			< 8 HP	≥ 8 HP	< 8 HP	≥ 8 HP		
Printed board bracket Zn die-cast	1	 06707050	1	1	–	–	1 Stück (LLG 10) ¹⁾	60807-181
Pozidrive panhead screw M2.5 × 6, St, nickel-plated	3	 AZA45177	2	2	2	2	100	21101-219
Slotted panhead screw with Torx 8 M2.5 × 6, St, zinc-plated Self-securing thread	3a	 aza45940	2	2	2	2	100	24560-159
Washer 2.7, St, nickel-plated	4	 AZA46586	2	2	2	2	100	21100-721
Raised Pozidrive countersunk panhead screw M2.5 × 8, St, nickel-plated	5	 06702056	1	1	–	–	100	21100-429
Raised countersunk panhead screw with Torx 8 M2.5 × 8, St, nickel-plated	5a	 06708050	1	1	–	–	100	24560-164
Slotted Pozidrive collar screw M2.5 × 11, St, nickel-plated	6	 AZA46586	1	3	–	2	100	21100-748
Slotted Pozidrive collar screw M2.5 × 12.3, St, nickel-plated	6a	 AZA46586	1	3	–	2	100	21101-101
For form hole 5.9 x 3.3, PA, UL 94 V-2, grey	7	 aza45933	1	3	–	2	100	21100-464
Metal sleeve, for form hole 5.9 x 3.3, press-in Stainless steel	7a	 aza45933	1	3	–	2	100	21100-662

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Plug-in units – for VME

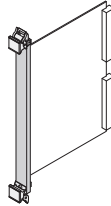
Dimensions Front panels, U profiles, for trapeziform extractor handles, type 2

3 U

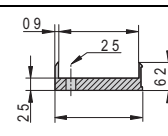
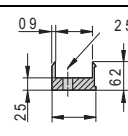
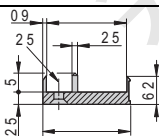
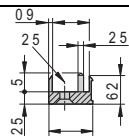
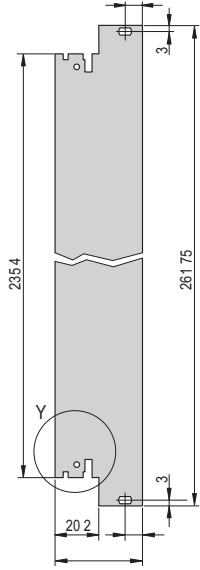
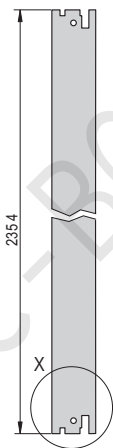
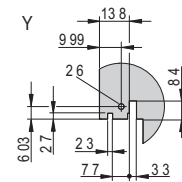
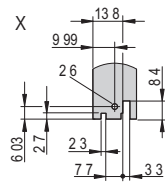
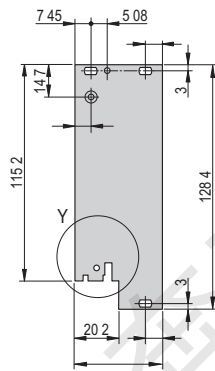
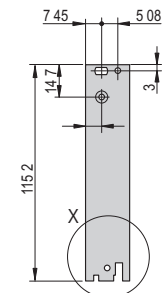
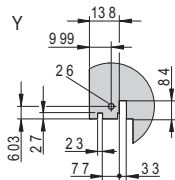
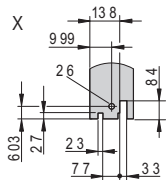


04608109

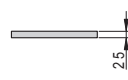
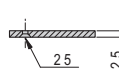
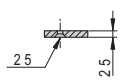
6 U



04608107



shieldable



unshielded

4 HP

≥5 HP

04608064 04608077

4 HP

≥5 HP

04608065 04608078

Dimensions table

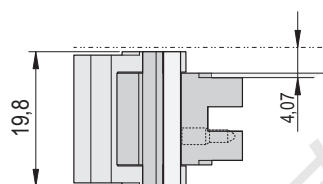
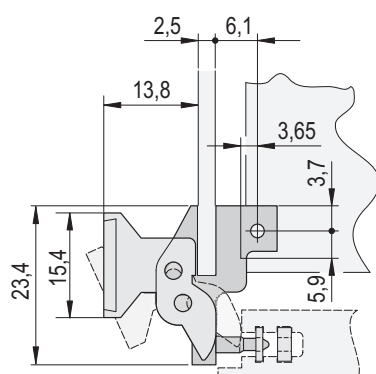
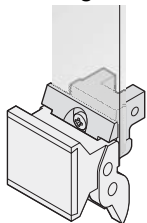
Width HP	b mm	c mm	d mm
4	19.98	17.45	—
5	25.06	22.53	—
6	30.14	27.61	—
7	35.22	32.69	—
8	40.30	37.77	7.45
9	45.38	42.85	7.45
10	50.46	47.93	7.45
11	55.54	53.01	7.45
12	60.62	58.09	7.45
14	70.78	68.25	7.45
16	80.94	78.41	7.45

Plug-in units – for VME

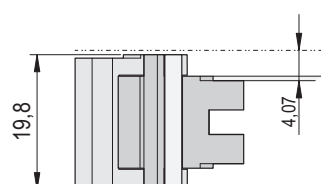
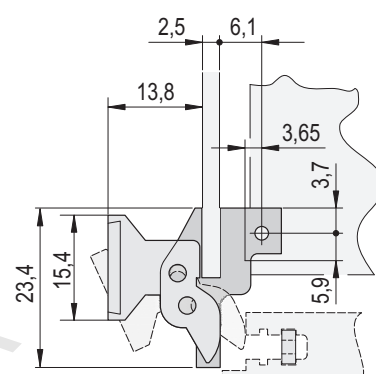
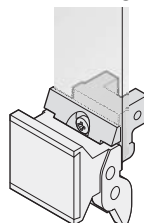
Dimension
drawings

Extractor handle, trapeziform, type 2

with alignment pin



without alignment pin

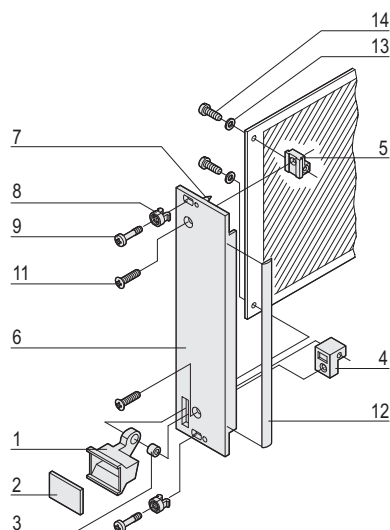


Plug-in units – for VME

Kits

Plug-in units with trapeziform extractor handle, type 1 – front panel, U-profile, shielded

3 U

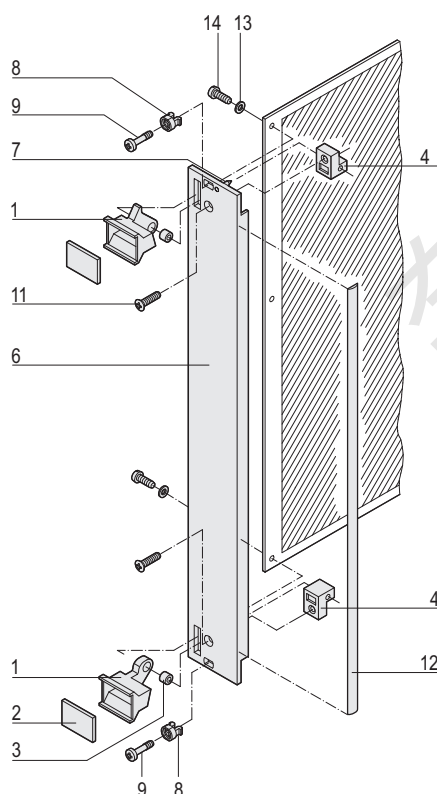


- At 6 U the board position can be offset by 1 HP to the right by swapping the top and bottom board supports; thus space is created for SMD components on the left (solder) side; for board thickness 1.6 mm only

Delivery comprises (kit)

Item	Qty	3 U	6 U	Description
1	1	1		Extractor handle, trapeziform type, PPE, grey, bottom
1a	-	1		Extractor handle, trapeziform type, PPE, grey, top
2	1	2		Identification plate, Al, 1.5 mm, anodised, cut edges plain
3	1	2		Pivot bush, Ms
4	1	1		Board support, die-cast zinc, bottom
4a	-	1		Board support, die-cast zinc, top
5	1	-		Board support, die-cast zinc
6	1	1		Front panel, U profile, for trapeziform extractor handle, front anodised, rear conductive
7	2	2		Alignment pin, pressed-in, stainless steel
8	2	2		Sleeve, PA, grey, up to 7 HP front panel width
8	4	4		Sleeve, PA, grey, from 8 HP front panel width
9	2	2		Collar screw, Pozidrive/slot, St, nickel-plated, M2.5 × 12.3, front panel width up to 7 HP
9	4	4		Collar screw, Pozidrive/slot, St, nickel-plated, M2.5 × 12.3, front panel width from 8 HP
11	1	2		Raised countersunk panhead screw, M2.5 × 8
12	1	1		EMC gasket (textile)
13	2	2		Washer, A2.7, DIN 125
14	2	2		Pozidrive flathead screw, St, nickel-plated, M2.5 × 10

6 U



Order Information

Width	3 U	6 U
HP	Part no.	Part no.
4	20848-485	20848-492
6	20848-487	20848-494
8	20848-489	20848-496
10	20848-490	20848-497
12	20848-491	20848-498



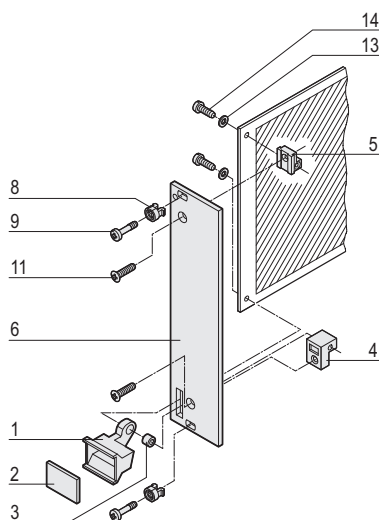
For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.

Plug-in units – for VME

Kits

Plug-in units with trapeziform extractor handle, type 1 – front panel unshielded

3 U

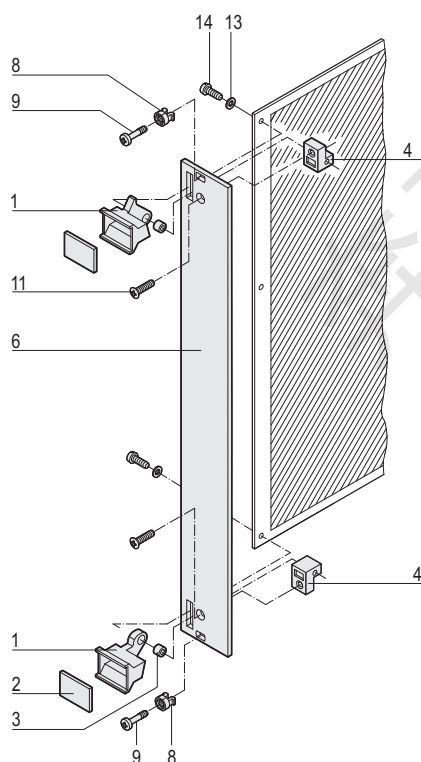


- At 6 U the board position can be offset by 1 HP to the right by swapping the top and bottom board supports; thus space is created for SMD components on the left (solder) side; for board thickness 1.6 mm only

Delivery comprises (kit)

Item	Qty		Description
	3 U	6 U	
1	1	1	Extractor handle, trapezium shape, PPE, grey, bottom
1a	–	1	Extractor handle, trapezium shape, PPE, grey, top
2	1	2	Identification plate, Al, 1.5 mm, anodised, cut edges plain
3	1	2	Pivot bush, Ms
4	1	1	Board support, die-cast zinc, bottom
4a	–	1	Board support, die-cast zinc, top
5	1	–	Board support, die-cast zinc
6	1	1	Front panel for trapeziform extractor handle, front anodised, rear iridescent green chromated
8	2	2	Sleeve, PA, grey, up to 7 HP front panel width
8	4	4	Sleeve, PA, grey, from 8 HP front panel width
9	2	2	Collar screw, Pozidrive/slot, St, nickel-plated, M2.5 × 11 and 12.3, front panel width up to 7 HP
9	4	4	Collar screw, Pozidrive/slot, St, nickel-plated, M2.5 × 11 and 12.3, front panel width from 8 HP
11	1	2	Raised countersunk panhead screw, M2.5 × 8
13	2	2	Washer, A2.7, DIN 125
14	2	2	Pozidrive flathead screw, St, nickel-plated, M2.5 × 10

6 U



Order Information

Width HP	3 U		6 U	
	Part no.		Part no.	
4	20817-443		20817-448	
5	20817-444		20817-449	
6	20817-445		20817-450	
7	20817-446		20817-451	
8	20817-447		20817-452	
10	20817-456		20817-458	
12	20817-457		20817-459	



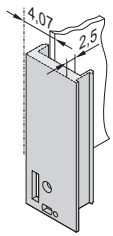
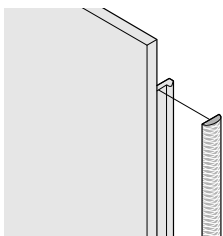
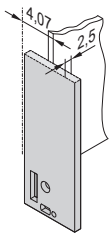
For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.

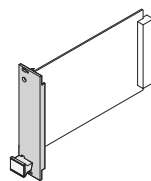
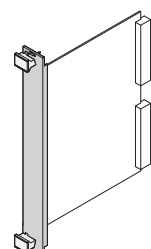
Plug-in units – for VME

Individual
components

Front panels and EMC gaskets, for trapezoidal extractor handle, type 1

Order Information

		Front panel, U profile, shieldable  04608091 Al profile, front anodised, rear conductive, alignment pin pressed-in, stainless steel	Textile EMC gasket  BGA45760 always fixed laterally on the front panel, in the groove of the profile, textile gasket, core: foam, sleeve: textile cladding with CuNi coating, UL 94 V-0, temperature range -40 ... 70 °C		Front panel, unshielded  04608092 front panel, Al, 2.5 mm, front anodised, rear iridescent green chromated
	Width HP	1 piece (SPQ 5) ¹⁾	PU 10 pieces	PU 100 pieces	1 piece (SPQ 5) ¹⁾

		3 U Height			
 04608117	4	30848-461	21101-853	21101-854	30847-659
	5	—			30847-660
	6	30848-463			30847-661
	7	—			30847-662
	8	30848-465			30847-663
	10	30848-466			30847-664
	12	30848-467			30847-665
		6 U Height			
 04608116	4	30848-468	21101-855	21101-856	30847-666
	5	—			30847-667
	6	30848-470			30847-668
	7	—			30847-669
	8	30848-472			30847-670
	10	30848-473			30847-671
	12	30848-474			30847-672
Dimensions see page		7.43			7.43

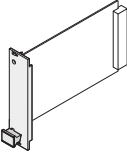
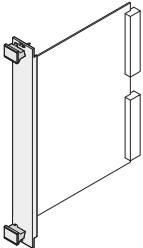
1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple
Part no. includes one packing unit (PU); delivery is exclusively made in PU

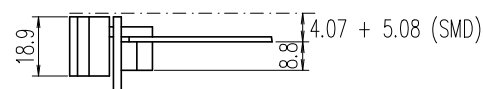
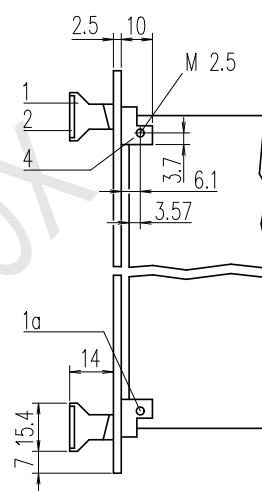
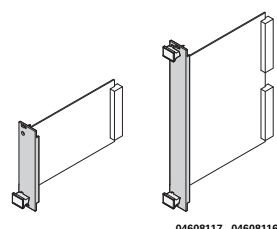
Plug-in units – for VME

Individual
components

Trapeziform extractor handles, type 1

Order Information

	Trapeziform extractor handle	
	black	grey
		
	04608093	04608094
	handle closed laterally, PPE, UL 94 V-1, black; pivot bush; identification plate, Al, 1.5 mm, anodised, cut edges plain; board support die-cast zinc; in the 6 U version, space can be created for SMD components on the left side by swapping the top and bottom handles and thus moving the PCB position 1 HP to the right	
Width HP	1 piece (SPQ 10) ¹⁾	1 piece (SPQ 10) ¹⁾
	3 U Height top	
	20817-329	20817-327
	6 U Height top	
	20817-330	20817-328
	bottom	
	20817-329	20817-327



1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

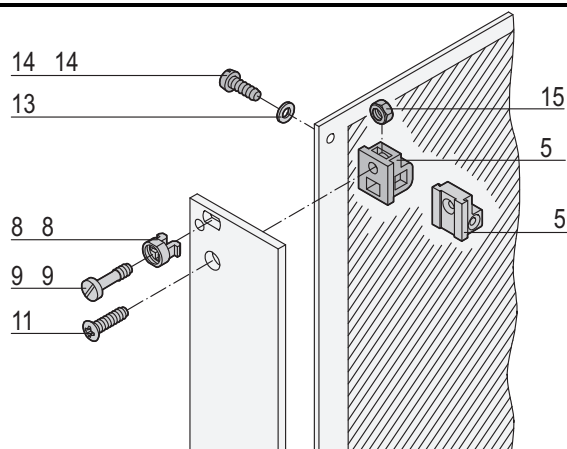
bga42556

Plug-in units – for VME

Individual
components

Fixing material for trapeziform extractor handle, type 1

Order Information



bga42545

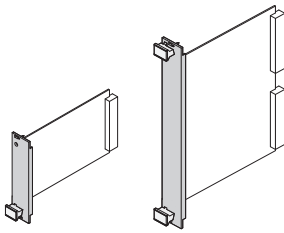
Fixing material	Item		Required Qty				Qty/PU	Part no.
			3 U		6 U			
			< 8 HP	≥ 8 HP	< 8 HP	≥ 8 HP		
Board support, die-cast zinc, with thread M2.5, for front panel and PCB fixing	5	 06707050	1	2	2	4	1 piece (SPQ 10) ¹⁾	60807-181
Board support, plastic, PBT, UL 94 V-0, grey, with recess for hexagon nut M2.5, for fixing front panel	5a	 AZA45177	1	2	2	4	1 piece (SPQ 10) ¹⁾	60807-183
Plastic sleeve, for form hole 5.9 x 3.3 PA, UL 90 V-2, grey	8	 aza45933	2	4	2	4	100	21100-464
Metal sleeve, for form hole 5.9 x 3.3, press-in Stainless steal	8a	 aza45933	2	4	–	–	100	21100-662
Pozidrive/slotted collar screw M2.5 × 11, St, nickel-plated	9	 AZA46586	2	4	2	4	100	21100-748
Pozidrive/slotted collar screw M2.5 × 12.3, St, nickel-plated	9a	 AZA46586	2	4	2	4	100	21101-101
Raised Pozidrive countersunk screw M2.5 × 8, St, nickel-plated	11	 06702056	2	2	2	2	100	21100-429
Washer 2.7 DIN 125, St, nickel-plated, 100 pieces	13	 AZA46586	2	2	2	2	100	21100-721
Pozidrive panhead screw M2.5 × 10, St, nickel-plated for item 5	14	 AZA45177	2	2	2	2	100	21101-220
Panhead screw, self-tapping 2.5 x 8, St, zinc-plated for item 5b	14a	 06702057	1	1	–	–	100	21100-710
Hexagon nut M2.5, nickel-plated steel for item 5b	15	 aza45933	1	1	–	–	100	21100-144

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

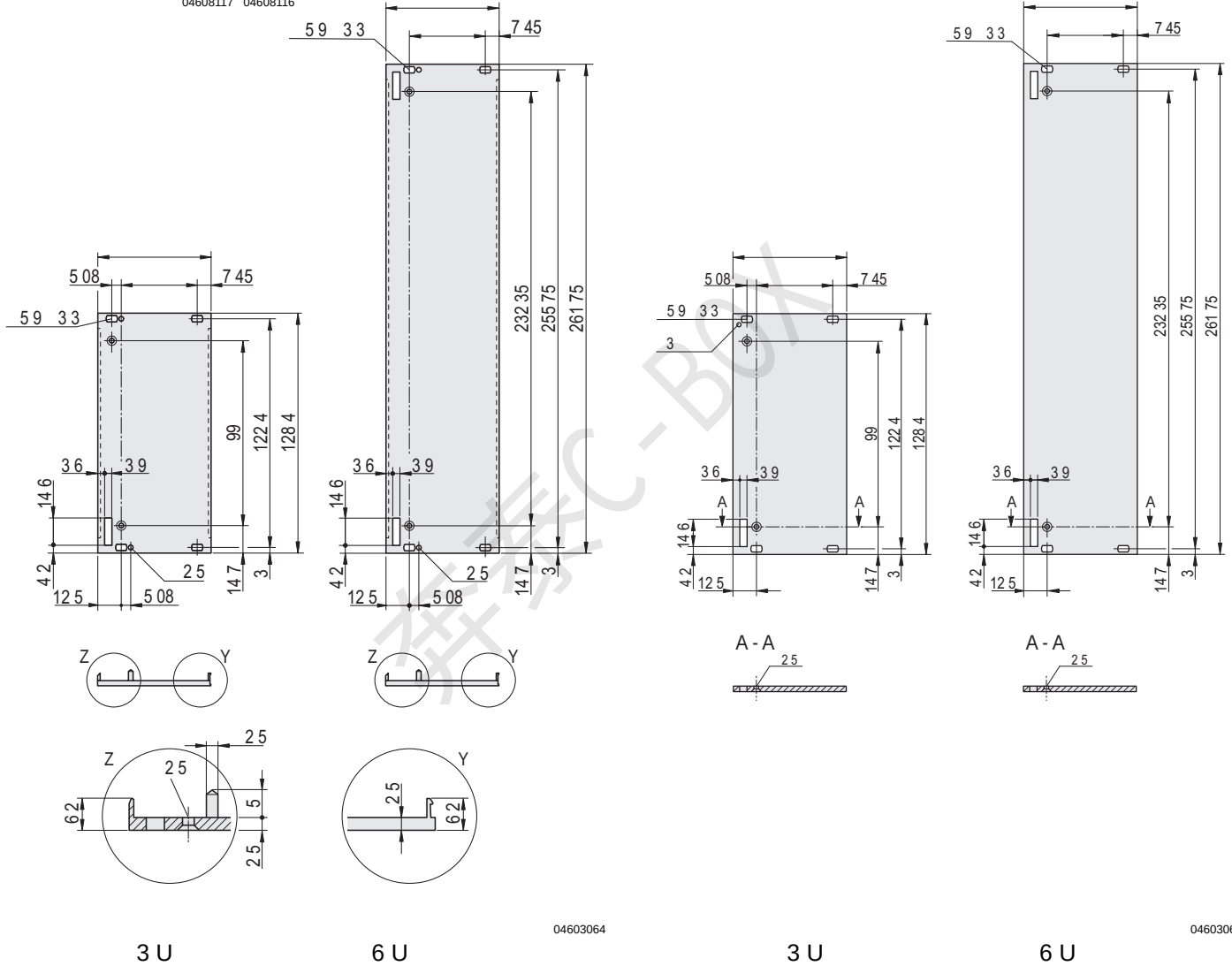
Plug-in units – for VME

Dimensions

Front panels for trapezoidal extractor handles, type 1, shielded/unshielded



04608117 04608116



04603064

04603063

Dimensions table

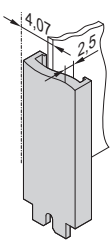
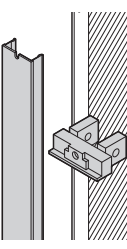
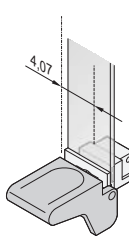
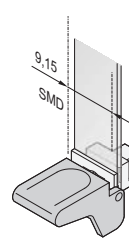
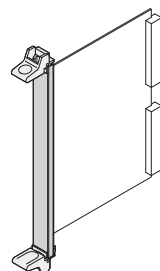
Width HP	A mm	B mm
4	19.98	–
5	25.06	–
6	30.14	–
7	35.22	–
8	40.30	20.32
10	50.46	30.48
12	60.62	40.64

Plug-in units – for Multibus II

Individual
components

Front panels/extractor handles for Multibus® II, symmetrical/SMDversion

Order Information

	Width HP	U front profile	Mounting block for D-Sub connector (50 pin)	Extractor handle for Multibus® II	
				symmetrical handle grey, RAL 7032	SMD handle grey, RAL 7032
		 Al extrusion, 1 mm 04608095	 for fixing D-Sub connectors 50-pin, thread on front UNC4/40; required quantity: for 6 U 1x, for 9 U 2x 04608098	 04608099	 04608108
		1 piece (SPQ 5) ¹⁾	1 piece (SPQ 10) ¹⁾	1 piece (SPQ 10) ¹⁾	1 piece (SPQ 10) ¹⁾
 04608120		6 U Height		6 U Height top	
	4	30829-001	60829-008	20829-011	20829-004
				bottom	
				20829-011	20829-003
		9 U Height		9 U Height top	
	4	30829-007	60829-008	20829-011	20829-004
				bottom	
				20829-011	20829-003
Dimensions see page		7.45	7.45	7.45	7.45

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ);

please order at least the SPQ quantity or a multiple

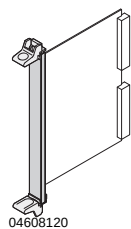
Part no. includes one packing unit (PU); delivery is exclusively made in PU

Plug-in units – for Multibus II

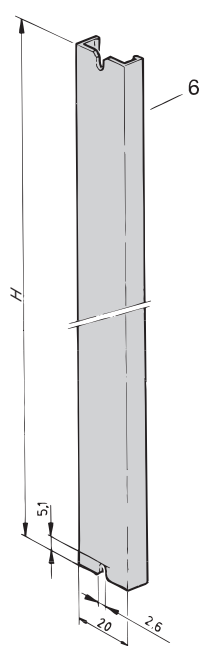
Dimension
drawings

Front panels, U profile / front panel for Multibus® II

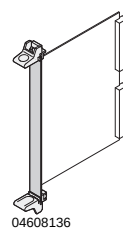
6/9 U



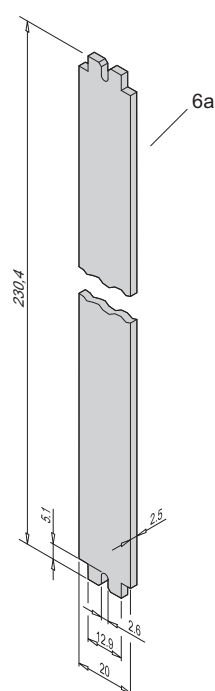
04608120



6 U



04608136



Dimensions
table

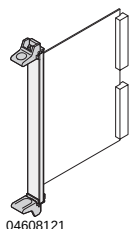
Height U	Height mm
6	230.4
9	363.7

A4-2580

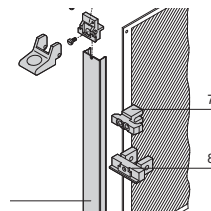
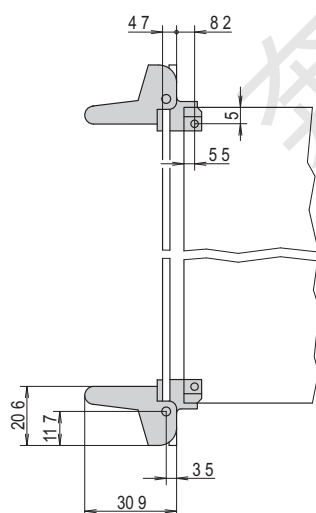
BGA46120

Dimensions

Extractor handles, mounting block for Multibus® II

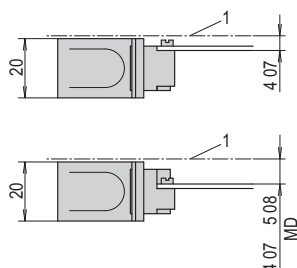
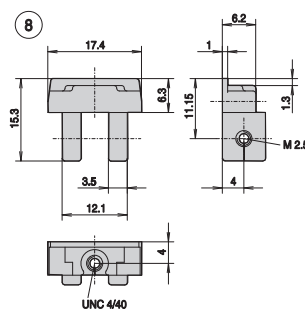
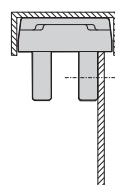


04608121



BGA42549

for D-Sub connector (50 pin)



BGA42585

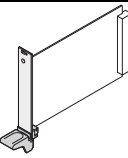
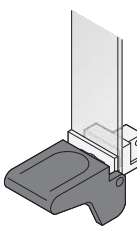
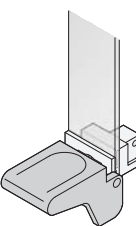
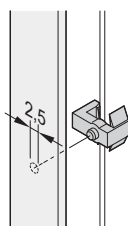
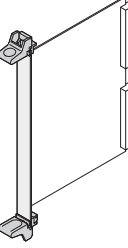
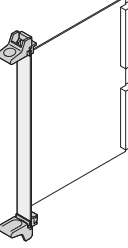
gba42579

Plug-in units – for IEC 60297, key form 1

Individual
components

Extractor handles in key form 1

Order Information

	Extractor handle		Front panel	Fixing clip
	black	grey		
 04608123	 04608101	 04608102	 04608103	 bga42544
	extractor handle in key form 1, PC, UL 94 V-0; bearing Zn die-cast, nickel-plated; slotted cheesehead screw, M2.5 x 6 (fitted); in the 6 U version, space can be created for SMD components on the left side by swapping the top and bottom handles and thus moving the PCB position 1 HP to the right		Al, 2.5 mm; available on request	for fixing PCB to the front panel (blind hole X2.6, depth 1.3 mm); also for SMD applications; clip, PPE, UL 94 V-0, red
Width HP	1 piece (SPQ 10) ¹⁾	1 piece (SPQ 10) ¹⁾		PU 100 pieces
 04608122	3 U Height bottom			
	20817-345	20817-325	—	—
 04608122	6 U Height top			
	20817-346	20817-326	—	21100-719
	bottom			
	20817-345	20817-325	—	
Dimensions see page	7.48	7.48	7.48	

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

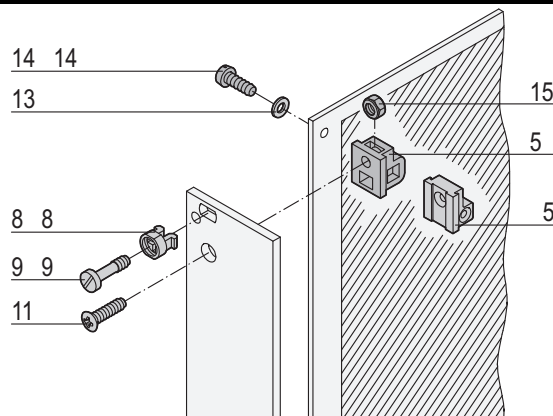
Part no. includes one packing unit (PU); delivery is exclusively made in PU

Plug-in units – for IEC 60297, key form 1

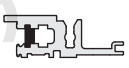
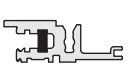
Individual
components

Fixing material for extractor handle in key form 1

Order Information



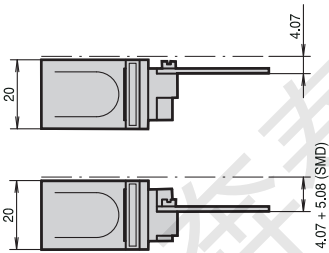
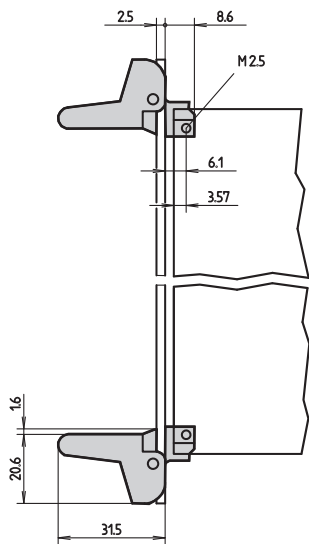
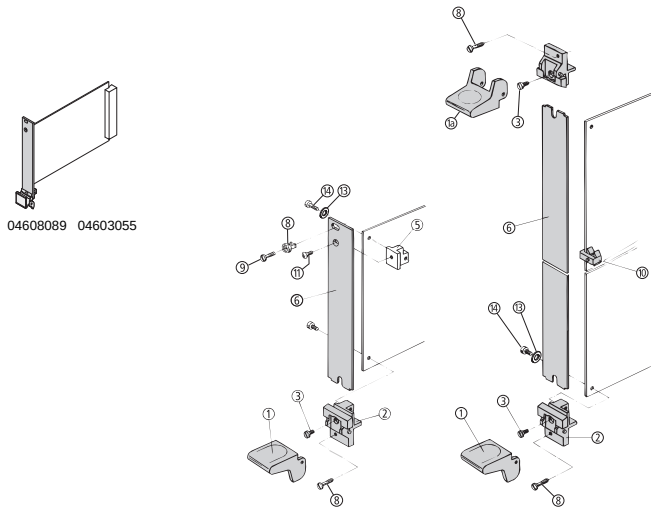
bga42545

Fixing material	Item		Required Qty		Qty/PU	Part no.
			3 U	6 U		
Board support, die-cast zinc, with thread M2.5, for front panel and PCB fixing	5	 06707050	1	—	1 piece (SPQ 10) ¹⁾	60807-181
Board support, plastic, PBT, UL 94 V-0, grey, with recess for hexagon nut M2.5, for fixing front panel	5a	 AZA45177	1	—	1 piece (SPQ 10) ¹⁾	60807-183
Plastic sleeve, for form hole 5.9 x 3.3 PA, UL 90 V-2, grey	8	 aza45933	1	—	100	21100-464
Metal sleeve, for form hole 5.9 x 3.3, press-in Stainless steel	8a	 aza45933	1	—	100	21100-662
Pozidrive/slotted collar screw M2.5 x 11, St, nickel-plated	9	 AZA46586	2	2	100	21100-748
Pozidrive/slotted collar screw M2.5 x 12.3, St, nickel-plated	9a	 AZA46586	2	2	100	21101-101
Raised Pozidrive countersunk screw M2.5 x 8, St, nickel-plated	11	 06702056	1	—	100	21100-429
Washer 2.7 DIN 125, St, nickel-plated, 100 pieces	13	 AZA46586	2	2	100	21100-721
Pozidrive panhead screw M2.5 x 10, St, nickel-plated for item 5	14	 AZA45177	2	2	100	21101-220
Pan head screw, self-tapping 2.5 x 8, St, zinc-plated for item 5b	14a	 06702057	1	—	100	21100-710
Hexagon nut M2.5, nickel-plated steel for item 5b	15	 aza45933	3	6	100	21100-144

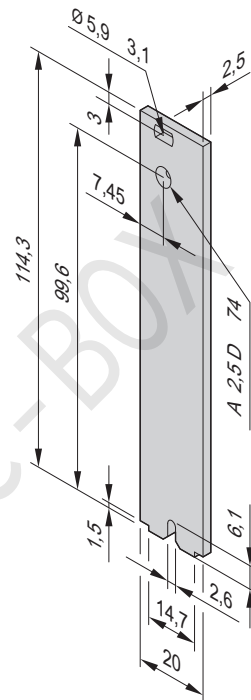
1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Plug-in units – for IEC 60297, key form 1

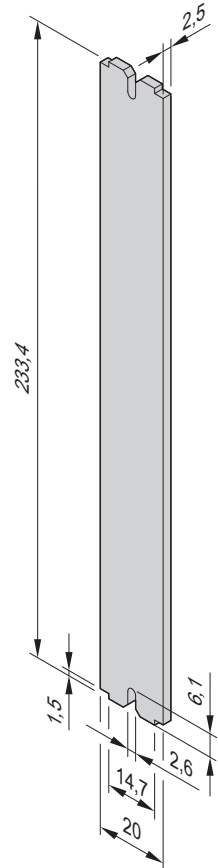
Dimensions Extractor handles/front panels key form 1



04603056



3 U



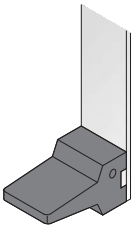
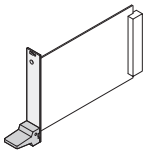
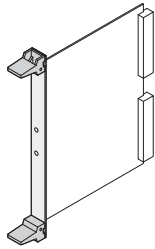
6 U

04603057

Plug-in units – for IEC 60297, key form 2

Individual components Extractor handles in key form 2

Order Information

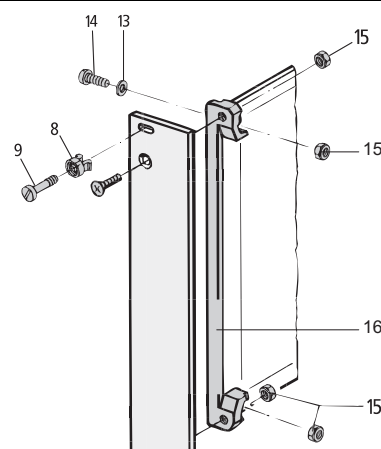
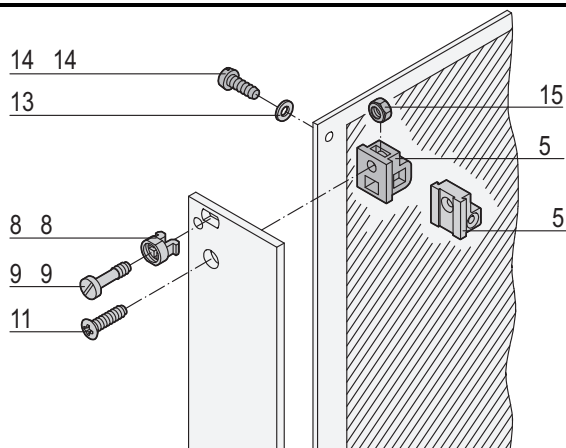
	Extractor handle black	Front panel
	 04608104 extractor handle, PBT, UL 90 V-0; bearing Zn die-cast, nickel-plated; incl. assembly kit for handle mounting	 04608106 Al, 2.5 mm; available on request
Width HP	1 piece (SPQ 10)¹	
 04608124	3 U Height top	
	20808-137	—
 04608125	6 U Height top	
	20808-137	—
	bottom	
	20808-137	—
Dimensions see page	7.51	7.51

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple
Part no. includes one packing unit (PU); delivery is exclusively made in PU

Plug-in units – for IEC 60297, key form 2

Individual components Fixing material for extractor handles, key form 2

Fixing material for extractor handles, key form 2



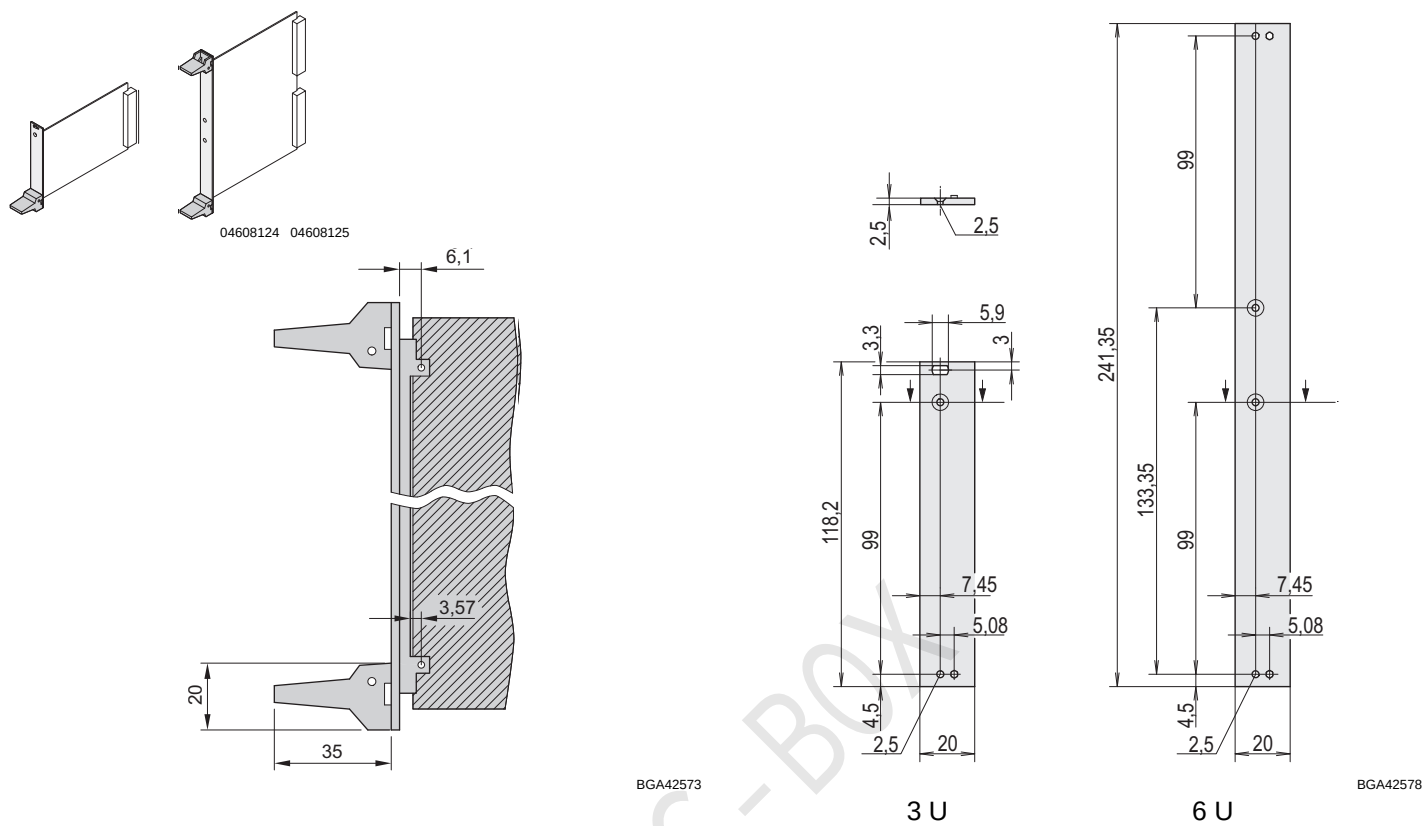
bga42545 04608137

Fixing material	Item		Required Qty		Qty/PU	Part no.
			3 U	6 U		
Board support, die-cast zinc, with thread M2.5, for front panel and PCB fixing	5		1	2	1 piece (SPQ 10) ¹⁾	60807-181
Board support, plastic, PBT, UL 94 V-0, grey, with recess for hexagon nut M2.5, for fixing front panel	5a		1	2	1 piece (SPQ 10) ¹⁾	60807-183
Plastic sleeve, for form hole 5.9 x 3.3 PA, UL 90 V-2, grey	8		1	–	100	21100-464
Metal sleeve, for form hole 5.9 x 3.3, press-in Stainless steel	8a		1	–	100	21100-662
Pozidrive/slotted collar screw M2.5 x 11, St, nickel-plated	9		2	2	100	21100-748
Pozidrive/slotted collar screw M2.5 x 12.3, St, nickel-plated	9a		2	2	100	21101-101
Raised Pozidrive countersunk screw M2.5 x 8, St, nickel-plated	11		1	–	100	21100-429
Washer 2.7 DIN 125, St, nickel-plated, 100 pieces	13		2	2	100	21100-721
Pozidrive panhead screw M2.5 x 10, St, nickel-plated for item 5	14		2	2	100	21101-220
Panhead screw, self-tapping 2.5 x 8, St, zinc-plated for item 5b	14a		1	–	100	21100-710
Hexagon nut M2.5, nickel-plated steel for item 5b	15		3	–	100	21100-144
PCB bracket 4 clearance holes for front panel/PCB fixing, 4 recesses for hexagon nuts; PBT, UL 94 V-0, red	16		1	2	1 piece (SPQ 10)	60807-011

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Plug-in units – for IEC 60297, key form 2

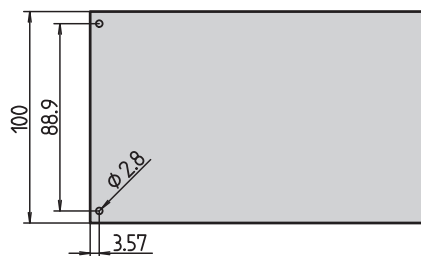
Dimensions Handles/front panels key form 2



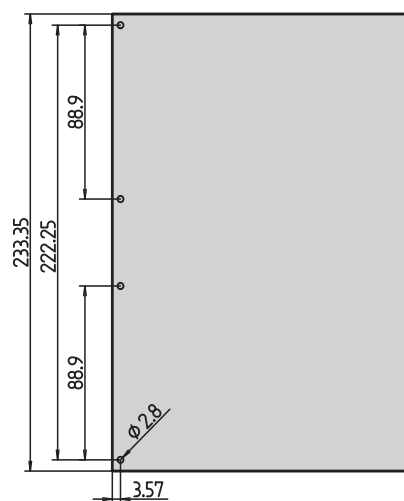
Dimensions Drill hole dimensions on the PCB key form 2

3 U

6 U



BGA43076



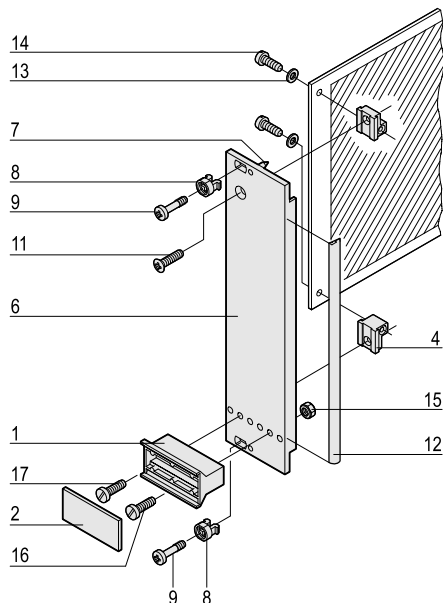
BGA43077

Plug-in units – for IEC 60297, trapeziform

Kits

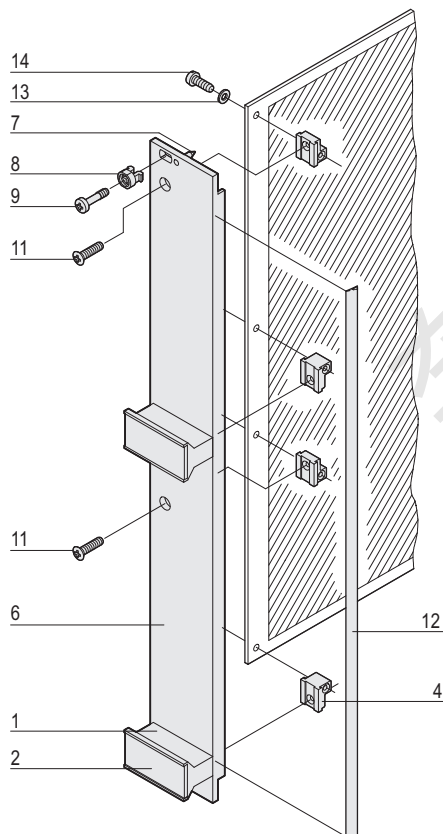
Plug-in unit with static trapeziform handle

3 U



04602062

6 U



04602063

- Front panel, U-profile, shielded
- Handle without extraction function

Delivery comprises

Item	Qty		Description
	3 U	6 U	
1	1	2	Plastic handle, trapeziform, PPE, grey
2	1	2	Identification plate, Al, 1.5 mm, anodised, cut edges plain
4	2	4	Board support, die-cast zinc
6	1	1	Front panel, U profile, for trapeziform handle, front anodised, rear conductive
7	2	2	Alignment pin, pressed-in, stainless steel
8	2	2	Sleeve, PA, grey, up to 7 HP front panel width
8	4	4	Sleeve, PA, grey, from 8 HP front panel width
9	2	2	Pozidrive/slotted collar screw, St, nickel-plated, M2.5 × 11 and 12.3, front panel width up to 7 HP
9	4	4	Pozidrive/slotted collar screw, St, nickel-plated, M2.5 × 11 and 12.3, front panel width from 8 HP
11	1	2	Raised countersunk screw, St, nickel-plated, M2.5 × 8
12	1	1	EMC sealing (textile)
13	2	4	Washer, A2.7, DIN 125
14	2	4	Pozidrive flathead screw, St, nickel-plated, M2.5 × 10
15	1	2	Hexagon nut, St, nickel-plated, M2.5
16	1	2	Pozidrive flathead screw, St, nickel-plated, M2.5 × 12
17	1	2	Pozidrive flathead screw, St, nickel-plated, M2.5 × 16

Order Information

Width HP	Qty	
	3 U	6 U
	Part no.	Part no.
3	20848-663	20848-671
4	20848-664	20848-672
5	20848-665	20848-673
6	20848-666	20848-674
7	20848-667	20848-675
8	20848-668	20848-676
10	20848-669	20848-677
12	20848-670	20848-678



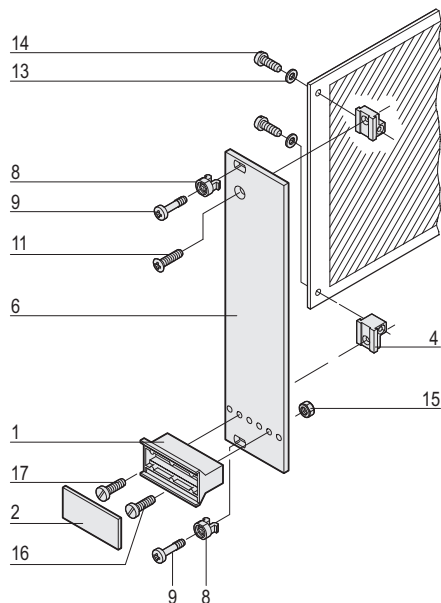
For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.

Plug-in units – for IEC 60297, trapeziform

Kits

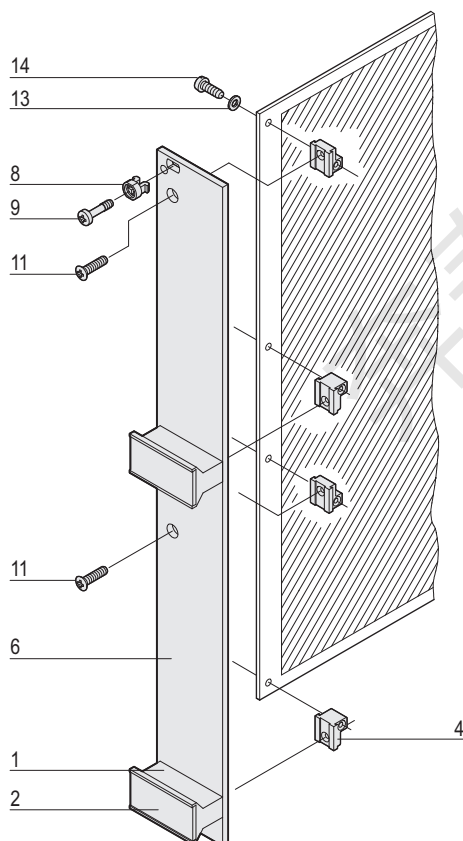
Plug-in unit with static trapeziform handle

3 U



04602064

6 U



04602065

■ Front panel unshielded

■ Handle without extraction function

Delivery comprises

Item	Qty	3 U	6 U	Description
1	1	2		Plastic handle, trapeziform, PPE, grey
2	1	2		Identification plate, Al, 1.5 mm, anodised, cut edges untreated
4	2	4		Board support, die-cast zinc
6	1	1		Front panel for trapeziform handle, front anodised, rear iridescent green chromated
8	2	2		Sleeve, PA, grey, up to 7 HP front panel width
8	4	4		Sleeve, PA, grey, from 8 HP front panel width
9	2	2		Pozidrive/slot collar screw, St, nickel-plated, M2.5 × 11 and 12.3, front panel width up to 7 HP
9	4	4		Pozidrive/slot collar screw, St, nickel-plated, M2.5 × 11 and 12.3, front panel width from 8 HP
11	1	2		Raised countersunk screw, St, nickel-plated, M2.5 × 8
13	2	4		Washer, A2.7
14	2	4		Pozidrive flathead screw, St, nickel-plated, M2.5 × 8
15	1	2		Hexagon nut, St, nickel-plated, M2.5
16	1	2		Pozidrive flathead screw, St, nickel-plated, M2.5 × 12
17	1	2		Pozidrive flathead screw, St, nickel-plated, M2.5 × 16

Order Information

Width	3 U	6 U
HP	Part no.	Part no.
3	20818-017	20809-507
4	20818-018	20818-025
5	20818-019	20818-026
6	20818-020	20818-027
7	20818-021	20818-162
8	20818-022	20818-028
10	20818-023	20818-029
12	20818-024	20818-120



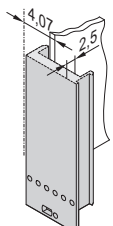
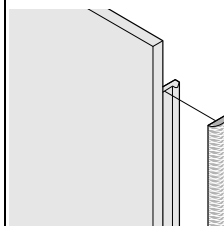
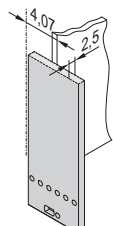
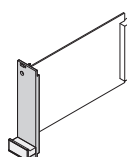
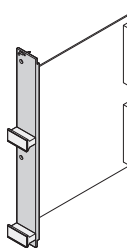
For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.

Plug-in units – for IEC 60297, trapeziform

Individual
components

Front panels for static cantilever handles

Order Information

		Front panel, U-profile, shieldable			Front panel unshielded
		Front panel, U-profile	Textile EMC gasket		
		 04608130 Al extrusion, front anodised, rear conductive, alignment pin pressed-in, stainless steel	 bga45760 always fixed laterally on the front panel, in the groove of the profile, textile gasket, core: foam, sleeve: textile cladding with CuNi coating, UL 94 V-0, temperature range -40 ... 70 °C		 04608131 front panel, Al 2.5 mm; front anodised; rear iridescent green chromated
Width HP		1 piece (SPQ 5) ¹⁾	PU 10 pieces	PU 100 pieces	1 piece (SPQ 5) ¹⁾
3 U Height					
 04608126	3	30849-086	21101-853	21101-854	30847-602
	4	30849-087			30847-603
	5	30849-088			30847-604
	6	30849-089			30847-605
	7	30849-090			30847-606
	8	30849-091			30847-607
	10	30849-092			30847-608
	12	30849-093			30847-609
6 U Height					
 04608127	3	30849-097	21101-855	21101-856	30847-625
	4	30849-098			30847-626
	5	30849-099			30847-627
	6	30849-100			30847-628
	7	30849-101			—
	8	30849-102			30847-630
	10	30849-103			30847-631
	12	30849-104			—
Dimensions see page		7.58			7.58

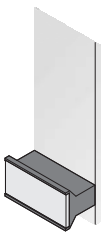
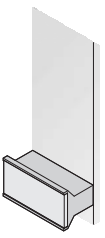
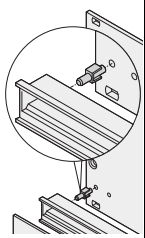
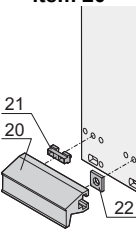
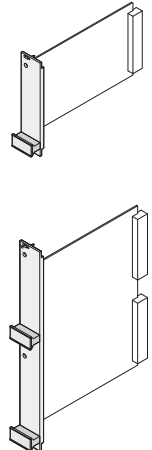
1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple
Part no. includes one packing unit (PU); delivery is exclusively made in PU

Plug-in units – for IEC 60297, trapeziform

Individual
components

Static trapeziform handle

Order Information

	Plastic handle in trapeziform			Al profile handle		
	Trapeziform handle black	Trapeziform handle grey	Fixing clip	Handle	Fixing part for Al profile handle	Square nut
	 04608132	 04608133	 04808064	 04608134	 04608135	 06707050
	handle: PPE, UL 94 V-1; identification plate: Al, 1.5 mm, anodised, cut edges plain; please order clip separately; required quantity: 1 handle for 3 U, 2 handles for 6 U		clip, PPE, UL 94 V-0, black, mounting aid from 5 HP to 42 HP	Al extrusion, anodised; fixing part, POM, black; square nut, St, nickel-plated; at length of 1000 mm only Al extrusion	fixing part, POM, black	DIN 562, M2.5, St, nickel-plated
Width HP	1 piece (SPQ 5) ¹⁾	1 piece (SPQ 5) ¹⁾	PU 100 pieces	1 piece (SPQ 10) ¹⁾	PU 100 pieces	PU 100 pieces
3 / 6 U Height						
 04608128 04608129	3	20809-396	20809-294	20809-281		
	4	20809-397	20809-295	20809-282		
	5	20808-080	20808-003	20809-283		
	6	20808-081	20808-060	20809-284		
	7	20808-082	20808-061	20809-285		
	8	20808-083	20808-062	20809-286		
	9	20808-084	20808-063	20809-287		
	10	20808-085	20808-004	20809-288	—	—
	12	20808-086	20808-064	20809-289		
	14	20808-087	20808-065	20809-290		
	21	20808-088	20808-066	20809-291		
	28	20808-089	20808-067	20809-292		
	40	20808-090	20808-009	—		
	42	20808-091	20808-068	20809-293		
	61	20808-092	20808-012	—		
	1000 mm	—	—	30809-428	21100-476	21100-359
Fixing material see page	7.57 Item 15, 16, 17					
Dimensions see page	7.57	7.57		7.59	7.59	7.59

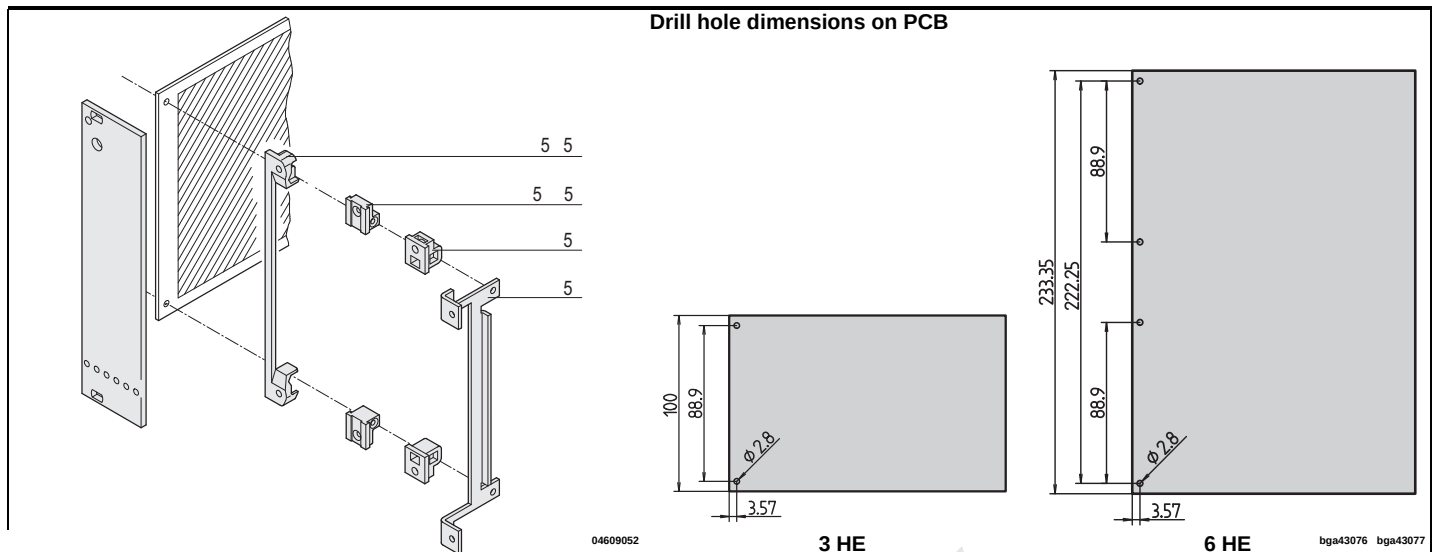
1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

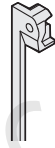
Part no. includes one packing unit (PU); delivery is exclusively made in PU

Plug-in units – for IEC 60297, trapeziform

Individual
components

PCB bracket for static trapeziform handle



	Item		Required Qty		Qty/PU	Part no.
			3 U	6 U		
PCB bracket 4 clearance holes for front panel/PCB fixing, 4 recesses for hexagon nuts; PBT, UL 94 V-0, red	5		1	2	1 piece (SPQ 10) ¹⁾	60807-011
PCB bracket 4 threads M2.5 for front panel/PCB fixing, PBT, UL 94 V-0, grey, 1 piece	5a	 AZA45177	1	2	1 piece (SPQ 10) ¹⁾	60807-211
PCB bracket Clearance hole for front panel fixing, with recess for hexagon nut, drill hole for self-tapping screw for PCB fixing, PBT, UL 94 V-0, grey, 1 piece	5b	 AZA45177	2	4	1 piece (SPQ 10) ¹⁾	60807-183
PCB bracket 2 threads M2.5 for front panel/PCB fixing, die-cast zinc, 1 piece	5c	 06707050	2	4	1 piece (SPQ 10) ¹⁾	60807-181
PCB bracket Thread M2.5 for front panel fixing, clearance hole for PCB fixing, die-cast zinc, 1 piece	5d	 06707050	2	4	1 piece (SPQ 10) ¹⁾	60807-203
PCB bracket 4 M2.5 threads for fixing front panel/PCB for recessed PCB mounting (20 mm), mounting depth 192.24 mm, St, zinc-plated; not for C-BOX PRO, multipacPRO, C-BOX PRO, propacPRO or compacPRO, 1 piece	5e	 AZA46586	1	2	1 piece (SPQ 10) ¹⁾	30808-871

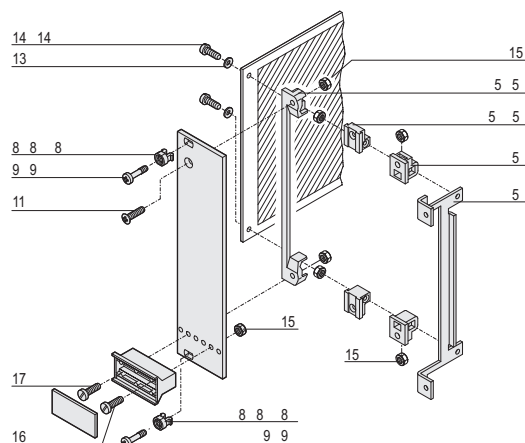
1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Plug-in units – for IEC 60297, trapeziform

Individual
components

Fixing material for static trapeziform handle

3 U

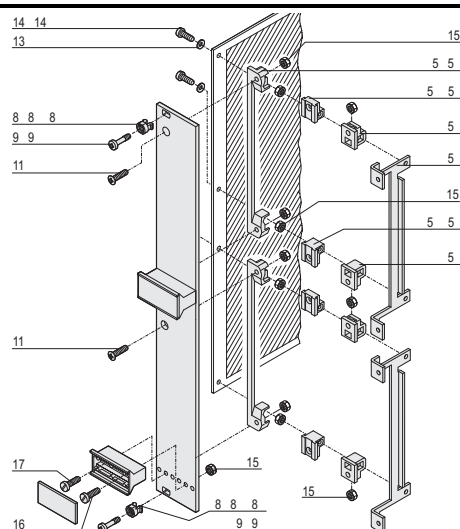


04609053

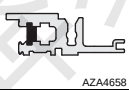
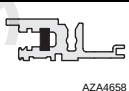
6 U

top

bottom



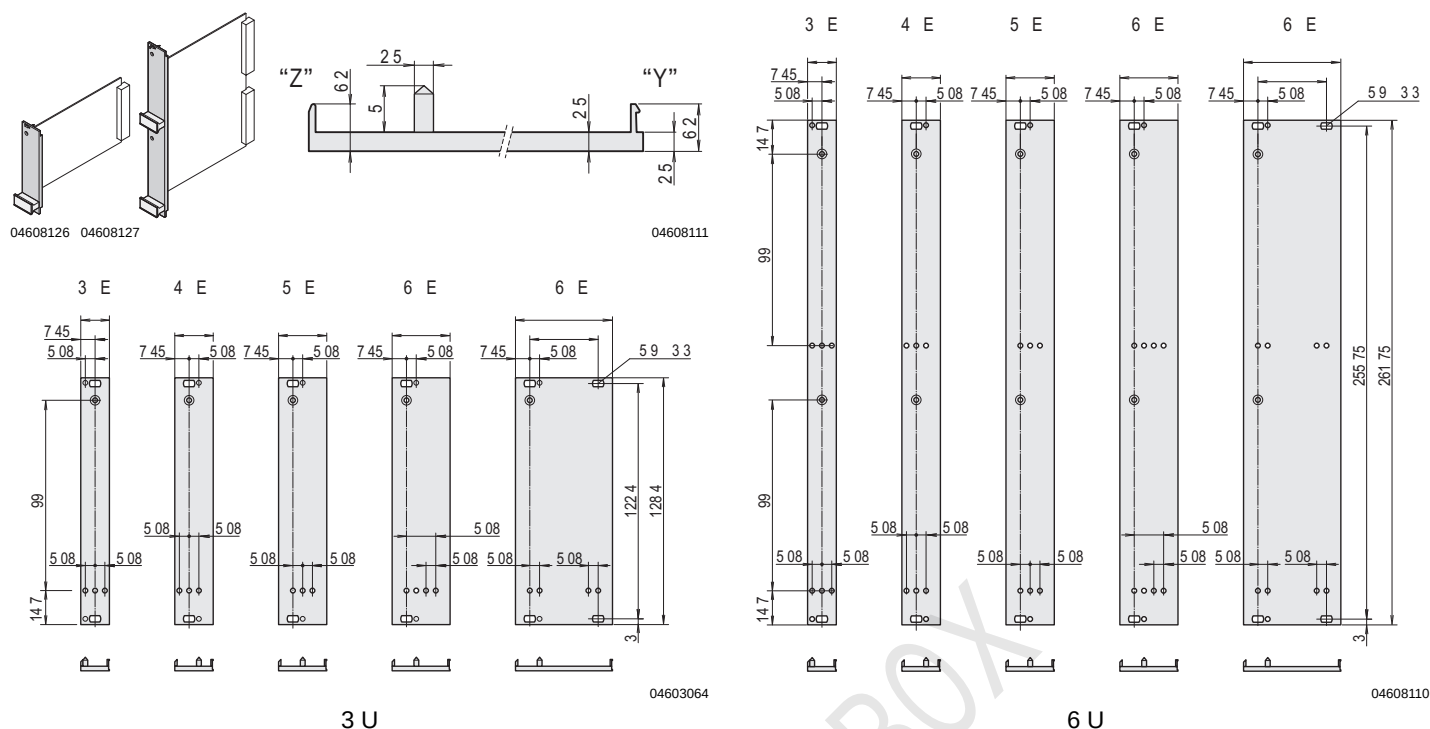
04609054

	Item		Required Qty				Qty/PU	Part no.
			3 U		6 U			
			< 8 HP	≥ 8 HP	< 8 HP	≥ 8 HP		
Plastic sleeve, for form hole 5.9 x 3.3 PA, UL 90 V-2, grey	8	 aza45933	2	4	2	4	100	21100-464
Metal sleeve, for form hole 5.9 x 3.3, press-in Stainless steal	8	 aza45933	2	4	2	4	100	21100-662
Metal sleeve, for form hole 5.9 x 3.3, to press-in Nickel-plated brass	8a	 aza45933	2	4	2	4	100	21100-660
Pozidrive/slotted collar screw M2.5 × 11, St, nickel-plated not for C-BOX PRO and cases	9	 AZA4658	2	4	2	4	100	21100-748
Pozidrive/slotted collar screw M2.5 × 12.3, St, nickel-plated	9a	 AZA4658	2	4	2	4	100	21101-101
Raised Pozidrive countersunk screw M2.5 × 8, St, nickel-plated	11	 06702056	1	1	2	2	100	21100-429
Washer 2.7 DIN 125, St, nickel-plated, 100 pieces	13	 AZA46586	2	2	4	4	100	21100-721
Pozidrive panhead screw M2.5 × 8, nickel-plated steel if using item 13	14	 06702057	2	2	4	4	100	21101-069
Panhead screw, self-tapping 2.5 x 8, St, zinc-plated for items 5 and 5b	14a	 06702057	1	1	—	—	100	21100-710
Hexagon nut M2.5, nickel-plated steel for items 5 and 5b	5 5b	 aza45933	4	4	8	8	100	21100-144
			2	2	4	4		
Pozidrive panhead screw M2.5 × 12, nickel-plated steel	16	 06702057	1	1	2	2	100	21101-221
Pozidrive panhead screw M2.5 × 16, nickel-plated steel	17	 06702057	1	1	2	2	100	21101-222

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Plug-in units – for IEC 60297, trapeziform

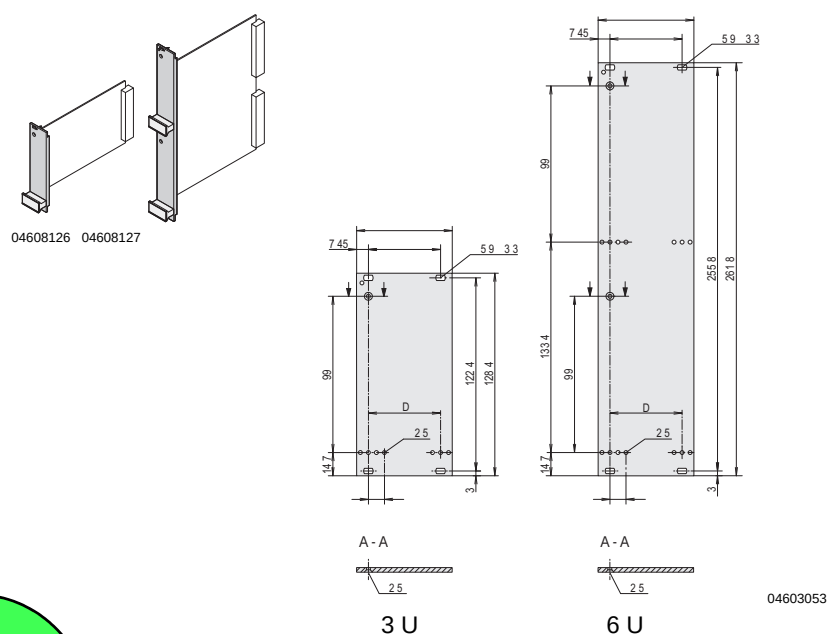
Dimensions Front panels, U profile, shieldable for static trapeziform handle



Dimensions table

Width HP	A mm	B mm
3	14.90	-
4	19.98	-
5	25.06	-
6	30.14	-
7	35.22	-
8	40.30	25.40
10	50.46	35.56
12	60.62	45.72

Dimensions Front panels for static trapeziform handle

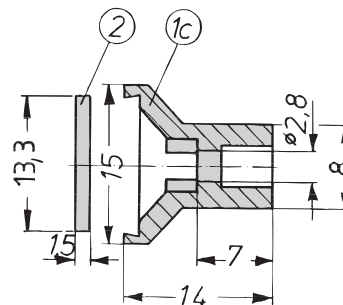
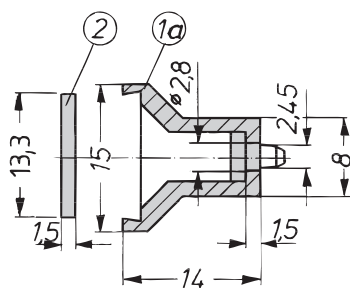
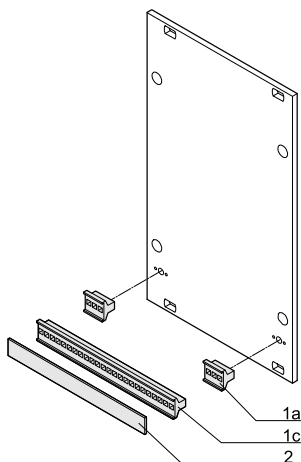


Dimensions table

Width HP	A mm	B mm	C mm	D mm
3	14.90	-	-	-
4	19.98	-	-	-
5	25.06	-	10.16	-
6	30.14	-	-	15.24
7	35.22	-	-	20.32
8	40.30	25.40	-	25.40
10	50.46	35.56	-	35.56
12	60.62	45.72	-	45.72

Plug-in units – for IEC 60297, trapeziform

Dimensions	Static plastic handles, trapeziform
------------	-------------------------------------



BGA46447

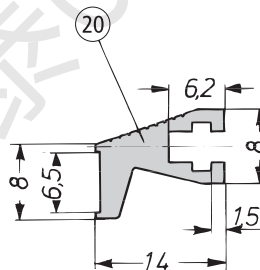
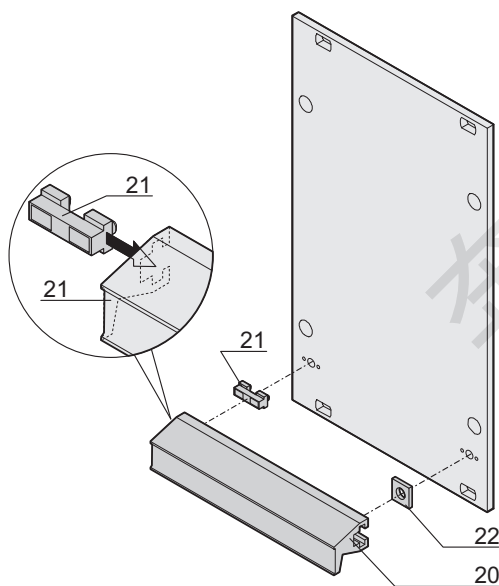
A4--328a

A4--328c

Dimensions table

Item	Width	Width
	HP	mm
1a	3	13.8
1a	4	18.9
1c	5	24.0
1c	6	29.0
1c	7	34.1
1c	8	39.2
1c	9	44.3
1c	10	49.4
1c	12	59.6
1c	14	69.7
1c	21	105.2
1c	28	140.8
1c	40	201.8
1c	42	212.0
1c	61	308.5

Dimensions Aluminium extrusion handles



04602069

A4-328d

Dimensions table

Item	Width	Width
20	HP	mm
20	3	13.8
20	4	18.9
20	5	24.0
20	6	29.0
20	7	34.1
20	8	39.2
20	9	44.3
20	10	49.4
20	12	59.6
20	14	69.7
20	21	105.2
20	28	140.8
20	40	201.8
20	42	212.0
20	-	1000

Plug-in units – with mechanical shielding

Plug-in unit with mechanical shielding, 3 U kits



04694001

- Mechanical protection of sub-assembly
- Earthing of shielding panels possible by Faston connectors 6.3 × 0.6 mm
- For euroboards 100 × 160 mm

Handles
without extraction function



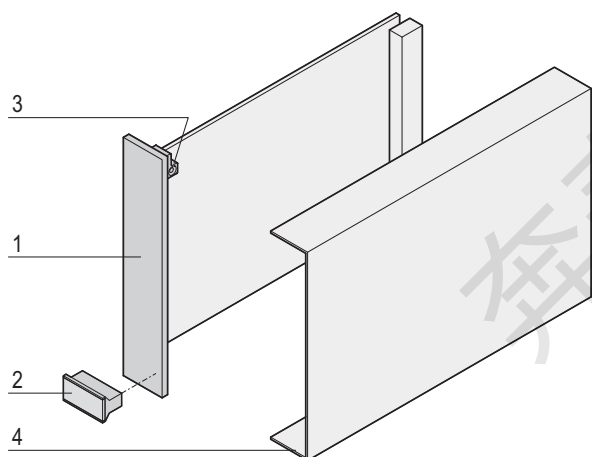
04692003

Handles
with extraction function



04692005

3 U kit, shielding component side, handles with/without extraction function



04602077

- Usable connectors in accordance with EN 60603 (DIN 41612): Construction type B, C, D, F, H, R;

Delivery comprises (kit)

Item	Qty	Description
1	1	Front panel, Al, 2.5 mm, front: anodised, rear: iridescent green chromated
2	1	Trapeziform handle, PPE, UL 94 V-1, grey
3	1	Board support, PBT, UL 94 V-0, red
5	1	Assembly kit (also for shielding panels)

Order Information

Width	H	Plug-in unit without extractionfunction	Plug-in unit with extractionfunction
HP	mm	Part no.	Part no.
6	24.60	20809-502	20809-516

Item 4 Shielding panel
component side for 7 HP
front panel width, stainless
steel, 0.8 mm, 1 piece

20809-371

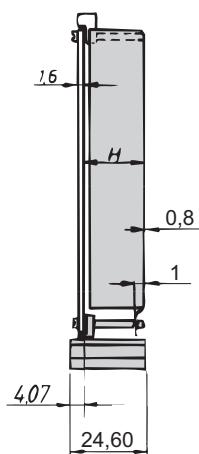
20809-371

Note

- Keying/coding with separate keying/coding strip is not possible
- Please order shielding plates separately



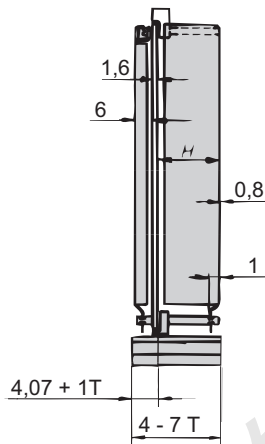
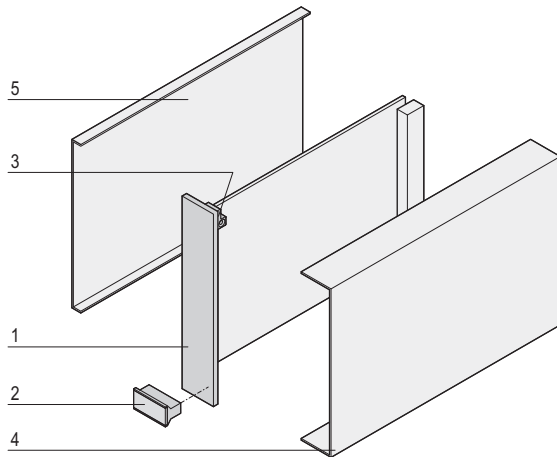
For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.



a4-237

Plug-in units – with mechanical shielding

3 U kits, both sides shielded
(solder/component side),
handles with/without extraction function



04602078

a4-236a

- Usable connectors in accordance with EN 60603 (DIN 41612): Construction type B, C, D, F, H, R;

Delivery comprises

Item	Qty	Description
1	1	Front panel, Al, 2.5 mm, front: anodised, rear: iridescent green chromated
2	1	Trapeziform handle, without extraction function, PPE, UL 94 V-1, grey
3	2	Board support, PBT, UL 94 V-0, red
6	1	Assembly kit (also for shielding panels)

Order Information

Width	H	Plug-in unit without extraction function	Plug-in unit with extraction function
HP	mm	Part no.	Part no.
4	9.60	20809-495	–
5	14.70	20809-496	20809-511
6	19.80	20809-497	20809-512
7	24.90	20809-498	20809-513
Item 4 Shielding panel component side for 4 HP front panel width, stainless steel, 0.8 mm, 1 piece		20809-329	20809-329
Item 4 Shielding panel component side or 5 HP front panel width, stainless steel, 0.8 mm, 1 piece		20809-357	20809-357
Item 4 Shielding panel component side for 6 HP front panel width, stainless steel, 0.8 mm, 1 piece		20809-359	20809-359
Item 4 Shielding panel component side for 7 HP front panel width, stainless steel, 0.8 mm, 1 piece		20809-371	20809-371
Item 5 Shielding panel on solder side, stainless steel, 0.8 mm, 1 piece		30809-571	30809-571

Note

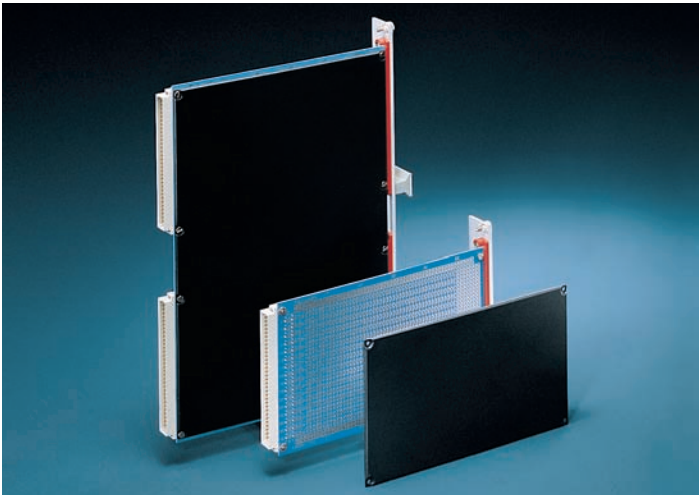
- Keying/coding with separate keying/coding strip is not possible
- Where the shielding plate is used for the solder side, the PCB is offset to the right by 1 HP



For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.

Plug-in units – with mechanical shielding

PCB cover for euroboards

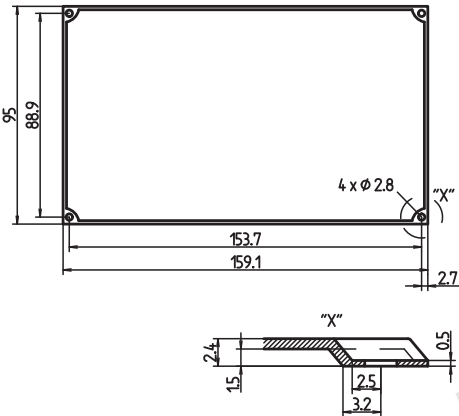


- Mechanical protection of the solder side

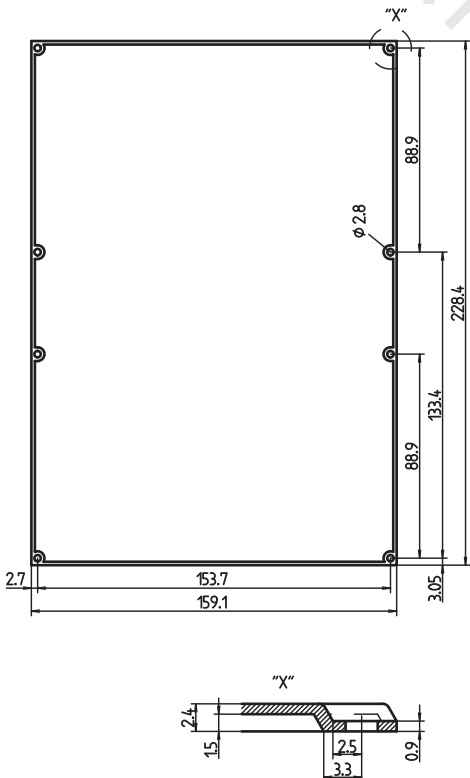
Order Information

Description	Qty	Part no.
PCB cover for euroboards (100 x 160 mm), PBT, UL 94 V-0, black	1 piece (SPQ 10)	61000-007
PCB cover with temperature expansion coefficients similar to FRA4 PCB; for euroboards (100 x 160 mm), LCP, UL 94 V-0, white	1 piece (SPQ 10)	61000-177
PCB cover for double euroboards (233.35 x 160 mm), PP, UL 94 V-0, black	1 piece (SPQ 10)	61000-012
Slotted flathead screw M2.5 x 6, height of head 1.2 mm, PU 100 pieces		21102-007
Slotted flathead screw M2.5 x 12, height of head 1.2 mm, PU 100 pieces		21102-008

For PCBs 100 × 160 mm



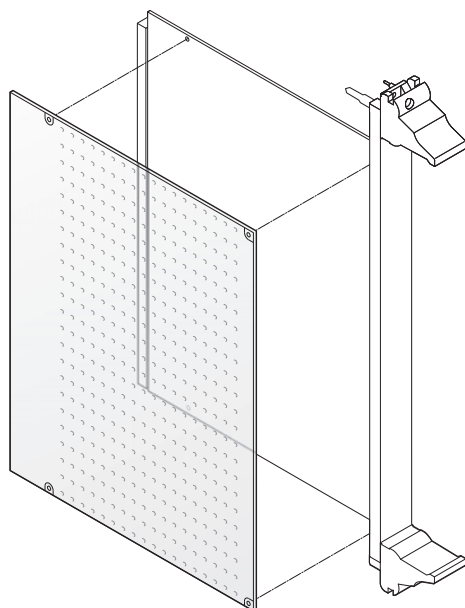
For PCBs 233.35 × 160 mm



For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.

Plug-in units – with mechanical shielding

PCB cover for CompactPCI



- Mechanical protection of solder side
- Cover is perforated for better cooling of components

Delivery comprises

Item	Qty	Description
1	1	Cover, plastic, 0.5 mm, antistatic, perforated, UL 94 V-0; max. operating temperature 65 °C, max. continuous operating temperature 55 °C

Order Information

Height U	Depth mm	Part no.
6	80	24579-039
3	160	24579-037
6	160	24579-038
Fixing clips PU 100 pieces		21101-914

Note

- Fixing clips are required for mounting the perforated covers; please order separately



For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.

Overview 0

Cabinets 1

Wall mounted cases 2

Accessories for cabinets and wall mounted cases 3

Climate control 4

Desk-top cases 5

Sub racks/ 19" chassis . . . 6

Front panels, plug-in units . . 7

Systems 8

Power supply units 9

Backplanes . . 10

Connectors, front panel component system 11

Appendix . . . 12

Frame type plug-in units



04807002

19" modules are mechanical components that serve to carry one or more circuit boards. The boards housed in a module are thus combined into a larger electronic function unit that is self-contained and testable. Mechanical dimensions conform to IEC 60297-3-101 / IEEE 1101.1/11 standards, i.e. the so-called 19" standard. These function units are integrated into the subrack or case; their dimensions likewise form a component of IEC 60297-3-101 / IEEE 1101.1/11.

The dimension obligations of the standard give only little freedom for individual design of frame type plug-in units. The aim is therefore to make optimum use of what freedoms regarding dimensions it does allow, e.g.

- to maximise the internal space of a plug-in unit and thus create maximum space for electronic components, or
- to ensure optimal EMC shielding with minimum loss of mounting space to the shielding components

Standards

- IEC 60297-3-101 / IEEE 1101.1/11

Product selection kits

Width	5 HP		6 HP		7 HP		8 HP		10 HP		12 HP		14 HP		21 HP		28 HP		42 HP	
Height in U	3	6	3	6	3	6	3	6	3	6	3	6	3	6	3	6	3	6	3	6
Frame-type plug-in units PRO	-	-	-	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Frame type plug-in units PRO with cooling fins	-	-	-	-	-	-	-	-	-	-	X	X	X	X	X	X	-	-	-	-
Frame-type plug-in units PRO with hood	X	X	X	X	X	X	-	-	X	X	X	X	X	X	-	-	-	-	-	-
HF frame-type plug-in units	-	-	-	-	X	-	-	-	X	-	X	-	X	-	X	-	X	-	-	-



Downloads and further important information can be found on the Internet under www.c-box-tech.com

Frame-type plug-in units to house printed boards

- For PCBs in euroboard format
- Kits or configuration from single components
- Front panels: unshielded or EMC shielded

Introduction:
Product features,
product comparison ... 7.66

Frame type plug-in units PRO

Frame type plug-in units PRO, shielded/unshielded 7.68

SERIES ... 7.74

SERIES configuration ... 7.75

Frame-type plug-in units PRO with hood, unshielded 7.86

HF plug-in units

Kits 3 U 7.90

SERIES configuration ... 7.91

Accessories for plug-in units
see page 7.52



04808008

Frame-type plug-in units PRO

- Kit or configuration from single components in 3 U and 6 U, 8 ... 42 HP
- Shielded and unshielded versions
- Side panel with/without cooling fins
- For one or several PCBs or one or several connectors
- Various possibilities for combining the individual components



04808009

Plug-in units PRO with hood

- Kit in 3 U and 6 U, 5 ... 14 HP
- Shielded and unshielded versions
- For one PCB with one connector



04892005

HF frame-type plug-in units

- Kit or configuration from single components in 3 U, 7 ... 28 HP
- For shielding against high-frequency radiation
- Tube with cooling fins, in extruded aluminium
- For one or more PCBs, one or more connectors



30407004

SERIES from page 7.74

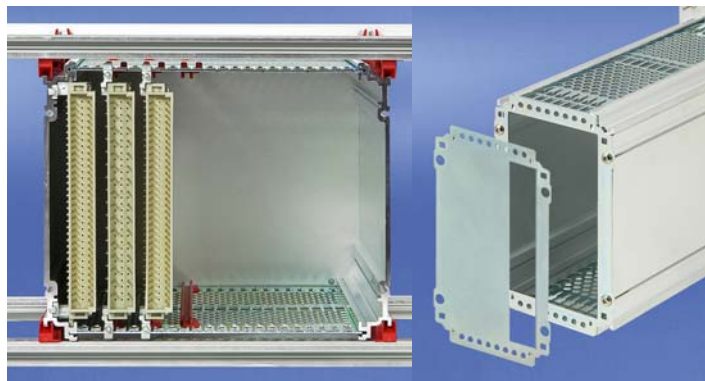
e.g. individual configuration and assembly
e.g. modification (special colours)
e.g. customised solutions with modified frame-type plug-in units (special sizes)

www.c-box-tech.com/SERIES

FRONT PANEL
EXPRESS

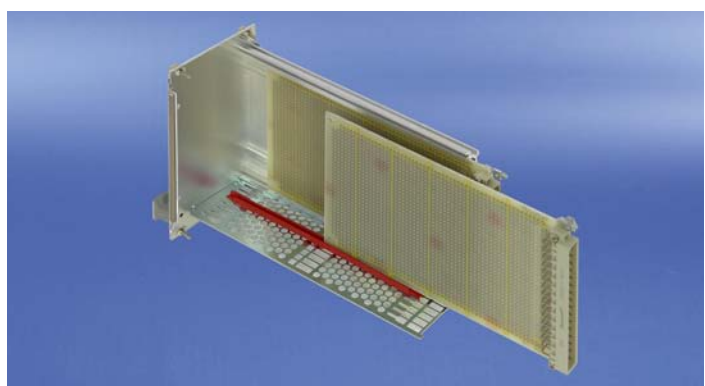
Frame type plug-in units PRO – Introduction

The new generation



Rear view: frame type plug-in unit mounted in subrack

04808013 04808014



Board for slot 1 fixes to the side panel; further boards are fixed with guide rails

04808012



Sliding cover plates

04808011 04808016

The frame type plug-in units conform to IEC 60297-3-101. They serve to house standardized PCBs and bulky components. Because of the standardized assembly dimensions the frame type plug-in units can be mounted on guide rails, to be pushed into the subrack, in any order and using any plug-in unit. The robust Al extrusion construction is especially suited for heavy components and the rough handling as "Field Replaceable Unit".

Details

The EMC version of the front panel was improved for frequencies over 1 GHz by using a conductive textile gasket and a robust U-shaped front panel

Push-in cover plates for quick fitting

Handles to be bolted-on from the front, easy mounting

Optimised air flow rate thanks to slender extruded side panels and large perforation areas in the cover plates, a perforation degree of up to 65 % is possible

3 cover plate versions (solid, perforated, perforated for guide rail mounting)

Width of frame-type plug-in units from 8 HP

To achieve a higher airflow rate, exceptionally slender guide rails are used to fix the boards

From slot 2 guide rails can be positioned in HP grid

Easy fixing of the boards in the frame-type plug-in units; only 2 x 1 screws per board are needed to fix the boards

3 rear panel variants (solid, for one DIN connector, for multiple DIN connectors)

The flat rear panel enables simple reworking (e.g. punching); the rear panel can be removed without removing the PCBs

For better EMC contacting between rear panel and cover plate and to increase the stability of broad frame-type plug-in units, a rear panel retainer is available

Use of Torx screws for secure machine mounting

Note:

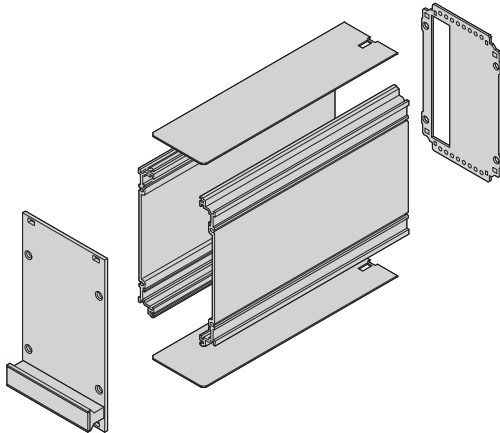
Frame type plug-in units cannot be combined with guide rails for CompactPCI or VME64x applications (width 4 HP)

Frame type plug-in units PRO – Introduction

Comparison:

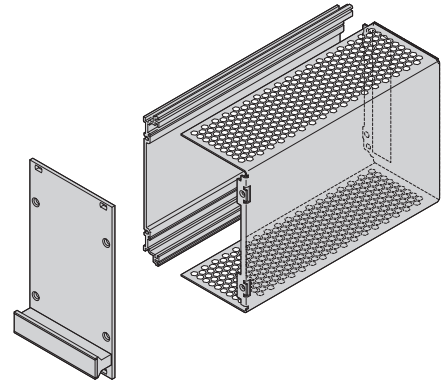
Frame-type plug-in units PRO/Frame-type plug-in units PRO with hood

Frame-type plug-in units PRO



04808125

Frame-type plug-in units PRO with hood (shielded)



04808115

For one or multiple PCBs

Only for one PCB

Modular, at least 6 components
(front panel, 2 side panels, 2 cover plates, rear panel)

Only 3 components
(front panel, left hand side panel, hood with integrated rear panel)

Identical front panel and front handle

Identical front panel and front handle

Identical left hand side panel (Al extrusion)

Identical left hand side panel (Al extrusion)

Side panel on right hand side (Al extrusion)

Hood on right hand side (Al sheet)

Separate rear panel

Hood includes rear panel

Widths from 8 HP to 42 HP

Widths from 5 HP to 14 HP

Guiding in subrack/case with 4 guide rails;
left and right side panels

Guiding in subrack/case with 2 guide rails;
left side panel

3 rear panel variants (for one DIN connector, for multiple DIN
connectors, rear panel without cut-out)

1 rear panel variant (for one DIN connector)

Frame type plug-in units PRO

Frame type plug-in units PRO, 3 U kits,
front panel shielded (textile gasket)



Illustration shows 12 HP width, side panel depth 167 mm

- Extruded side panels with groove to right and left, to insert a PCB (board position in accordance with standard in left side panel only)
- 2 board depths: 160 mm and 220 mm
- 2 cover plate versions
 - with perforation, for guide rails (5a, airflow rate approx. 60 %); please order guide rails separately
 - Without perforation (5b)
- 2 rear panel versions
 - With cut-out for one connector (3a, in accordance with EN 60603-2, DIN 41612)
 - With cut-out for multiple connectors (3b, in accordance with EN 60603-2, DIN 41612)

Delivery comprises (Kit)

Item	Qty	Description
1	1	Front panel, U profile anodised, rear conductive, alignment pin pressed-in
2	1	Handle, grey, PPE, UL 94 V-1
3a	1	Rear panel, St, zinc-plated, 1.5 mm, with cut-out for one connector, incl. PCB fixing (slot 1)
3b	1	Rear panel, St, zinc-plated, 1.5 mm, with cut-out for multiple connectors, incl. PCB fixing (slot 1 and slot 2), incl. 2 guide rails
3c	2	rear panel fastener
4	2	Side panel, Al extrusion, colourless passivated, with groove for one PCB
5a	2	Cover plate, St, zinc-plated, 1.0 mm, with perforation
5b	2	Cover plate, St, zinc-plated, 1.0 mm, without perforation
6	1	EMC sealing (textile)
7	1	Assembly kit



SERIES

see page 7.74

Order Information

	Rear panel	Height Width		Cover plate without perforation		Cover plate with perforation, for guide rails	
		U	HP	167 mm deep Part no.	227 mm deep Part no.	167 mm deep Part no.	227 mm deep Part no.
		3	8	24813-408	24813-458	24813-208	24813-258
		3	10	24813-410	24813-460	24813-210	24813-260
		3	12	24813-412	24813-462	24813-212	24813-262
		3	14	24813-414	24813-464	24813-214	24813-264
		3	21	24813-421	24813-471	24813-221	24813-271
		3	28	24813-428	24813-478	24813-228	24813-278
		3	42	24813-442	24813-492	24813-242	24813-292
		3	8	–	–	24813-308	24813-358
		3	10	–	–	24813-310	24813-360
		3	12	–	–	24813-312	24813-362
		3	14	–	–	24813-314	24813-364
		3	21	–	–	24813-321	24813-371
		3	28	–	–	24813-328	24813-378
		3	42	–	–	24813-342	24813-392

- Description of individual components, guide rails, dimension drawings, other combinations cover plates/rear panels etc. see from page 7.75

Frame type plug-in units PRO

Frame type plug-in units PRO, 6 U kits,
front panel shielded (textile gasket)



Illustration shows 12 HP width, side panel depth 167 mm

04811008



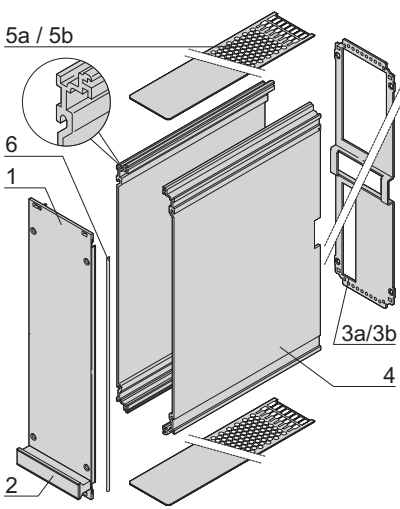
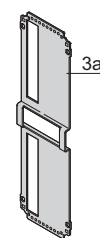
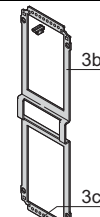
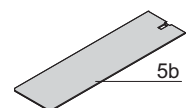
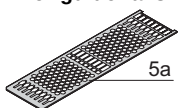
SERIES see page 7.74

- Extruded side panels with groove to right and left, to insert a PCB (board position in accordance with standard in left side panel only)
- 2 board depths: 160 mm and 220 mm
- 2 cover plate versions
 - With perforation, for guide rails (5a, airflow rate approx. 60 %),
 - please order guide rails separately
 - Without perforation (5b)
- 2 rear panel versions
 - With cut-out for one connector (3a; in accordance with EN 60603-2, DIN 41612)
 - With cut-out for multiple connectors (3b; in accordance with EN 60603-2, DIN 41612)
 - 6 U has cut-outs for connectors at top and bottom

Delivery comprises (Kit)

Item	Qty	Description
1	1	Front panel, U profile anodised, rear conductive, alignment pin pressed-in
2	1	Handle, grey, PPE, UL 94 V-1
3a	1	Rear panel, St, zinc-plated, 1.5 mm, with cut-out for one connector, incl. PCB fixing (slot 1)
3b	1	Rear panel, St, zinc-plated, 1.5 mm, with cut-out for multiple connectors, incl. PCB fixing (slot 1 and slot 2), incl. 2 guide rails
3c	2	rear panel fastener
4	2	Side panel, Al extrusion, colourless passivated, with groove for one PCB
5a	2	Cover plate, St, zinc-plated, 1.0 mm, with perforation
5b	2	Cover plate, St, zinc-plated, 1.0 mm, without perforation
6	1	EMC sealing (textile)
7	1	Assembly kit

Order Information

	  	Rear panel	Height	Width	Cover plate without perforation		Cover plate with perforation, for guide rails		
		5a / 5b							
						167 mm deep	227 mm deep	167 mm deep	227 mm deep
						Part no.	Part no.	Part no.	Part no.
			U	HP					
			6	8	24813-908	24813-958	24813-708	24813-758	
			6	10	24813-910	24813-960	24813-710	24813-760	
			6	12	24813-912	24813-962	24813-712	24813-762	
			6	14	24813-914	24813-964	24813-714	24813-764	
		6	21	24813-921	24813-971	24813-721	24813-771		
		6	28	24813-928	24813-978	24813-728	24813-778		
		6	42	24813-942	24813-992	24813-742	24813-792		
		6	8	—	—	24813-808	24813-858		
		6	10	—	—	24813-810	24813-860		
		6	12	—	—	24813-812	24813-862		
		6	14	—	—	24813-814	24813-864		
		6	21	—	—	24813-821	24813-871		
		6	28	—	—	24813-828	24813-878		
		6	42	—	—	24813-842	24813-892		

- Description of individual components, guide rails, dimension drawings, other combinations cover plates/rear panels etc. see from page 7.75

Frame type plug-in units PRO

Frame-type plug-in units PRO, 3 U kits, front panel unshielded



Illustration shows 12 HP width, side panel depth 167 mm



SERIES

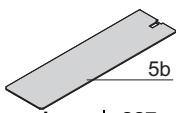
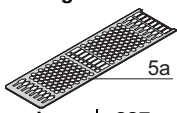
see page 7.74

- Extruded side panels with groove to right and left, to insert a PCB (board position in accordance with standard in left side panel only)
- 2 board depths: 160 mm and 220 mm
- 2 cover plate versions
 - with perforation, for guide rails (5a, airflow approx. 60 %); please order guide rails separately
 - Without perforation (5b)
- 2 rear panel versions
 - With cut-out for one connector (3a, in accordance with EN 60603-2, DIN 41612)
 - With cut-out for multiple connectors (3b, in accordance with EN 60603-2, DIN 41612)

Delivery comprises (Kit)

Item	Qty	Description
1	1	Front panel, Al, 2.5 mm, anodised, cut edges plain
2	1	Handle, grey, PPE, UL 94 V-1
3a	1	Rear panel, St, zinc-plated, 1.5 mm, with cut-out for one connector, incl. PCB fixing (slot 1)
3b	1	Rear panel, St, zinc-plated, 1.5 mm, with cut-out for multiple connectors, incl. PCB fixing (slot 1 and slot 2), incl. 2 guide rails
3c	2	rear panel fastener
4	2	Side panel, Al extrusion, colourless passivated, with groove for one PCB
5a	2	Cover plate, St, zinc-plated, 1.0 mm, with perforation
5b	2	Cover plate, St, zinc-plated, 1.0 mm, without perforation
6	1	Assembly kit

Order Information

	Rear panel	Height	Width	Cover plate without perforation		Cover plate with perforation, for guide rails	
							
				167 mm deep	227 mm deep	167 mm deep	227 mm deep
U	HP			Part no.	Part no.	Part no.	Part no.
3	8			24812-408	24812-458	24812-208	24812-258
3	10			24812-410	24812-460	24812-210	24812-260
3	12			24812-412	24812-462	24812-212	24812-262
3	14			24812-414	24812-464	24812-214	24812-264
3	21			24812-421	24812-471	24812-221	24812-271
3	28			24812-428	24812-478	24812-228	24812-278
3	42			24812-442	24812-492	24812-242	24812-292
3	8			–	–	24812-308	24812-358
3	10			–	–	24812-310	24812-360
3	12			–	–	24812-312	24812-362
3	14			–	–	24812-314	24812-364
3	21			–	–	24812-321	24812-371
3	28			–	–	24812-328	24812-378
3	42			–	–	24812-342	24812-392

- Description of individual components, guide rails, dimension drawings, other combinations cover plates/rear panels etc. see from page 7.75

Frame type plug-in units PRO

Frame type plug-in units PRO, 6 U kits, front panel unshielded



Illustration shows 12 HP width, side panel depth 167 mm

04811010



SERIES

see page 7.74

- Extruded side panels with groove to right and left, to insert a PCB (board position in accordance with standard in left side panel only)
- 2 board depths: 160 mm and 220 mm
- 2 cover plate versions
 - with perforation, for guide rails (5a, airflow approx. 60 %); please order guide rails separately
 - Without perforation (5b)
- 2 rear panel versions
 - With cut-out for one connector (3a; in accordance with EN 60603-2, DIN 41612)
 - With cut-out for multiple connectors (3b; in accordance with EN 60603-2, DIN 41612)
 - 6 U has cut-outs for connectors at top and bottom

Delivery comprises (Kit)

Item	Qty	Description
1	1	Front panel, Al, 2.5 mm, anodised, cut edges plain
2	1	Handle, grey, PPE, UL 94 V-1
3a	1	Rear panel, St, zinc-plated, 1.5 mm, with cut-out for one connector, incl. PCB fixing (slot 1)
3b	1	Rear panel, St, zinc-plated, 1.5 mm, with cut-out for multiple connectors, incl. PCB fixing (slot 1 and slot 2), incl. 2 guide rails
3c	2	rear panel fastener
4	2	Side panel, Al extrusion, colourless passivated, with groove for one PCB
5a	2	Cover plate, St, zinc-plated, 1.0 mm, with perforation
5b	2	Cover plate, St, zinc-plated, 1.0 mm, without perforation
6	1	Assembly kit

Order Information

	Rear panel	Height	Width	Cover plate without perforation		Cover plate with perforation, for guide rails	
				167 mm deep	227 mm deep	167 mm deep	227 mm deep
				Part no.	Part no.	Part no.	Part no.
		U	HP				
		6	8	24812-908	24812-958	24812-708	24812-758
		6	10	24812-910	24812-960	24812-710	24812-760
		6	12	24812-912	24812-962	24812-712	24812-762
		6	14	24812-914	24812-964	24812-714	24812-764
		6	21	24812-921	24812-971	24812-721	24812-771
		6	28	24812-928	24812-978	24812-728	24812-778
		6	42	24812-942	24812-992	24812-742	24812-792
		6	8	–	–	24812-808	24812-858
		6	10	–	–	24812-810	24812-860
		6	12	–	–	24812-812	24812-862
		6	14	–	–	24812-814	24812-864
		6	21	–	–	24812-821	24812-871
		6	28	–	–	24812-828	24812-878
		6	42	–	–	24812-842	24812-892

- Description of individual components, guide rails, dimension drawings, other combinations cover plates/rear panels etc. see from page 7.75

Frame type plug-in units PRO



Illustration shows 12 HP width, side panel depth 167 mm

Frame type plug-in unit PRO kits, side panel with cooling fins, front panel shielded

- Right side panel with cooling fins to improve heat dissipation; left side panel extrusion with groove to insert a PCB (board position in accordance with standard in left side panel only)
- 2 board depths: 160 mm and 220 mm
- Cover plate without perforation
- With cut-out for one connector in accordance with EN 60603-2, DIN 41612
- With 10 W installed heat dissipation loss the internal temperature falls by approx. 5°C

NEW

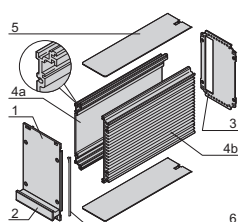
Delivery comprises (Kit)

Item	Qty	Description
1	1	Front panel, U profile anodised, rear conductive, alignment pin pressed-in
2	1	Handle, grey, PPE, UL 94 V-1
3	1	Rear panel, St, zinc-plated, 1.5 mm, with cut-out for one connector, incl. PCB fixing (slot)
4a	2	Side panel, left, Al extrusion, clear passivated, with groove for one PCB
4b	2	Side panel, right, Al extrusion, clear passivated, with cooling fins
5	2	Cover plate, St, zinc-plated, 1.0 mm
6	1	EMC sealing (textile)
7	1	Assembly kit

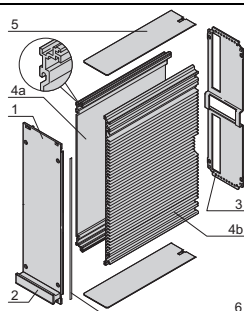


SERIES see page 7.74

Order Information



04812058



04812060

Height U	Width HP	Depth = 167 mm Part no.	Depth = 227 mm Part no.
3	14	24813-164	—
3	21	24813-171	—
6	14	24813-664	24813-614
6	21	24813-671	24813-621

Note

- Description of individual components, guide rails, dimension drawings, other combinations cover plates/rear panels etc. see from page 7.75

Frame type plug-in units PRO

Frame type plug-in units PRO kits, side panel with cooling fins, front panel unshielded



Illustration shows 12 HP width, side panel depth 167 mm

04812008

- Right side panel with cooling fins to improve heat dissipation; left side panel extrusion with groove for insertion of a PCB (board position in accordance with standard in left side panel only)
- 2 board depths: 160 mm and 220 mm
- Cover plate without perforation
- With cut-out for one connector in accordance with EN 60603-2, DIN 41612
- With 10 W installed heat dissipation loss the internal temperature falls by approx. 5°C

NEW

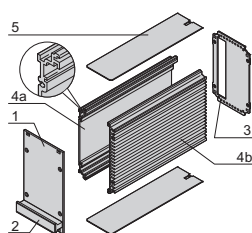
Delivery comprises (Kit)

Item	Qty	Description
1	1	Front panel, Al, 2.5 mm, anodised, cut edges plain
2	1	Handle, grey, PPE, UL 94 V-1
3	1	Rear panel, St, zinc-plated, 1.5 mm, with cut-out for one connector, incl. PCB fixing (slot 1)
4a	2	Side panel, left, Al extrusion, clear passivated, with groove for one PCB
4b	2	Side panel, right, Al extrusion, clear passivated, with cooling fins
5	2	Cover plate, St, zinc-plated, 1.0 mm
6	1	Assembly kit

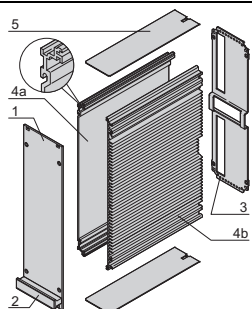


SERIES see page 7.74

Order Information



04812059



04812061

Height U	Width HP	Depth = 167 mm Part no.	Depth = 227 mm Part no.
3	12	24812-162	—
3	14	24812-164	—
3	21	24812-171	—
6	12	24812-662	24812-612
6	14	24812-664	24812-614
6	21	24812-671	24812-621

Note

- Description of individual components, guide rails, dimension drawings, other combinations cover plates/rear panels etc. see from page 7.75

Frame type plug-in units PRO SERIES



configuration

Components can be varied and combined freely

Simple. Fast. For the product you want.

- Configuration tables for frame type plug-in units PRO from page 7.75
- Configuration tables for HF plug-in units from page 7.90
- Online configuration: www.C-BOX.co.uk/configuration



assembly

Fitting of all mechanical, electrical and electronic components by our specialists

Assembled by professionals. Double benefit!

- Professional and reliable
- Packaged ready for despatch



modification

Custom drillings, cut-outs and special colours for off-the-shelf products

Small changes. Large impact.

- Holes, cut-outs, drill holes, individual colour and printing



solution

Integration and custom developments

Simple. Fast. From one source.

- Special sizes, custom solutions
- Heat dissipation concepts
- EMC solutions



express

Delivery time to customer's request

When fast has to be faster.

- Delivery time for front panels from 2 working days; for frame-type plug-in units from 5 working days

FRONT PANEL
EXPRESS



academy

Knowledge transfer and partnership

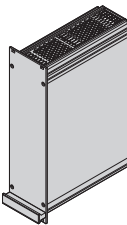
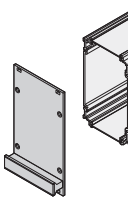
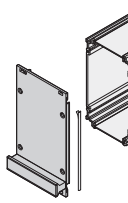
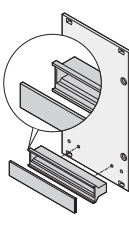
Knowledge. Sharing. Partnerships.

- Downloadable CAD drawings, test reports, user manual

Frame type plug-in units PRO SERIES

Individual components

Front panels, front handles

	Front panel		Shieldable front panel, U profile		Trapeziform handle, grey (without extraction function)	
	unshielded		Front panel	Textile EMC gasket	Grey	Black
 04808124	 04808060	 04808061	 04808062	 04808063		
Supplied quantity for assembly of 5 frame type plug-in units	Al, 2.5 mm, front anodised, rear iridescent green chromated, cut edges blank		Al extrusion, alignment pin pressed-in, front anodised, rear conductive		always fixed laterally on the front panel, in the groove of the profile, textile gasket, core: foam, sleeve: textile cladding with CuNi coating, UL 94 V-0, temperature range -40 ... 70 °C	
	1 piece (SPQ 5) ¹⁾		1 piece (SPQ 5) ¹⁾		PU 10 pieces PU 100 pieces	
Width	3 U Height					
HP	PCB depth 160 mm					
8	34812-108	34813-108	21101-853	21101-854	20808-062	20808-083
10	34812-110	34813-110			20808-004	20808-085
12	34812-112	34813-112			20808-064	20808-086
14	34812-114	34813-114			20808-065	20808-087
21	34812-121	34813-121			20808-066	20808-088
28	34812-128	34813-128			20808-067	20808-089
42	34812-142	34813-142			20808-068	20808-091
	PCB depth 220 mm					
8	34812-108	34813-108	21101-853	21101-854	20808-062	20808-083
10	34812-110	34813-110			20808-004	20808-085
12	34812-112	34813-112			20808-064	20808-086
14	34812-114	34813-114			20808-065	20808-087
21	34812-121	34813-121			20808-066	20808-088
28	34812-128	34813-128			20808-067	20808-089
42	34812-142	34813-142			20808-068	20808-091
Width	6 U Height					
HP	PCB depth 160 mm					
8	34812-608	34813-608	21101-855	21101-856	20808-062	20808-083
10	34812-610	34813-610			20808-004	20808-085
12	34812-612	34813-612			20808-064	20808-086
14	34812-614	34813-614			20808-065	20808-087
21	34812-621	34813-621			20808-066	20808-088
28	34812-628	34813-628			20808-067	20808-089
42	34812-642	34813-642			20808-068	20808-091
	PCB depth 220 mm					
8	34812-608	34813-608	21101-855	21101-856	20808-062	20808-083
10	34812-610	34813-610			20808-004	20808-085
12	34812-612	34813-612			20808-064	20808-086
14	34812-614	34813-614			20808-065	20808-087
21	34812-621	34813-621			20808-066	20808-088
28	34812-628	34813-628			20808-067	20808-089
42	34812-642	34813-642			20808-068	20808-091
Dimensions see page	7.82	7.82			7.82	7.82

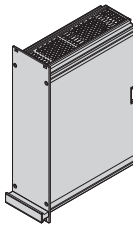
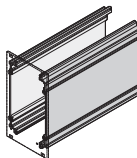
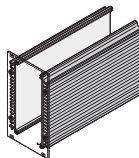
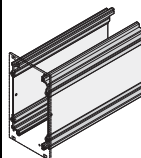
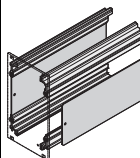
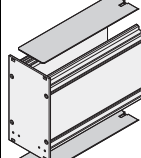
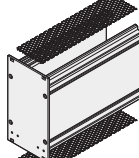
1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Part no. includes one packing unit (PU); delivery is exclusively made in PU

Frame type plug-in units PRO SERIES

Individual components

Side panels, cover plates, guide rails

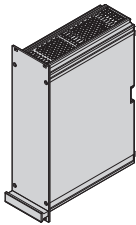
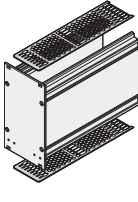
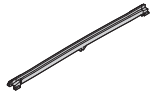
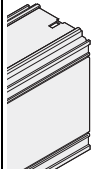
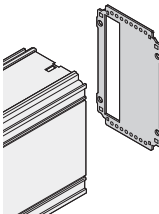
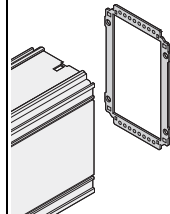
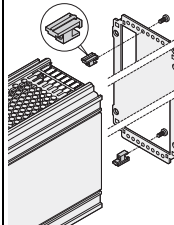
 04808124 Supplied quantity for assembly of 5 frame type plug-in units	Extruded side panel		Extruded side panel with cooling fins		Side panel, corner profile and side plate		Cover plate	
	Left	Right	Left	Right	Corner profile	Side plate	Without perforation	With perforation
	 04808065 Al extrusion, colourless passivated, with groove for one PCB; 3 U symmetrical; 6 U asymmetrical, right and left side panel different) Side panels with and without cooling fins can be combined 1 piece (SPQ 10) ¹⁾	 04811050 Al extrusion, colourless passivated, with groove for one PCB; 3 U symmetrical; 6 U asymmetrical Side panels with and without cooling fins can be combined 1 piece (SPQ 10) ¹⁾	 04808066 Al extrusion, colourless passivated, with groove for one PCB, please order side plate separately 1 piece (SPQ 10) ¹⁾	 04808067 St, 1 mm, zinc-plated, is inserted into side panel rear angle 1 piece (SPQ 5) ¹⁾	 04808068 St, 1.0 mm, zinc-plated; PCB only possible in slot 1 1 piece (SPQ 10) ¹⁾	 04808070 St, 1.2 mm, Al, airflow rate in perforated area approx. 65 %; PCB only possible in slot 1 1 piece (SPQ 10) ¹⁾		
3 U Height								
Width	HP PCB depth 160 mm							
8	34812-100 1 piece (SPQ 10) ¹⁾	34812-100 1 piece (SPQ 10) ¹⁾	34812-200	34812-200	34812-102	34812-103	34812-408	34812-958
10							34812-410	34812-960
12							34812-412	34812-962
14							34812-414	34812-964
21							34812-421	34812-971
28	34812-428	34812-978						
42			34812-442	34812-992				
PCB depth 220 mm								
8	34813-100 1 piece (SPQ 10) ¹⁾	34813-100 1 piece (SPQ 10) ¹⁾	34813-200	34813-200	34813-102	34813-103	34813-408	34813-958
10							34813-410	34813-960
12							34813-412	34813-962
14							34813-414	34813-964
21							34813-421	34813-971
28	34813-428	34813-978						
42			34813-442	34813-992				
6 U Height								
Width	HP PCB depth 160 mm							
8	34812-600 1 piece (SPQ 5) ¹⁾	34812-601 1 piece (SPQ 5) ¹⁾	–	34812-701	34812-102	34812-603	34812-408	34812-958
10							34812-410	34812-960
12							34812-412	34812-962
14							34812-414	34812-964
21							34812-421	34812-971
28	34812-428	34812-978						
42			34812-442	34812-992				
PCB depth 220 mm								
8	34813-600 1 piece (SPQ 5) ¹⁾	34813-601 1 piece (SPQ 5) ¹⁾	–	34813-701	34813-102	34813-603	34813-408	34813-958
10							34813-410	34813-960
12							34813-412	34813-962
14							34813-414	34813-964
21							34813-421	34813-971
28	34813-428	34813-978						
42			34813-442	34813-992				
Dimensions see page	7.80	7.80	7.80	7.80	7.81	7.81	7.84	7.84

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Frame type plug-in units PRO SERIES

Individual components

Rear panels, assembly material

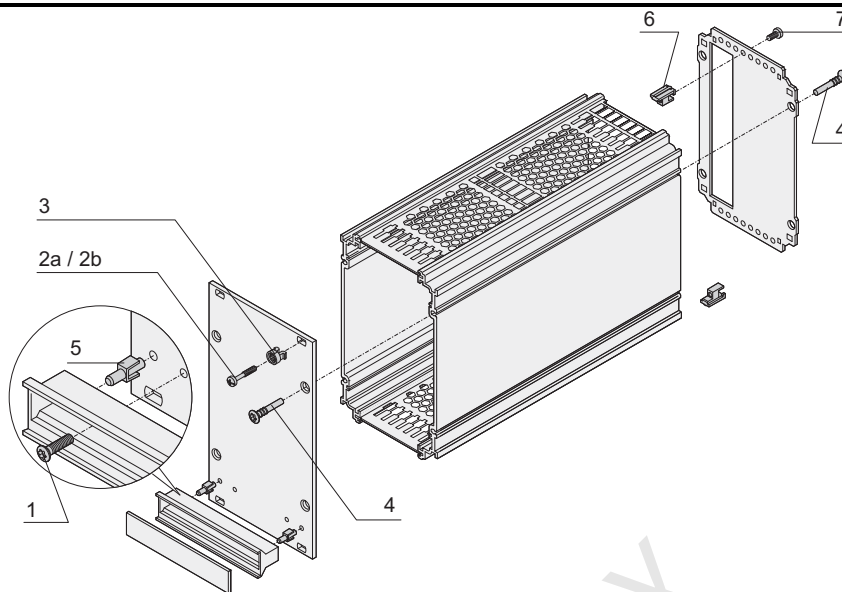
	With perforation for guide rails		Rear panel			Rear panel fastener	Assembly kit
	Cover plate	Guide rail	Without cut-out	Cut-out for one connector	Cut-out for multiple connectors	for connection of rear panel with cover plate	
 04808124	 04808069	 04808074	 04808073	 04808071	 04808072	 04808123	
Supplied quantity for assembly of 5 frame type plug-in units	St, 1.0 mm, zinc-plated; air flow rate in perforated area approx. 60 %; please order snap-in guide rails separately	PBT, UL 94 V-0, red, groove width 2 mm, PCB fixing required from slot 2, see page 7.79	St, 1.5 mm, zinc-plated	St, 1.5 mm, zinc-plated	St, 1.5 mm, zinc-plated, for EN 60603 (DIN 41612) connectors, types: B, C, D, F, H, Q, R, S	10 rear panel fasteners, Zn die-cast; 10 fixing screws; not suitable for cover plate with perforation	for mounting five 3 U or 6 U frame type plug-in units from SERIES components: front panel, rear panel, side panel, cover plate and handle, description see page 7.78
	1 piece (SPQ 10) ¹⁾	PU 10 pieces	1 piece (SPQ 5) ¹⁾	1 piece (SPQ 5) ¹⁾	1 piece (SPQ 5) ¹⁾	PU 1 kit	PU 1 kit
Width	3 U Height						
HP	PCB depth 160 mm						
8	34812-908	24812-101	34813-208	34812-208	34812-308	24812-401	24812-100
10	34812-910		34813-210	34812-210	34812-310		
12	34812-912		34813-212	34812-212	34812-312		
14	34812-914		34813-214	34812-214	34812-314		
21	34812-921		34813-221	34812-221	34812-321		
28	34812-928		34813-228	34812-228	34812-328		
42	34812-942		34813-242	34812-242	34812-342		
	PCB depth 220 mm						
8	34813-908	24812-101	34813-208	34812-208	34812-308	24812-401	24812-100
10	34813-910		34813-210	34812-210	34812-310		
12	34813-912		34813-212	34812-212	34812-312		
14	34813-914		34813-214	34812-214	34812-314		
21	34813-921		34813-221	34812-221	34812-321		
28	34813-928		34813-228	34812-228	34812-328		
42	34813-942		34813-242	34812-242	34812-342		
Width	6 U Height						
HP	PCB depth 160 mm						
8	34812-908	24812-101	34813-708	34812-708	34812-808	24812-401	24812-100
10	34812-910		34813-710	34812-710	34812-810		
12	34812-912		34813-712	34812-712	34812-812		
14	34812-914		34813-714	34812-714	34812-814		
21	34812-921		34813-721	34812-721	34812-821		
28	34812-928		34813-728	34812-728	34812-828		
42	34812-942		34813-742	34812-742	34812-842		
	PCB depth 220 mm						
8	34813-908	24812-101	34813-708	34812-708	34812-808	24812-401	24812-100
10	34813-910		34813-710	34812-710	34812-810		
12	34813-912		34813-712	34812-712	34812-812		
14	34813-914		34813-714	34812-714	34812-814		
21	34813-921		34813-721	34812-721	34812-821		
28	34813-928		34813-728	34812-728	34812-828		
42	34813-942		34813-742	34812-742	34812-842		
Dimensions see page	7.84	7.84	7.83	7.83	7.83		

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple
Part no. includes one packing unit (PU); delivery is exclusively made in PU

Frame type plug-in units PRO SERIES

Individual components

Fixing material (100 pieces)



04808085

Fixing parts	Item		Required quantity per plug-in unit	Description	Qty/PU	Part no.
Fixing parts for mounting the module in subrack or case						
Torx panhead screw, M2.5 x 10, St, zinc-plated, self-forming thread	1		2	Assembly of handle on front panel	100	24560-179
Pozidrive/slotted collar screw M2.5 x 11, St, nickel-plated	2a		4 / 6*	Mounting of front panel on horizontal rail with threaded insert pushed in to front	100	21100-748
Pozidrive/slotted collar screw M2.5 x 12.3, St, nickel-plated	2b		4 / 6*	Front panel is fitted to horizontal rail with threaded insert pushed in to rear in the standard position	100	21101-101
Plastic sleeves for form hole 5.9 x 3.3, PA, UL 94 V-2, grey	3		4 / 6*	Is needed to fix collar screws	100	21100-464
Fixing parts for mounting the module						
Torx raised countersunk panhead screw 3 x 20, St, nickel-plated	4		8	Assembly of front panel and rear panel on extruded side panel/rear extrusion of side panel	100	24812-501
Fixing clip for trapeziform plastic handle PPE UL 94 V 0, black	5		2	Alignment aid for handle on front panel	100	21101-239
Rear panel fastener Zn die-cast	6		2	To stabilise rear panel with wide frame-type plug-in units	100	24812-402
Torx panhead screw M2.5 x 10, St, nickel-plated	7		2	To fix rear panel fastener or board fixing	100	24560-148
Board support (slot 1) Zn die-cast			2	Board support (slot 1) see page 7.79	50 pairs	24812-202
Board support (from slot 2) Zn die-cast			2	Board support (from slot 2) see page 7.79	50 pairs	24812-302
Torx panhead screw M2.5 x 6, St, nickel-plated			2	Is needed for board fixing without connector see page 7.79	100	24560-178

* on 42 HP EMC shielded frame type plug-in units

■ Further collar screws and sleeves see page 7.107

Frame type plug-in units PRO SERIES

Individual
components

Board fixing

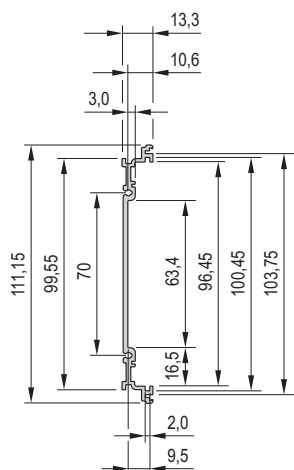
	Board fixing slot 1	Board fixing from slot 2	
	04808118 04808109 04808129 Zn die-cast, Torx panhead screw M2.5 x 10; PCB is pushed into the guiding groove of the left side panel/ side panel rear angle, is fixed with rear panel	04808119 04808110 bga42785 kaa46417 Zn die-cast, Torx panhead screw M2.5 x 10; PCB is pushed into guide rail, is fixed with rear panel	
Height	PU 5 pair	PU 5 pair	
3 U	24812-201	24812-301	
6 U	24812-201	24812-301	
Assembly kits		With connector from slot 2	Without connector from slot 2
Torx panhead screw, M2.5 x 6, St, nickel-plated, PU 100 pieces; is needed for board fixing without connector	24560-178 aza45940	—	24560-178
Connector mounting on PCB, for 6 U frame type plug-in units (centre) Torx panhead screw M2.5 x 10, nut M2.5; PU 10 pieces (screw + nut)	24812-600 04808120	24812-600	

Frame type plug-in units PRO

Dimensions

Side panel without cooling fins

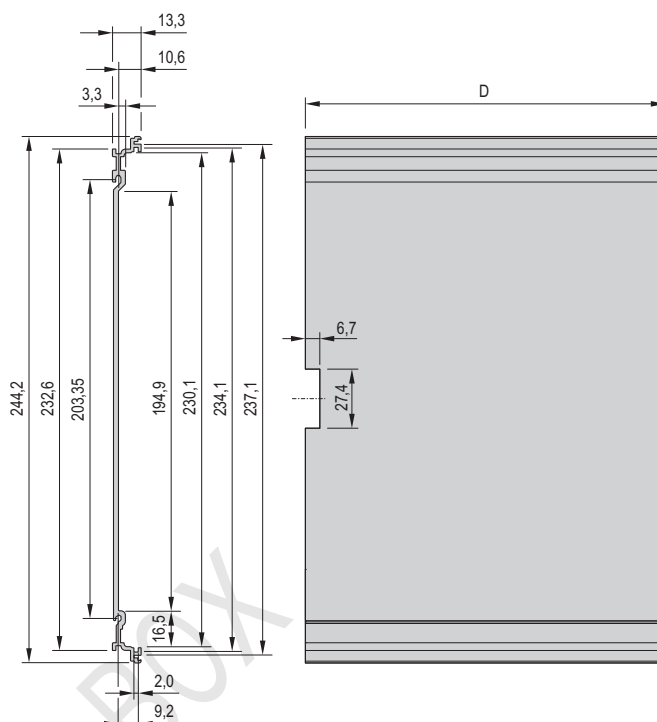
3 U



Depth = 167/227 mm

04808101

6 U

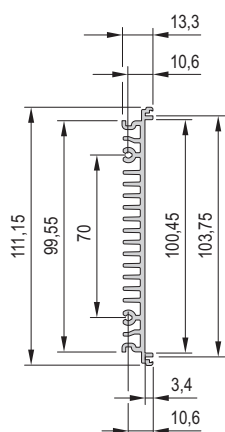


04808102

Dimensions

Side panel with cooling fins

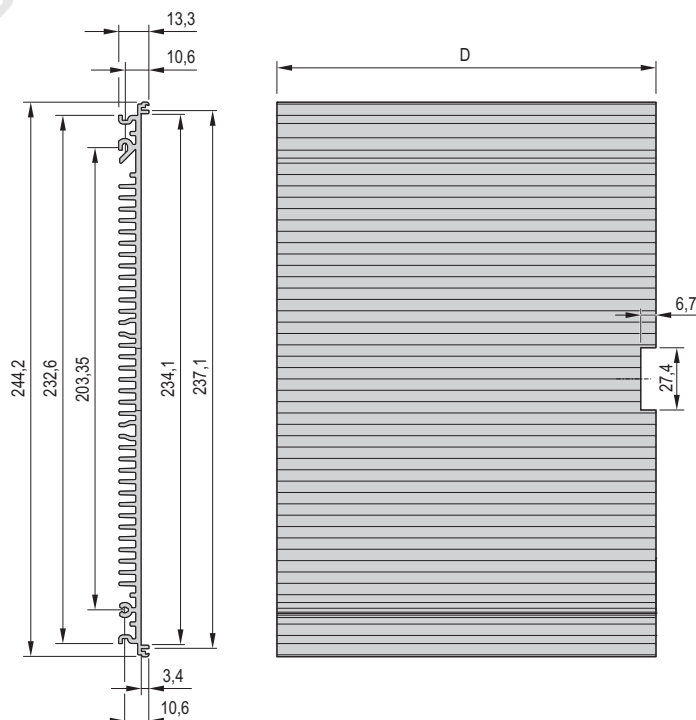
3 U



Depth = 167/227 mm

04811051

6 U

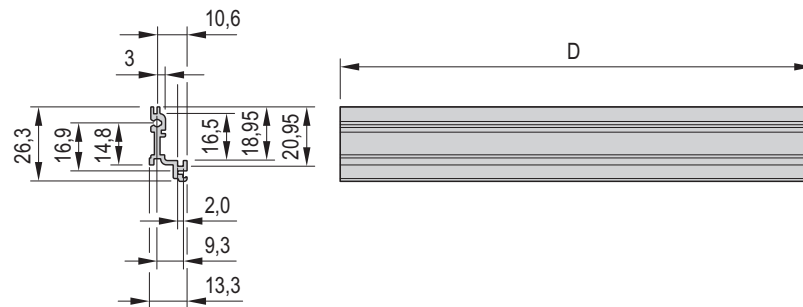


04811052

Frame type plug-in units PRO

Dimensions

Side panel rear angle

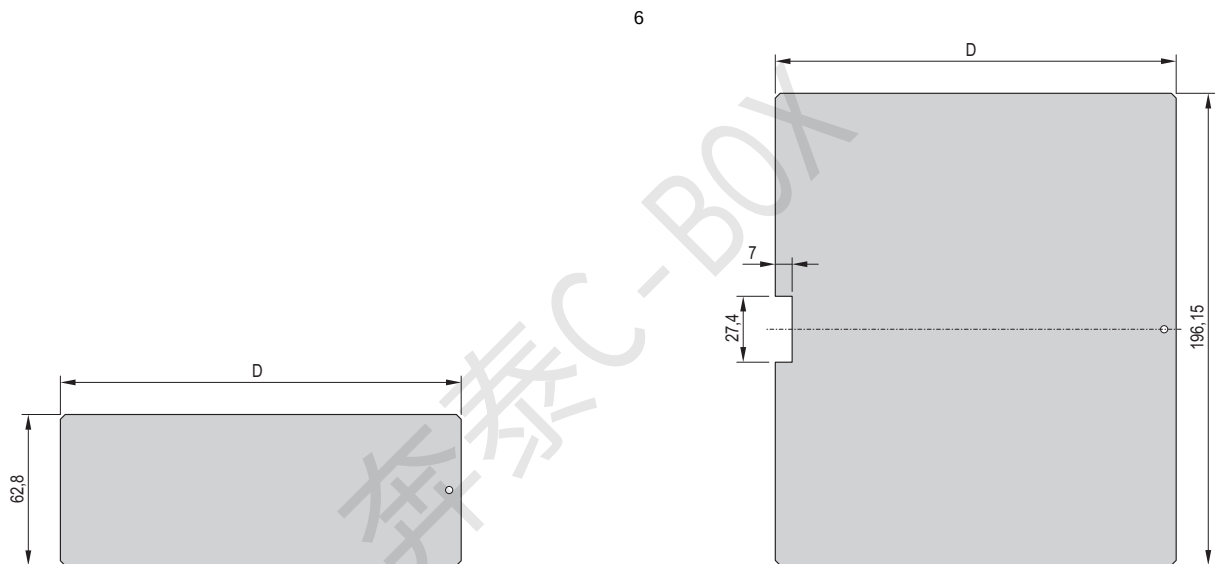


Depth = 167/227 mm

04808103

Dimensions

Side plate



3 U for side panel rear angle

04808100

6 U for side panel rear angle

04808099

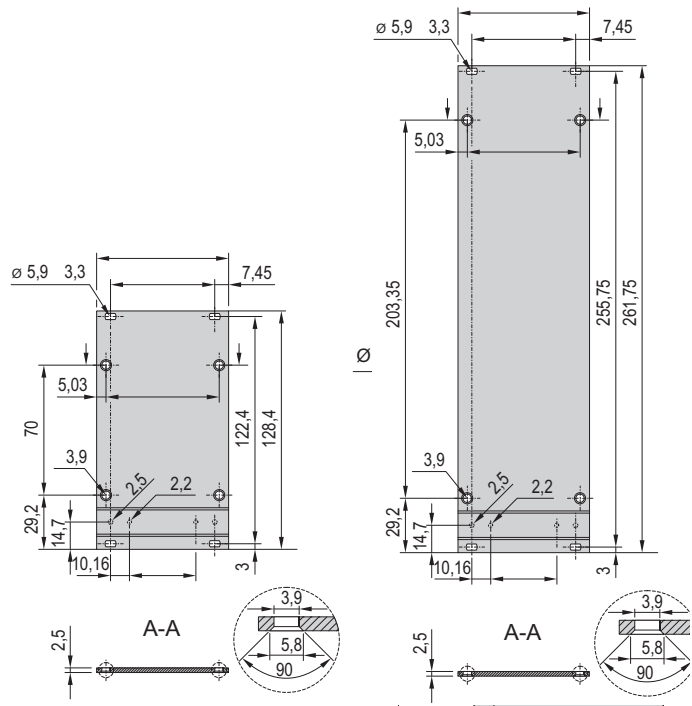
Frame type plug-in units PRO

Dimensions Front panels

Unshielded

3 U

6 U



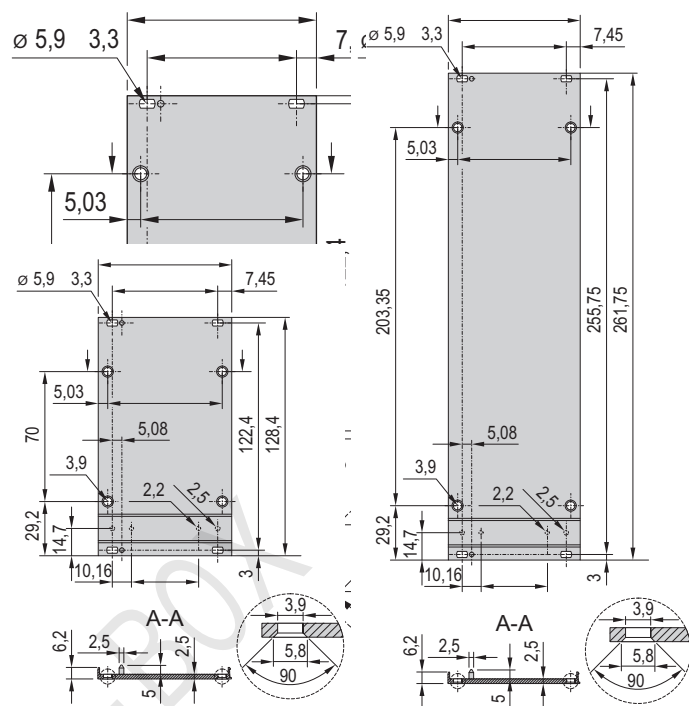
04808086

04808087

Shieldable, for EMC textile gasket

3 U

6 U



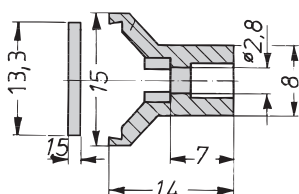
04808088

04808089

Dimensions table

	A	b	c	d
Width	mm	mm	mm	mm
8 HP	40.30	25.40	30.24	5.08
10 HP	50.46	35.56	40.40	15.24
12 HP	60.62	45.72	50.56	25.40
14 HP	70.78	55.88	60.72	35.56
21 HP	106.34	91.44	96.28	71.12
28 HP	141.90	127.00	131.84	106.68
42 HP	213.02	198.12	202.96	177.80

Dimensions Front handle



A4-328e

Dimensions table

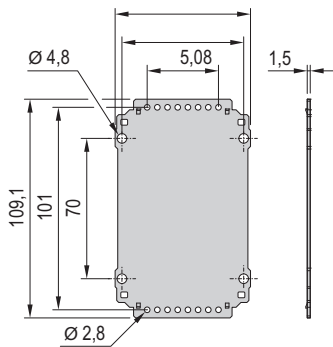
Width	Width
HP	mm
8 HP	39.2
10 HP	49.4
12 HP	59.6
14 HP	69.7
21 HP	105.2
28 HP	140.8
42 HP	212.0

Frame type plug-in units PRO

Dimensions

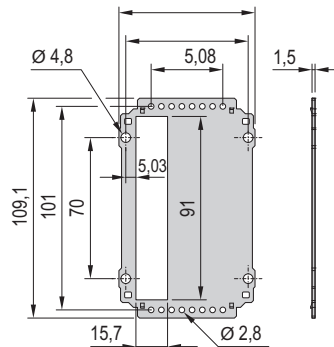
Rear panel 3 U

Without cut-out



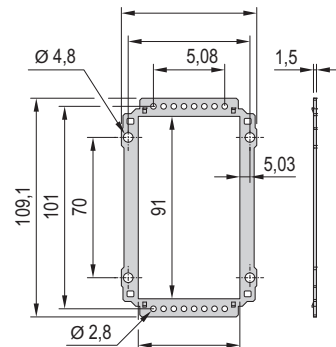
04808092

For one connector



04808091

For multiple connectors



04808090

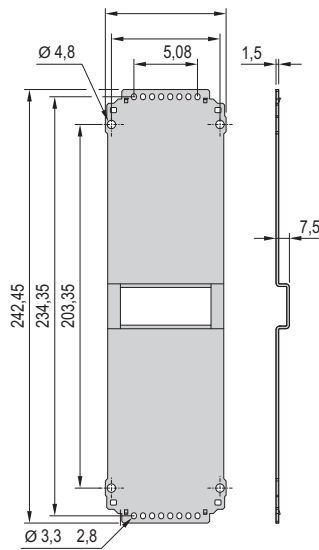
Dimensions table

HP	A mm	B mm	C mm
8 HP	37.04	30.24	20.18
10 HP	47.20	40.40	30.34
12 HP	57.36	50.56	40.50
14 HP	67.52	60.72	50.66
21 HP	103.08	96.28	86.22
28 HP	138.64	131.84	121.78
42 HP	209.76	202.96	192.90

Dimensions

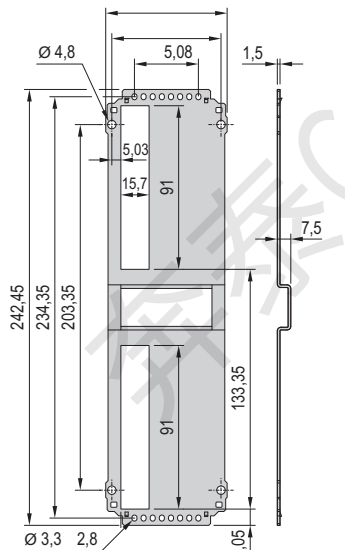
Rear panel 6 U

Without cut-out



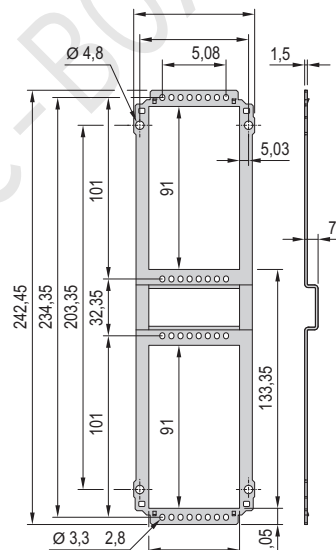
04808095

For one connector



04808094

For multiple connectors



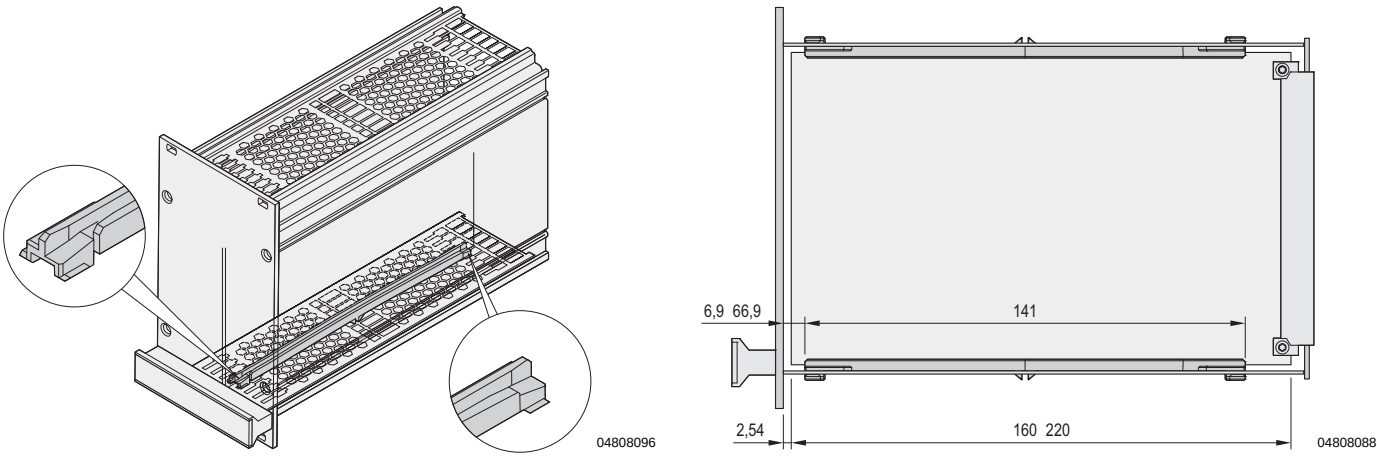
04808093

Dimensions table

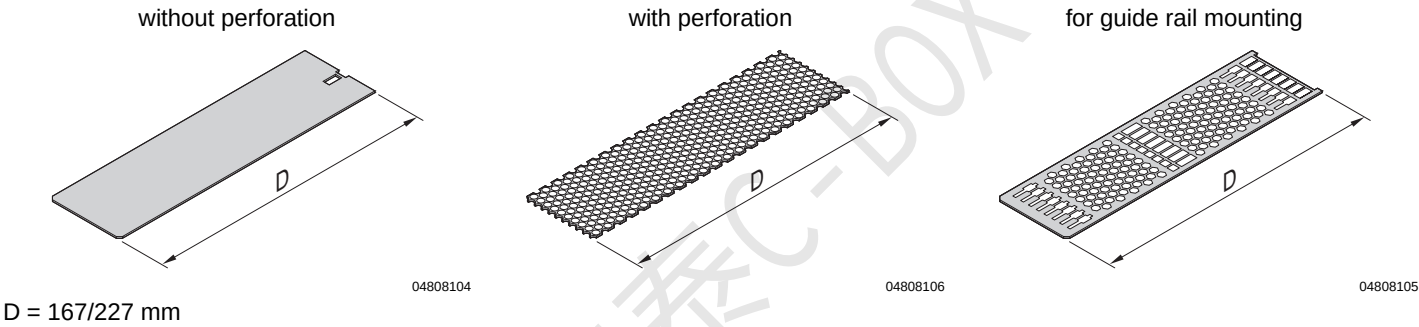
HP	A mm	B mm	C mm
8 HP	37.04	30.24	20.18
10 HP	47.20	40.40	30.34
12 HP	57.36	50.56	40.50
14 HP	67.52	60.72	50.66
21 HP	103.08	96.28	86.22
28 HP	138.64	131.84	121.78
42 HP	209.76	202.96	192.90

Frame type plug-in units PRO

Dimensions Guide rail



Dimensions Cover plates

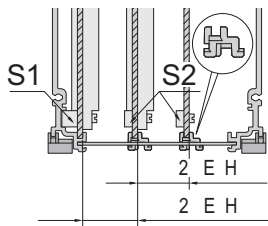


Frame type plug-in units PRO

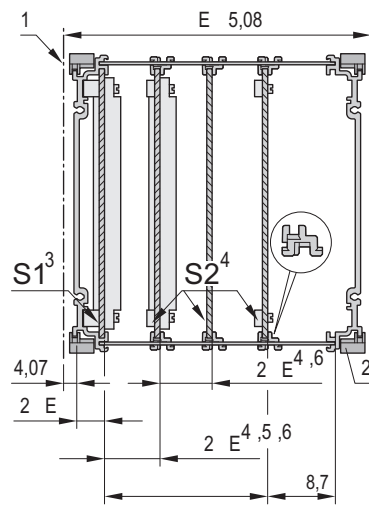
Dimensions

Mounting instructions for guide rails in frame type plug-in units

Slot 1 + slot 2



Front view



- Mounting pitch for guide rails: 1 HP
- Min. distance between 2 guide rails: 2 HP

Width of frame type plug-in unit	b	Max. number of PCBs mountable	
		slot 1	from slot 2
HP	mm		
8	—	1	1
	5.08	—	1 5)
10	10.16	1	1 6)
	15.24	—	2 5) 6)
12	20.32	1	2 6)
	25.40	—	3 5) 6)
14	30.48	1	3 6)
	35.56	—	4 5) 6)
21	71.12	1	7 6)
	66.04	—	7 5) 6)
28	101.60	1	10 6)
	106.68	—	11 5) 6)
42	172.72	1	17 6)
	177.80	—	18 5) 6)

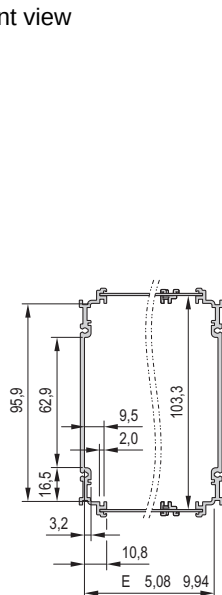
TE = HP = F

- 1) Division line
- 2) Guide rail rotated by 180° from standard position
- 3) The first PCB is held in the extruded side panel, corresponds to standard position (slot 1)
- 4) All additional PCBs are fitted into guide rails (from slot 2)
- 5) Min. 1 HP where slot 1 is not used (slot 2)
- 6) Dependent on construction of connector used (not every connector allows a 2 HP fitting)

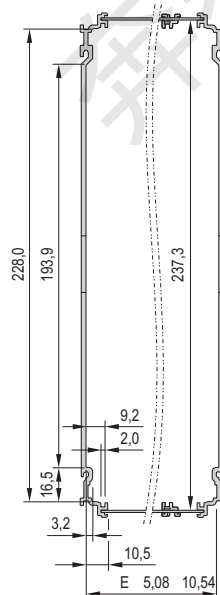
Dimensions

Mounting space frame-type plug-in unit 3 U/6 U

Front view



04808097



04808098

Dimensions table

Height	Width	A
U	HP	mm
3	8	30.70
3	10	40.86
3	12	51.02
3	14	61.18
3	21	96.74
3	28	132.30
3	42	203.42
6	8	30.10
6	10	40.26
6	12	50.42
6	14	60.58
6	21	96.14
6	28	131.70
6	42	202.82

Frame type plug-in units PRO with hood

Frame type plug-in units PRO with hood, 3/6 U, front panel shielded (textile gasket)



- Protects a PCB against mechanical damage and deflects electrostatic discharge; for euroboard formats
- Suitable in all subracks and these cases:
C-BOX PRO/-air, propacPRO and compacPRO
- Useable connectors in accordance with EN 60603-2 (DIN 41612)
- 2 depths, for 160 mm and 220 mm boards

Delivery comprises (kit)

Item	Qty	Description
1	1	Front panel, U profile, 2.5 mm, front anodised, rear conductive, alignment pin pressed-in
2	1	Handle, grey, PPE, UL 94 V-1
3	1	Side panel, Al extrusion, colourless passivated, with groove for one PCB
4	1	Hood, Al, 1 mm, with perforation, rear panel integrated
5	1	EMC textile gasket
6	1	Assembly kit (incl. PCB fixing for slot 1)

Illustration shows 12 HP width, side panel depth 167 mm

04808007



SERIES

see page 7.74

Order Information

		Height	Width	Depth = 167 mm	Depth = 227 mm
		U	HP	Part no.	Part no.
5 HP		3	5	24813-005	24813-055
		3	6	24813-006	24813-056
		3	7	24813-007	24813-057
		3	10	24813-010	24813-060
		3	12	24813-012	24813-062
		3	14	24813-014	24813-064
6 ... 14 HP		6	5	24813-505	24813-555
		6	6	24813-506	24813-556
		6	7	24813-507	24813-557
		6	10	24813-510	24813-560
		6	12	24813-512	24813-562
		6	14	24813-514	24813-564

■ Dimension drawings see from page 7.88

Frame type plug-in units PRO with hood

Plug-in units PRO with hood, 3/6 U, front panel unshielded



Illustration shows 12 HP width, side panel depth 167 mm

04808002

- Protects a PCB against mechanical damage and deflects electrostatic discharge; for euroboard formats
- Suitable in all subracks and these cases:
C-BOX PRO/-air, propacPRO and compacPRO
- Useable connectors in accordance with EN 60603-2 (DIN 41612)
- 2 depths, for 160 mm or 220 mm board

Delivery comprises (kit)

Item	Qty	Description
1	1	Front panel, Al, 2.5 mm, anodised, cut edges plain
2	1	Handle, grey, PPE, UL 94 V-1
3	1	Side panel, Al extrusion, colourless passivated, with groove for one PCB
4	1	Hood, Al, 1 mm, with perforation, rear panel integrated
5	1	Assembly kit (incl. PCB fixing for slot 1)



SERIES

see page 7.74

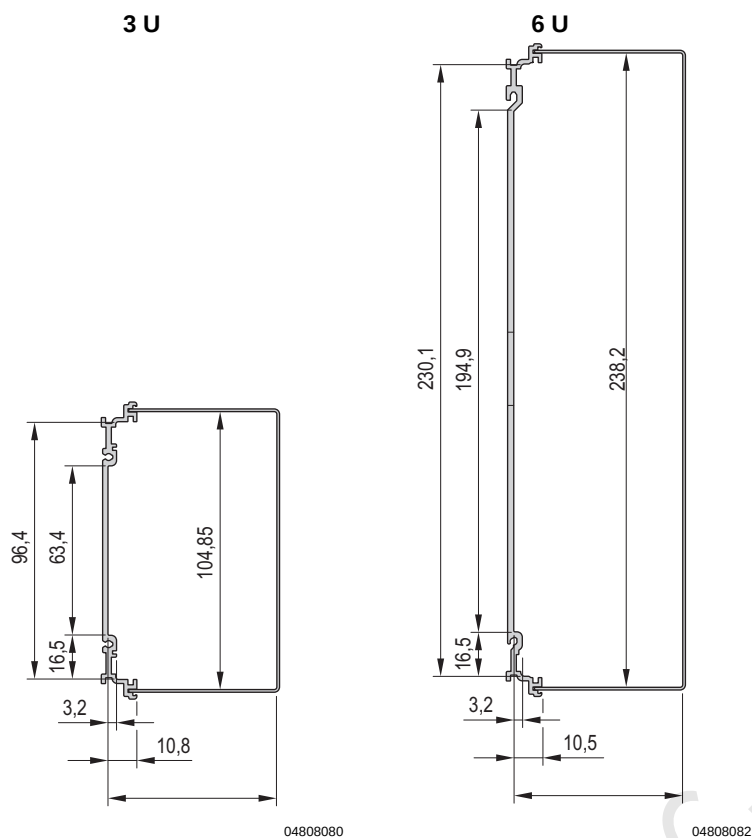
Order Information

5 HP		6 ... 14 HP		Height U	Width HP	Depth = 167 mm Part no.	Depth = 227 mm Part no.
				3	5	24812-005	24812-055
				3	6	24812-006	24812-056
				3	7	24812-007	24812-057
				3	10	24812-010	24812-060
				3	12	24812-012	24812-062
				3	14	24812-014	24812-064
				6	5	24812-505	24812-555
				6	6	24812-506	24812-556
				6	7	24812-507	24812-557
				6	10	24812-510	24812-560
				6	12	24812-512	24812-562
				6	14	24812-514	24812-564

■ Dimension drawings see from page 7.88

Frame type plug-in units PRO with hood

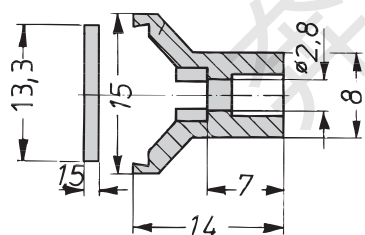
Dimensions Cross-section frame-type plug-in units PRO with hood 3 U/6 U



Dimensions table

Height	Width	A
U	HP	mm
3	5	17.52
3	6	22.60
3	7	27.68
3	10	42.92
3	12	53.08
3	14	63.24
6	5	17.22
6	6	22.30
6	7	27.38
6	10	42.62
6	12	57.78
6	14	62.94

Dimensions Front handle



a4-328e

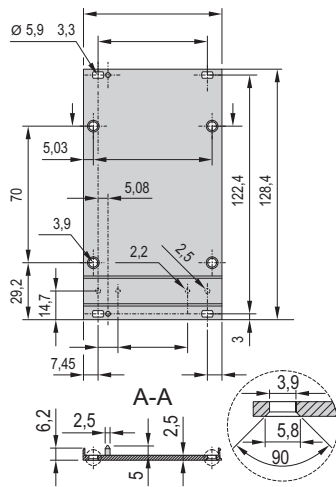
Dimensions table

Width	Width
HP	mm
5	24.0
6	29.0
7	34.1
10	49.4
12	59.6
14	69.7

Frame type plug-in units PRO with hood

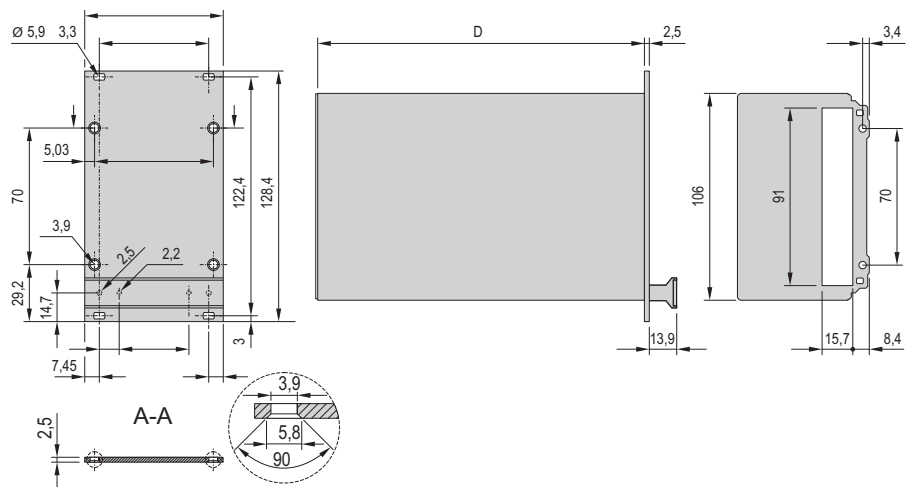
Dimensions 3/6 U frame-type plug-in units PRO with hood

3 U Front panel shieldable



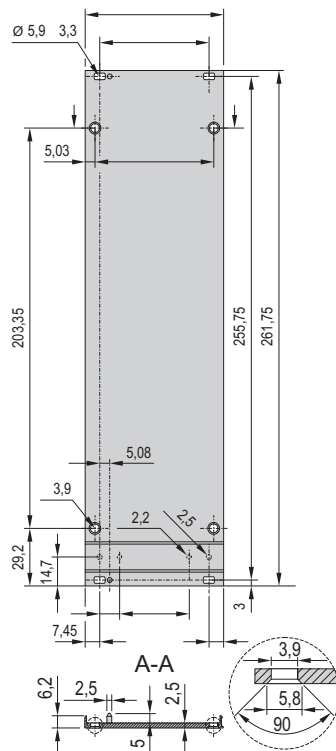
04808052

Front panel unshielded



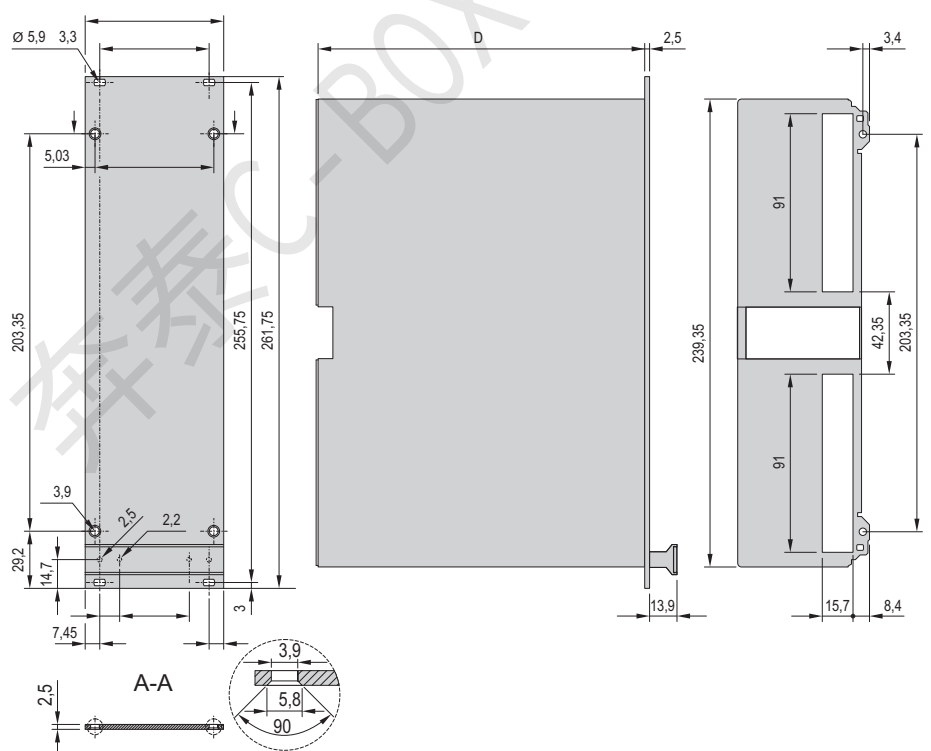
04808111

6 U Front panel shieldable



04809053

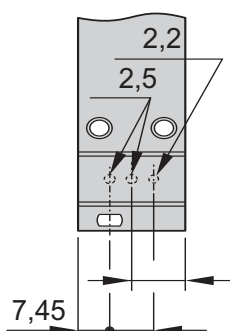
Front panel unshielded



04808112

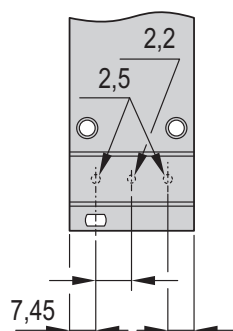
Front panel

5 HP



04809067

6 + 7 HP



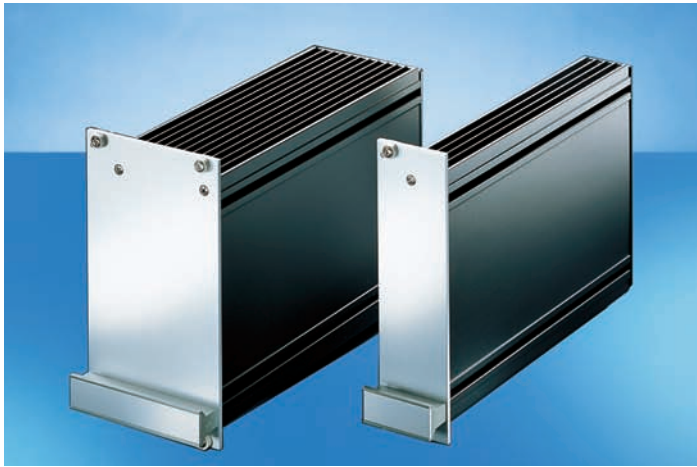
04809066

Dimensions table

Width	A	b	c	d	e	f	Depth D
HP	mm	mm	mm	mm	mm	mm	mm
5	25.06	-	15.00	-	10.16	12.53	167 mm/ 227 mm
6	30.14	-	20.08	-	10.16	7.45	
7	35.22	-	25.16	-	10.16	7.45	
10	50.46	35.56	40.40	15.24	10.16	7.45	
12	60.62	45.72	50.56	25.40	10.16	7.45	
14	70.78	55.88	60.72	35.56	10.16	7.45	

HF frame type plug-in units

HF frame type plug-in units, 3 U kits,
front panel shielded



04892005



SERIES

see page 7.74

- With high shielding from high-frequency radiation
- To accept boards in HP grid increments
- Solid body on all sides, with cooling fins

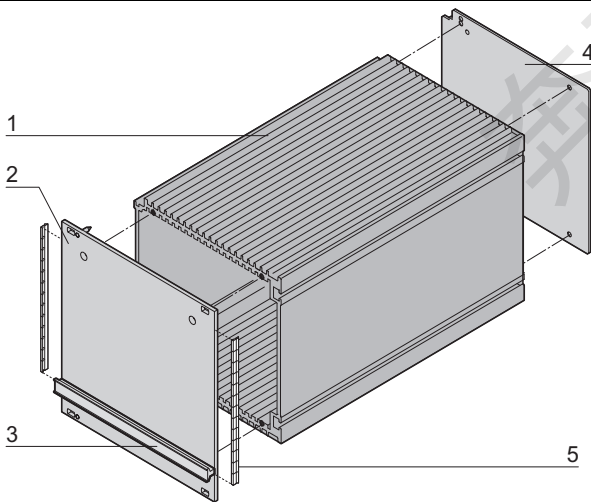
Delivery comprises (kit)

Item	Qty	Description
1	1	Body tube, Al extrusion, black anodised, cut edges plain
2	1	Front panel, Al, 2.5 mm, with lateral grooves for EMC gasket (stainless steel), alignment pin pressed-in, front anodised, rear iridescent green chromated
3	1	Plastic handle, trapeziform, PPE, grey, identification plate, Al, anodised, cut edges plain
4	1	Rear panel, Al, 1.5 mm, etched without cut-outs
5	2	EMC gasket (steel, stainless)
6	1	Assembly kit

Technical data

HF plug-in unit	Thermal resistance K/W	
HP	Depth = 167 mm	Depth = 227 mm
7	1.68	1.51
10	1.62	1.46
12	1.56	1.40
14	1.50	1.35
21	1.06	0.95
28	0.94	0.85

Order Information



04802050

Height U	Width HP	Depth = 167 mm Part no.	Depth = 227 mm Part no.
3	7	20809-529	20809-536
3	10	20809-530	20809-537
3	12	20809-531	20809-538
3	14	20809-532	20809-539
3	21	20809-533	20809-540
3	28	20809-534	20809-541

Note

- Dimension drawings see from page 7.94



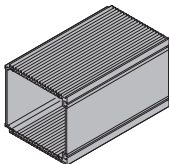
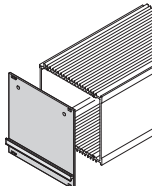
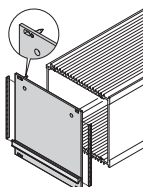
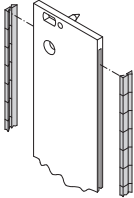
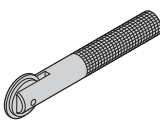
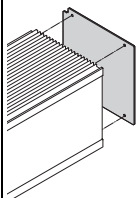
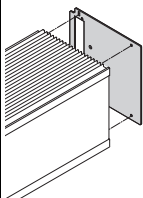
For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.

HF frame type plug-in units SERIES

Individual components

HF body tube, front panels with handle, rear panels

Order Information

		HF body tube	Shieldable front panel, with handle	Shieldable front panel, with handle			Rear panel	
		 KAA45832 Al extrusion, black anodised, cut edges plain	 KAA45831 Al, 2.5 mm, front anodised, rear iridescent green chromated; static handle, grey, PPE, UL 94 V-1	 04807074 Al, 2.5 mm, front anodised, rear iridescent green chromated, with lateral grooves for stainless steel EMC gasket (please order separately), alignment pin pressed-in, trapeziform handle, grey, PPE, UL 94 V-1	 bga45760 inserted laterally into the grooves of the front panel	 aza45937 to mount the EMC gasket (stainless steel)	 04807075 Al, 1.5 mm, etched	 KAA45834 Al, 2.5 mm, etched, cut-out for connector types EN 60603 (DIN 41612); 7 HP: B, C, D, R; 10 - 28 HP: B, C, D, R, F, H, MF, MH
Height U	Width HP	1 piece (SPQ 5) ¹⁾	1 piece (SPQ 5) ¹⁾	1 piece (SPQ 5) ¹⁾	PU 100 pieces	1 piece	1 piece (SPQ 5) ¹⁾	1 piece (SPQ 5) ¹⁾
		PCB depth 160 mm						
3	7	30809-667	20838-001	20838-093	21101-705	24560-270	30809-635	30809-641
	10	30809-677	20838-002	20838-094			30809-636	30809-642
	12	30809-675	20838-003	20838-095			30809-637	30809-643
	14	30809-673	20838-004	20838-096			30809-638	30809-644
	21	30809-671	20838-005	20838-097			30809-639	30809-645
	28	30809-669	20838-006	20838-098			30809-640	30809-646
		PCB depth 220 mm						
3	7	30809-668	20838-001	20838-093	21101-705	24560-270	30809-635	30809-641
	10	30809-678	20838-002	20838-094			30809-636	30809-642
	12	30809-676	20838-003	20838-095			30809-637	30809-643
	14	30809-674	20838-004	20838-096			30809-638	30809-644
	21	30809-672	20838-005	20838-097			30809-639	30809-645
	28	30809-670	20838-006	20838-098			30809-640	30809-646
		Depth 1000 mm (without thread for front panel and rear panel)						
3	7	30809-679	—	—	—	—	—	—
	10	30809-698						
	12	30809-699						
	14	30809-680						
	21	30809-681						
	28	30809-682						
Dimensions see page		7.94	7.95				7.94	

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Part no. includes one packing unit (PU); delivery is exclusively made in PU



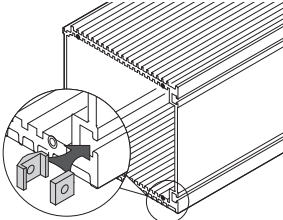
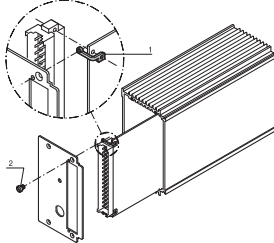
For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.

HF frame type plug-in units

Individual components

Slide nuts, fixing for PCBs, mounting kit

Order Information

		Slide nut		Fixing for PCBs			Fixing material for one HF frame type plug-in unit
		M 2.5	M 3	Individual components top	bottom	Complete assembly kit	
		 width across flats (WAF) 7, for insertion into HF body tube, top and bottom, provides lateral fixing (on right) 04807076		 bracket (stainless steel), 1.5 mm; please order retention screws separately KAA45843		bracket top and bottom (stainless steel), 1.5 mm; incl. two cheesehead screws M2.5 x 4	for complete assembly of a 3 U HF frame type plug-in unit: front panel, rear panel and handle, description see page 7.93
Height U	Width HP	PU 100 pieces	PU 100 pieces	1 piece (SPQ 10) ¹⁾	1 piece (SPQ 10) ¹⁾	PU 1 kit	PU 1 kit
3	7 10 12 14 21 28	21100-112	21100-289	30809-701	30809-700	21101-937	21100-105
Accessories							
Cheesehead screw M2.5 x 4, St, nickel-plated, PU 100 pieces		—	—	21100-431	21100-431	—	—

1) SPQ (standard pack quantity): Part number includes 1 piece, but delivery is exclusively made in standard pack quantity (SPQ); please order at least the SPQ quantity or a multiple

Part no. includes one packing unit (PU); delivery is exclusively made in PU



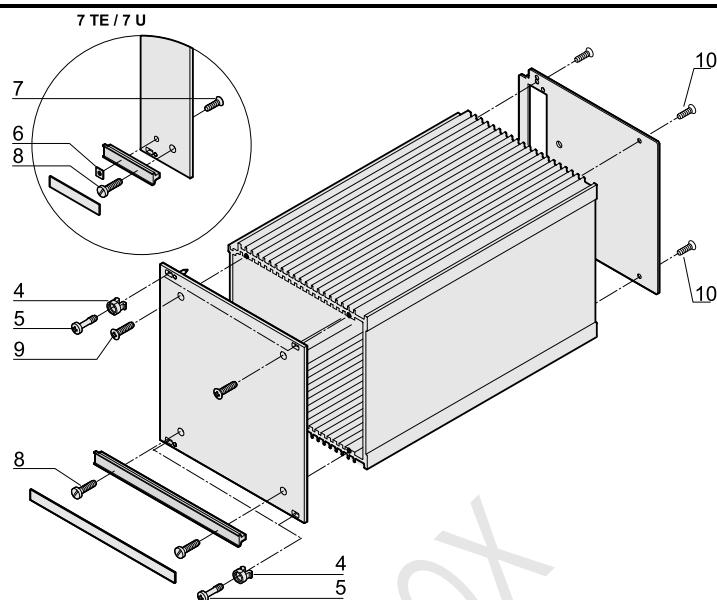
For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.

HF frame type plug-in units

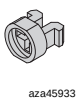
Individual
components

Fixing material (100 pieces)

Order Information



04802054

Description	Item		Required quantity per plug-in unit	Description	Qty/PU	Part no.
Fixing parts for mounting the module in subrack or case						
Plastic sleeve for form hole 5.9 x 3.3, PA, UL 94 V-2, grey	4		2 at 7 HP 4 at > 7 HP	Front panel is fitted to horizontal rail with threaded insert pushed in to front	100	21100-464
Pozidrive/slot collar screw M2.5 x 11, St, nickel-plated	5		2 at 7 HP 4 at > 7 HP	Front panel is fitted to horizontal rail with threaded insert pushed in to front	100	21100-748
Pozidrive/slot collar screw M2.5 x 12.3, St, nickel-plated	5		2 at 7 HP 4 at > 7 HP	Front panel is fitted to horizontal rail with threaded insert pushed in to rear in the standard position	100	21101-101
Fixing parts for mounting the module						
Square nut DIN 562, M2.5, St, nickel-plated	6		1 at 7 HP	To mount handle on front panel	100	21100-359
Pozidrive countersunk screw M2.5 x 12, St, nickel-plated	7		1 at 7 HP	To mount handle on front panel	100	21100-507
Slotted cheesehead screw M2.5 x 16, St, nickel-plated	8		1 at 7 HP 2 at > 7 HP	To mount handle and front panel on HF body tube	100	21100-150
Raised Pozidrive countersunk panhead screw M2.5 x 8, St, nickel-plated	9		2	To mount front panel on HF body tube	100	21100-429
Pozidrive countersunk screw M2.5 x 6, St, nickel-plated	10		4	To mount rear panel on HF body tube	100	21100-515

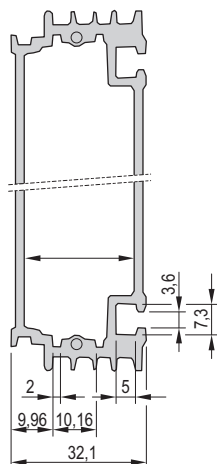
Note

■ Further collar screws and sleeves see page 7.107

HF frame type plug-in units

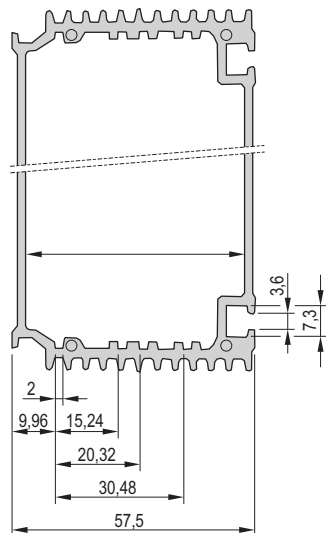
Dimensions HF body tube

7 HP



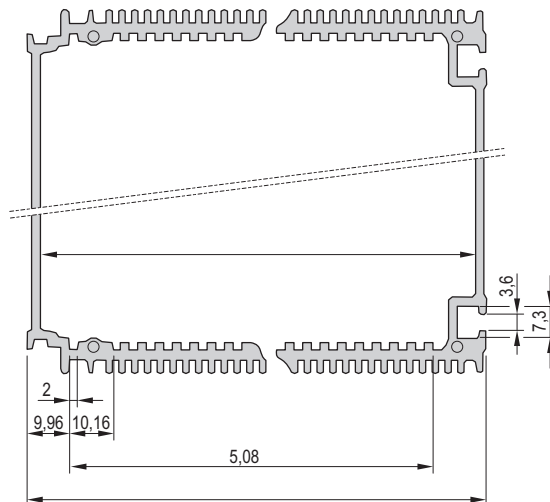
A4-247c

12 HP



04807079

10, 14, 21, 28 HP



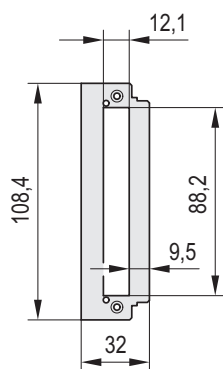
A4-247a

Dimensions table

Dimension	7 HP	10 HP	12 HP	14 HP	21 HP	28 HP
mm						
n	–	3 × 5.08	–	7 × 5.08	14 × 5.08	21 × 5.08
A	–	47.34	–	67.66	103.22	138.78
B	26.34	41.58	51.74	61.90	97.46	133.02

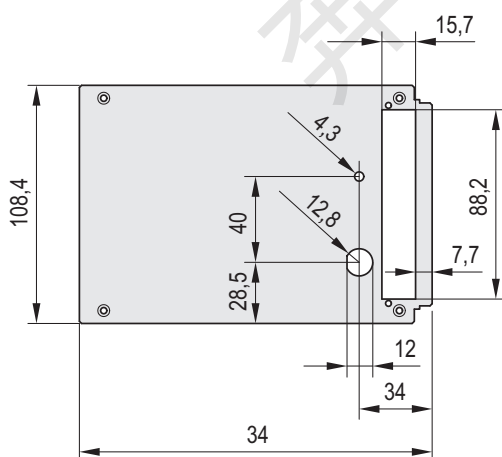
Dimensions Rear panel with/without cut-out for connector

7 HP



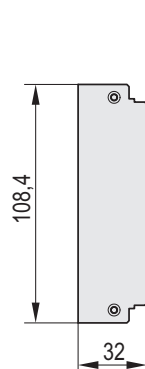
04807086

10, 12, 14, 21, 28 HP



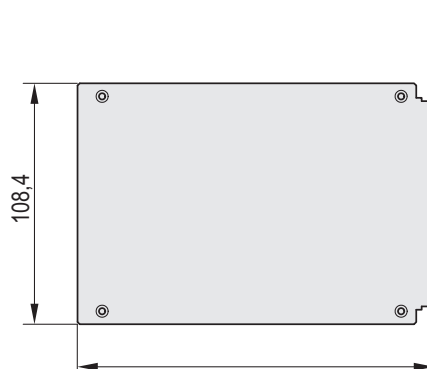
04802053

7 HP



04807087

10, 12, 14, 21, 28 HP



04807083

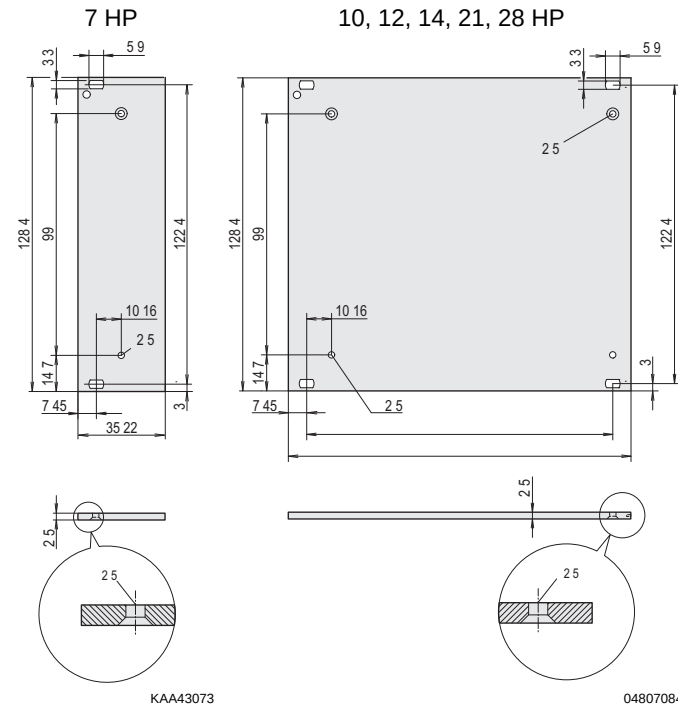
Dimensions table

Width	A
	mm
7 HP	32.00
10 HP	47.24
12 HP	57.40
14 HP	67.40
21 HP	103.12
28 HP	136.68

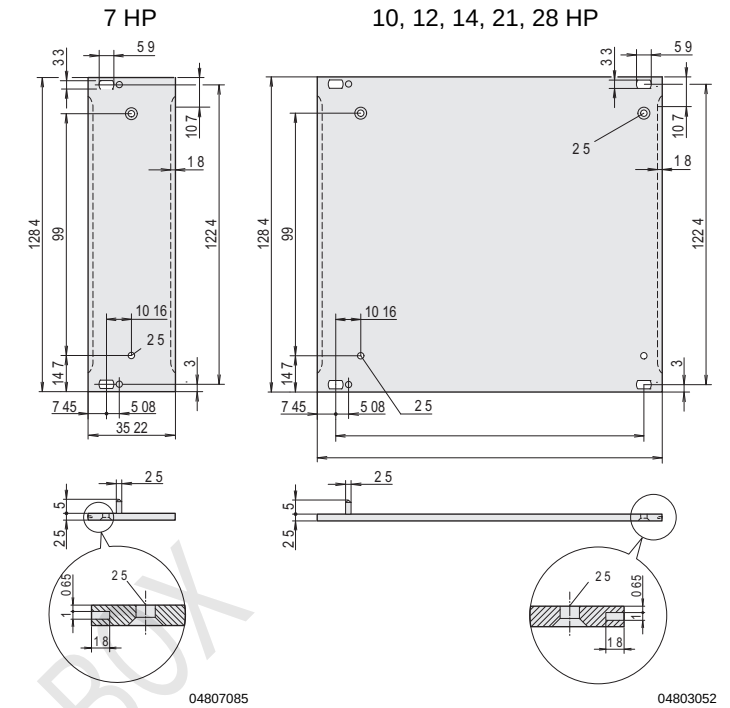
HF frame type plug-in units

Dimensions Front panels

Unshielded



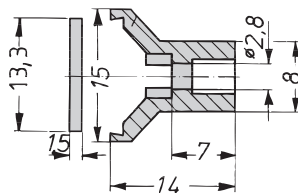
Shieldable, slotted for EMC stainless steel gasket



Dimensions table

Width	A	w
	mm	mm
7 HP	32.22	—
10 HP	50.46	35.56
12 HP	60.62	45.72
14 HP	70.78	55.88
21 HP	106.34	91.44
28 HP	141.90	127.00

Dimensions Front handle



A4-328e

Dimensions table

Width	Width
HP	mm
10 HP	49.4
12 HP	59.6
14 HP	69.7
21 HP	105.2
28 HP	140.8

Frame type plug-in units

Adaptor for horizontal rail mounting



04812021

- For fitting of e.g. subracks, wall mounted cases, frame type plug-in units or PSUs on a horizontal rail with lip
- Adaptor is bolted to the desired product and can then be clipped onto the lipped horizontal rail (DIN 43880)

Delivery comprises

Item	Qty	Description
1	1	Adaptor, Al extrusion, length 160 mm
1	1	Fixing material

Order Information

Description	Part no.
Adaptor for horizontal rail mounting	11000-002



For further information www.c-box-tech.com/oneclick
oneClick search code = Part no.



11395007

Example: horizontal rail adaptor with lip for 19" PSU

Frame type plug-in units

变频C-BOX