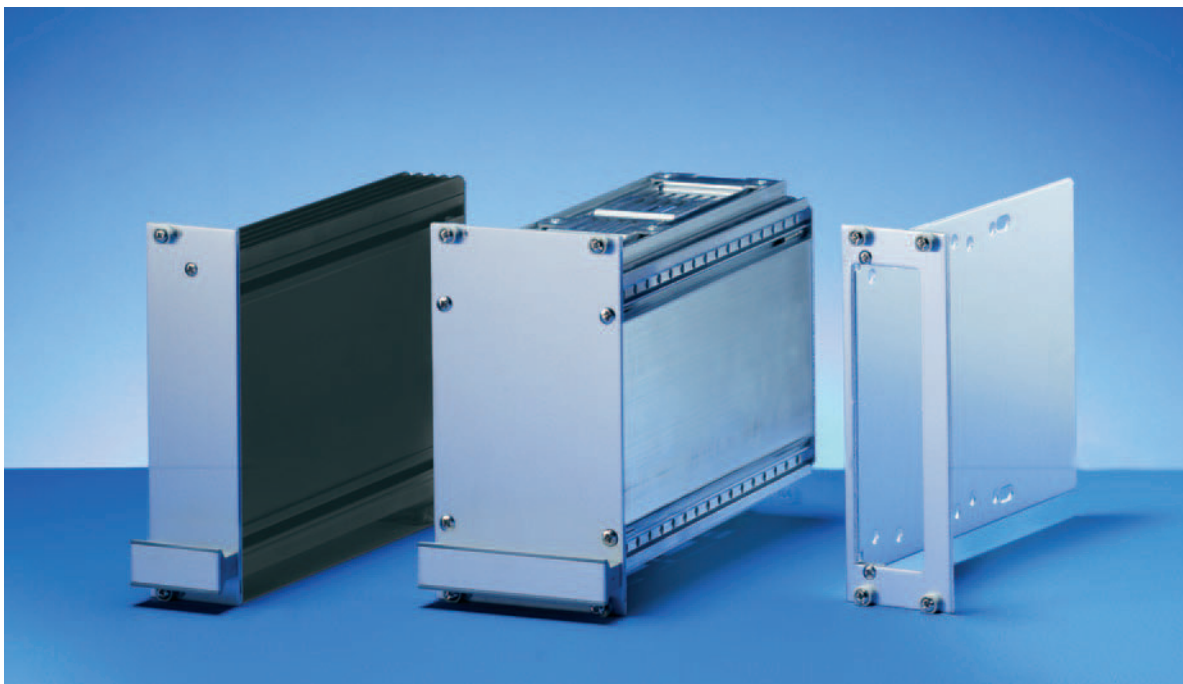


Overview	0
Cabinets	1
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Connectors, front panel component system	11
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Frame type plug-in units



04802002

Frame type plug-in units / HF plug-in units

- For printed boards in euroboard format
 - 3 U: 100 × 160 mm and 100 × 220 mm respectively
 - 6 U: 233.5 × 160 mm and 233.5 × 220 mm respectively
- Available as kits or individual components
- Front panels also with EMC shielding

Standards

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

Note

- Where finish is identified as being chromated this provides a conductive surface to maintain high levels of EMC shielding effectiveness

Modifications

- Special widths
- Special depths
- Other finishes
- Top and rear panels made of steel
- Front and rear panel modifications
- Mounting service



Further important information can be found on the internet under www.schroff.biz

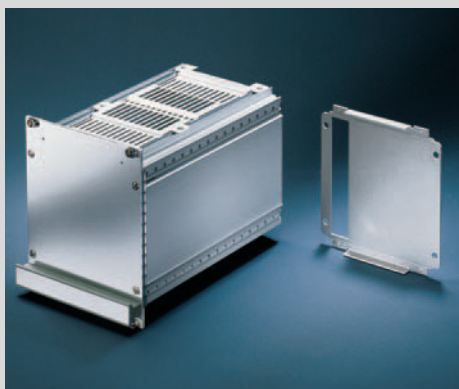


Frame type plug-in units

Overview 7.62

Components

- Plug-in units type 4 & 5
- HF plug-in units
- Mechanically shielded plug-in units



04898001

Plug-in units type 4 & 5

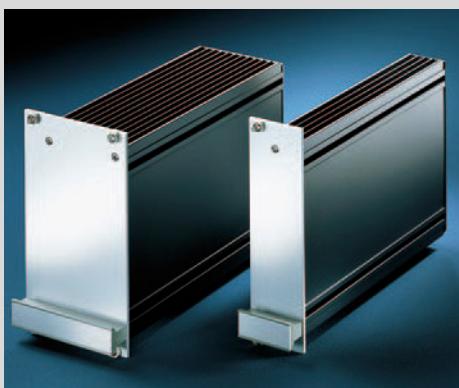
- Available in 3 U and 6 U version
- Suitable for all subracks and cases



04792001

Mechanically shielded plug-in units

- Protection of printed boards against mechanical damage



04892005

HF plug-in units

- Available in 3 U versions
- Suitable for all subracks and cases
- HF plug-in units with shielding against high-frequency radiation
- Front panels with EMC shielding

Drive units see chapter
Systems - Accessories

Plug-in units

3/6 U shielded/ unshielded	7.64
Front panel	7.66
Handles	7.68
Extruded side panel	7.69
Side panel	7.70
Cover plate	7.71
Guide rails	7.71
Rear panel	7.72
Printed board assembly	7.74
Assembly instructions	7.76

Shielded plug-in units

3 U	7.77
6 U	7.78

HF plug-in units

Kit	7.79
HF body tube	7.80
Front panel	7.81
EMC stainless steel gasket	7.82
Assembly tools	7.82
Rear panel	7.82
Assembly kit	7.83

Frame type plug-in units

Plug-in unit kits 3/6 U, shielded

- Right and left extruded side panels with grooves for sliding in printed board (standard card position only on the left)
- Assembly of further printed boards via assembly of guide rails in the perforated covers
- Front panel EMC shielded, covers with perforation

Delivery comprises (kit)

Item	Qty	Description
1	1	Front panel, Al, 2.5 mm, front anodised, rear colourless chromated
2	1	Handle, grey PPE, UL 04 V-1
3a/3b	1	Rear panel Al, 1.5 mm
4	2	Extruded side panel
5	2	Cover, perforated, Al 1 mm
6	2	EMC gasket, stainless steel
7	1	Assembly kit

Order Information

	Rear panel	Height	Width	T = 167mm, front panel shielded		T = 227 mm front panel shielded			
				U	HP	Order no.	Order no.		
		3	10	3	10	20846-636	20846-642		
		3	12	3	12	20846-637	20846-643		
		3	14	3	14	20846-638	20846-644		
		3	21	3	21	20846-639	20846-645		
		3	28	3	28	20846-640	20846-646		
		3	42	3	42	20846-641	20846-647		
				3	10	6	10	20846-660	20846-666
				3	12	6	12	20846-661	20846-667
				3	14	6	14	20846-662	20846-668
				3	21	6	21	20846-663	20846-669
3	28			6	28	20846-664	20846-670		
3	42			6	42	20846-665	20846-671		
				6	10	6	10	20846-648	20846-654
				6	12	6	12	20846-649	20846-655
				6	14	6	14	20846-650	20846-656
				6	21	6	21	20846-651	20846-657
		6	28	6	28	20846-652	20846-658		
		6	42	6	42	20846-653	20846-659		
				6	10	6	10	20846-672	20846-678
				6	12	6	12	20846-673	20846-679
				6	14	6	14	20846-674	20846-680
				6	21	6	21	20846-675	20846-681
6	28			6	28	20846-676	20846-682		
6	42			6	42	20846-677	20846-683		

T = plug-in unit side panel depth

- Guide rails for plug-in unit, see page 7.71
- Printed board assembly, see page 7.74

Frame type plug-in units

Plug-in unit kits 3/6 U, unshielded

- Right and left extruded side panels with grooves for sliding in a printed board (standard card position only on the left)
- Assembly of further boards via assembly of guide rails in the perforated covers
- Front panel EMC unshielded, cover with perforation

Delivery comprises (kit)

Item	Qty	Description
1	1	Front panel, Al, 2.5 mm, front anodised, rear colourless chromated
2	1	Handle, grey, PPE, UL 04 V-1
3a/3b	1	Rear panel Al, 1.5 mm
4	2	Extruded side panel
5	2	Cover, perforated, Al, 1 mm
6	1	Assembly kit

Order Information

	Rear panel	Height U	Width HP	T = 167 mm, front panel unshielded		T = 227 mm, front panel unshielded	
				Order no.	Order no.		
	 KAA46405	3	10	24811-478	24811-484		
		3	12	24811-479	24811-485		
		3	14	24811-480	24811-486		
		3	21	24811-481	24811-487		
		3	28	24811-482	24811-488		
		3	42	24811-483	24811-489		
			 KAA46407	3	10	24811-490	24811-496
				3	12	24811-491	24811-497
				3	14	24811-492	24811-498
				3	21	24811-493	24811-499
3	28			24811-494	24811-500		
3	42			24811-495	24811-501		
	 KAA46406			6	10	24811-502	24811-508
				6	12	24811-503	24811-509
				6	14	24811-504	24811-510
				6	21	24811-505	24811-511
		6	28	24811-506	24811-512		
		6	42	24811-507	24811-513		
			 KAA46408	6	10	24811-514	24811-520
				6	12	24811-515	24811-521
				6	14	24811-516	24811-522
				6	21	24811-517	24811-523
6	28			24811-518	24811-524		
6	42			24811-519	24811-525		

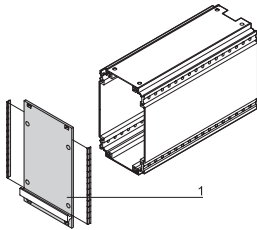
- Guide rails for plug-in unit, see page 7.71
- Printed board assembly, see page 7.74



For further information www.schroff.biz/oneclick
oneClick code = Order no.

Frame type plug-in units – Components

Front panel for plug-in units type 4 and 5

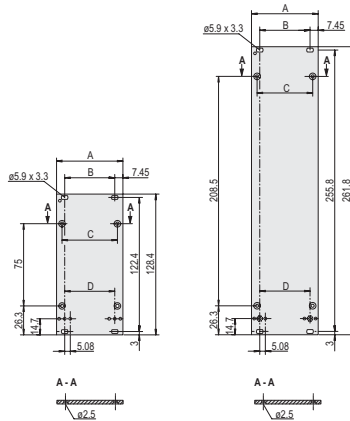


Delivery comprises

Item	Qty	Description
1	1	Front panel, Al, 2.5 mm, front anodised, rear colourless chromated

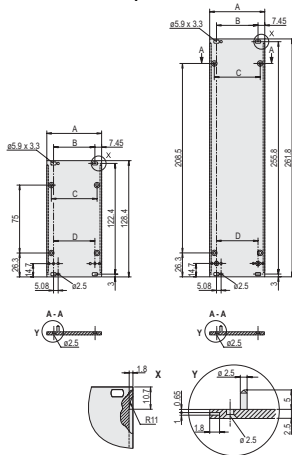
3 U/6 U unshielded

KAA46409



04802066

3 U/6 U with slot for contact strips



04802067

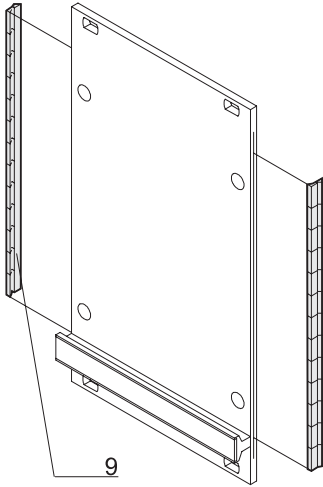
Order Information

Height	Width	A	B	C	D	Unshielded	With slots for EMC stainless steel gasket
						Order no.	Order no.
3	10	50.46	35.56	40.4	35.56	30847-729	20846-584
3	12	60.62	45.72	50.56	45.72	30847-730	20846-585
3	14	70.76	55.88	60.72	55.88	30847-731	20846-586
3	21	106.34	91.44	96.28	91.44	30847-732	20846-587
3	28	141.9	127	131.84	127	30847-733	20846-588
3	42	213.02	198.12	202.96	198.12	30847-734	20846-589
6	10	50.46	35.56	40.4	35.56	30847-739	20846-594
6	12	60.62	45.72	50.56	45.72	30847-740	20846-595
6	14	70.78	55.88	60.72	55.88	30847-741	20846-596
6	21	106.34	91.44	96.28	91.44	30847-742	20846-597
6	28	141.9	127	131.84	127	30847-743	20846-598
6	42	213.02	198.12	202.96	198.12	30847-744	20846-599

Delivery may be in Standard Pack Quantity: Please order 10 pieces or a multiple. Pricing is per individual item.

Frame type plug-in units – Components

EMC stainless steel gasket



KAA46411

- The EMC stainless steel gasket is pushed into the lateral slots of the shielded front panels

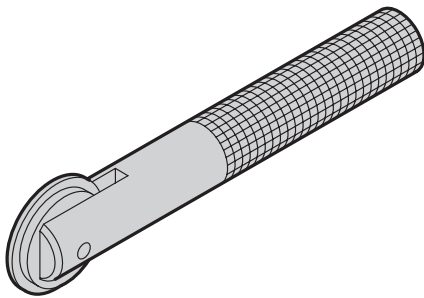
Order Information

Item	Height U	Height mm	Material	Qty / PU	Order no.
9	3	97	Stainless steel	10	21101-705
9	3	97	Stainless steel	100	21101-706
9	6	232	Stainless steel	10	21101-707
9	6	232	Stainless steel	100	21101-708



For further information www.schroff.biz/oneclick
oneClick code = Order no.

Assembly tool



aza45937

- For easier assembly of EMC stainless steel gasket

Order Information

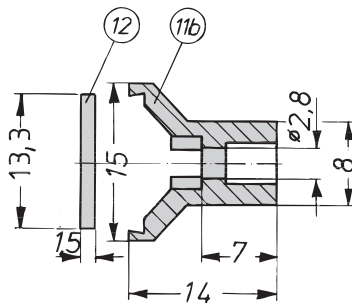
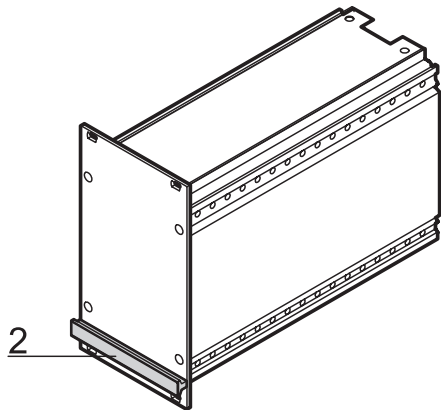
Description	Qty / PU	Order no.
Assembly tool	1	24560-270



For further information www.schroff.biz/oneclick
oneClick code = Order no.

Frame type plug-in units – Components

Static plastic handle



KAA46410

A4-328e

- With separate identification plate
- Handles laterally closed

Delivery comprises

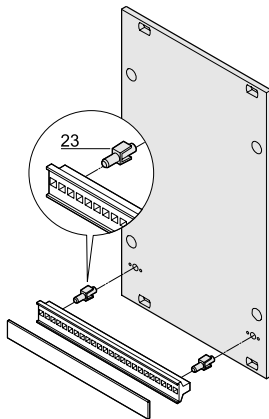
Item	Qty	Description
11b	1	Static plastic handle, PPE UL 94 V-1, grey or black
12	1	Identification plate, Al, 1.5 mm, anodised, cut edges untreated

Order Information

Width	Width	Grey	Black
HP	mm	Order no.	Order no.
10	49.4	20808-004	20808-085
12	59.6	20808-064	20808-086
14	69.7	20808-065	20808-087
21	105.2	20808-066	20808-088
28	140.8	20808-067	20808-089
42	212	20808-068	20808-091

Delivery may be in Standard Pack Quantity: Please order 10 pieces or a multiple. Pricing is per individual item.

Fixing clip for static plastic handle



04602059

- Assembly aid for handles from 5 HP up to 42 HP

Order Information

Item	Description	Qty / PU	Order no.
23	Fixing clip, PPE, UL 94 V-0, black	100	21101-239



For further information www.schroff.biz/oneclick
oneClick code = Order no.

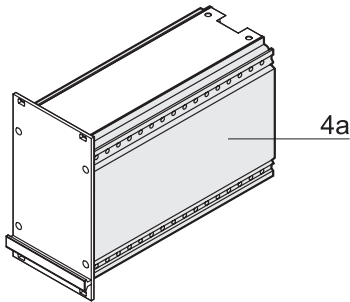
Assembly parts for plastic handle

Order Information

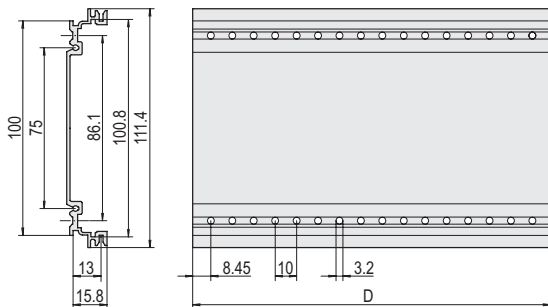
Description		Qty / PU	Order no.
Pozidrive c/sk screw, M2.5	M2.5 × 12, St, nickel-plated	100	21100-507
Square nut	Square nut, M2.5, St, nickel-plated	100	21100-359

Frame type plug-in units – Components

Extruded side panel for plug-in units

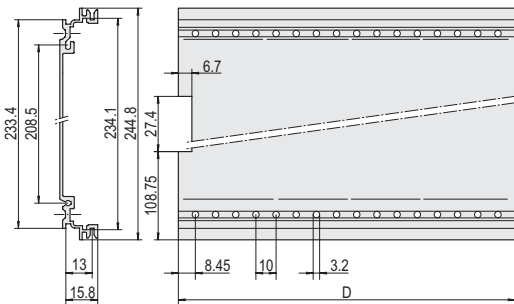


3 U



KAA46412

6 U



KAA42600

KAA42602

Delivery comprises

Item	Qty	Description
4a	1	Extruded side panel, Al extrusion

Order Information

Height U	Description	Depth D mm	Order no.
3	left, right	167	34811-391
3	left, right	227	34811-393
6	left	167	34811-401
6	left	227	34811-403
6	right	167	34811-411
6	right	227	34811-413

Delivery may be in Standard Pack Quantity: Please order 10 pieces or a multiple. Pricing is per individual item.

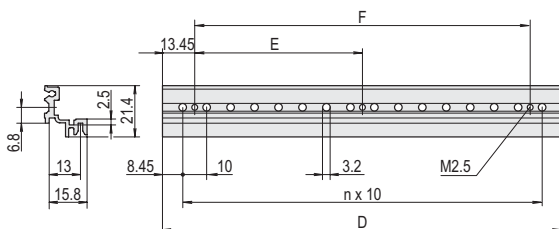
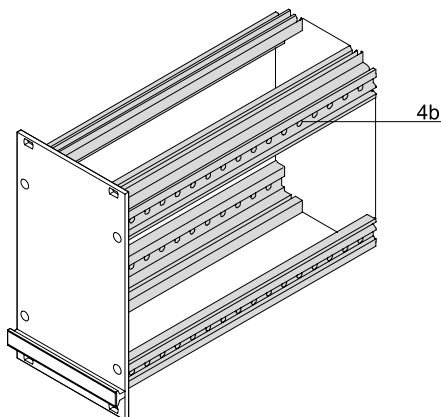
Note

- At 6 U, the assembly with printed board assembly type A is recommended to secure the printed board
- Printed board assembly, see page 7.74



For further information www.schroff.biz/oneclick
oneClick code = Order no.

Depth extrusion for plug-in units



04802060

KAA42601

Delivery comprises

Item	Qty	Description
4b	1	Depth extrusion, Al extrusion

Order Information

Depth D mm	E mm	F mm	Order no.
167	-	140	34811-381
227	-	200	34811-383

Delivery may be in Standard Pack Quantity: Please order 10 pieces or a multiple. Pricing is per individual item.

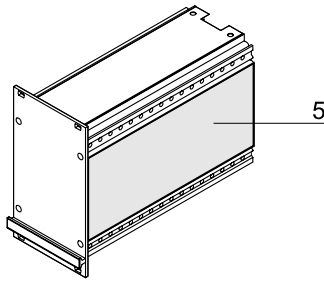


For further information www.schroff.biz/oneclick
oneClick code = Order no.



Frame type plug-in units – Components

Side panel for plug-in units



- Instead of extruded side panel, but can only be used together with depth extrusion

Delivery comprises

Item	Qty	Description
5	1	Side panel, to screw on, Al, 1 mm

Order Information

KAA46414

Height U	Depth D mm	Order no.
3	166.7	34811-224
3	226.7	34811-226
6	166.7	34811-233
6	226.7	34811-235

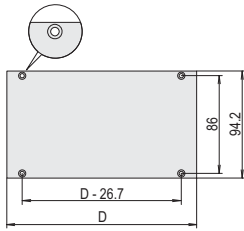
Delivery may be in Standard Pack Quantity: Please order 10 pieces or a multiple. Pricing is per individual item.

KAA44940

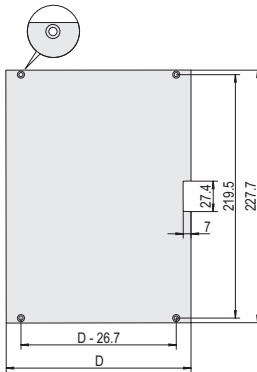


For further information www.schroff.biz/oneclick
oneClick code = Order no.

3 U



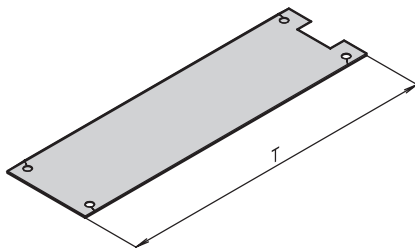
6 U



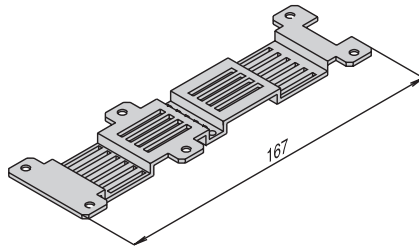
KAA42608

Frame type plug-in units – Components

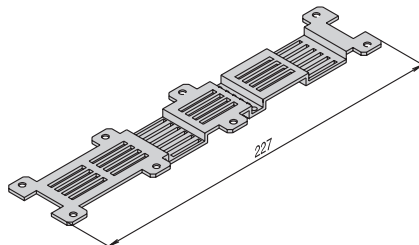
Cover for plug-in units



KAA45172



KAA45173



KAA45174

Delivery comprises (kit)

Item	Qty	Description
1	1	Cover, to screw on, Al, 1 mm

Order Information

Width	With perforation, T = 167 mm	With perforation, T = 227 mm	Without perforation, T = 167 mm	Without perforation, T = 227 mm
HP	Order no.	Order no.	Order no.	Order no.
10	34811-548	34811-549	34811-040	34811-060
12	34811-100	34811-109	34811-041	34811-061
14	34811-101	34811-110	34811-042	34811-062
21	34811-102	34811-111	34811-043	34811-063
28	34811-103	34811-112	34811-044	34811-064
42	34811-104	34811-113	34811-045	34811-065

Delivery may be in Standard Pack Quantity: Please order 10 pieces or a multiple. Pricing is per individual item.

HP = Front panel width



For further information www.schroff.biz/oneclick
oneClick code = Order no.

Guide rails in plug-in units

- For assembly into perforated covers if more than one printed board has to be installed into the plug-in units

Delivery comprises

Item	Qty	Description
1	1	Guide rail, groove width 2 mm, PPE, UL 94 V-0, black

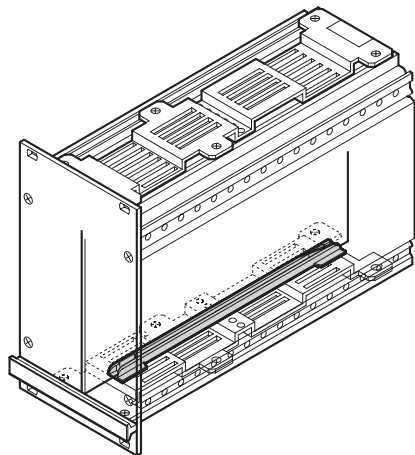
Order Information

Description	Order no.
For 160 and 220 mm deep plug-in units	60809-004

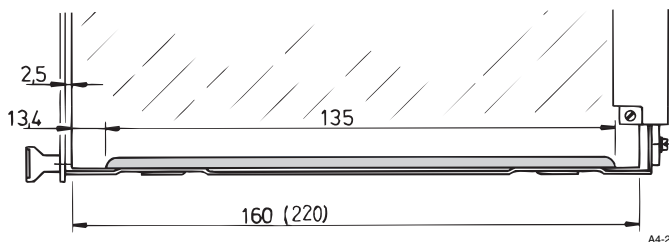
Delivery may be in Standard Pack Quantity: Please order 10 pieces or a multiple. Pricing is per individual item.



For further information www.schroff.biz/oneclick
oneClick code = Order no.



KAA45903



A4-2687

Frame type plug-in units – Components

Rear panel for plug-in units

- Rear panel with cut-out for 1 connector (type 4)
- Rear panel with cut-out for several connectors (type 5)

Delivery comprises

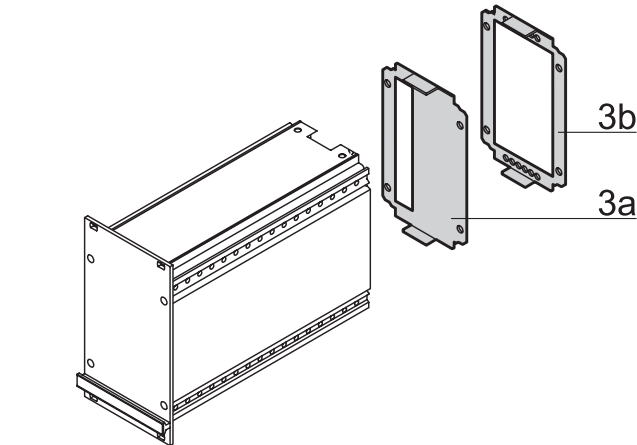
Item	Qty	Description
3a/b	1	Rear panel, Al, 1.5 mm

Order Information

Height	Width	Cut-out for 1 connector	Cut-out for several connectors
U	HP	Order no.	Order no.
3	10 1)	34811-136	34811-146
3	12 1)	34811-137	34811-147
3	14	34811-138	34811-148
3	21	34811-139	34811-149
3	28	34811-140	34811-150
3	42	34811-141	34811-151
6	10	34811-156	34811-166
6	12	34811-157	34811-167
6	14	34811-158	34811-168
6	21	34811-159	34811-169
6	28	34811-160	34811-170
6	42	34811-161	34811-171

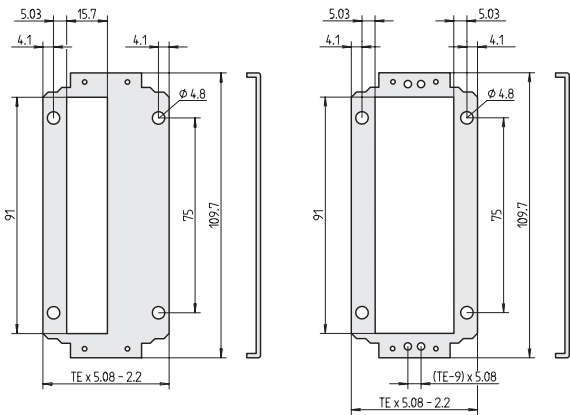
1) Rear panel without cut-out

Delivery may be in Standard Pack Quantity: Please order 5 pieces or a multiple. Pricing is per individual item.



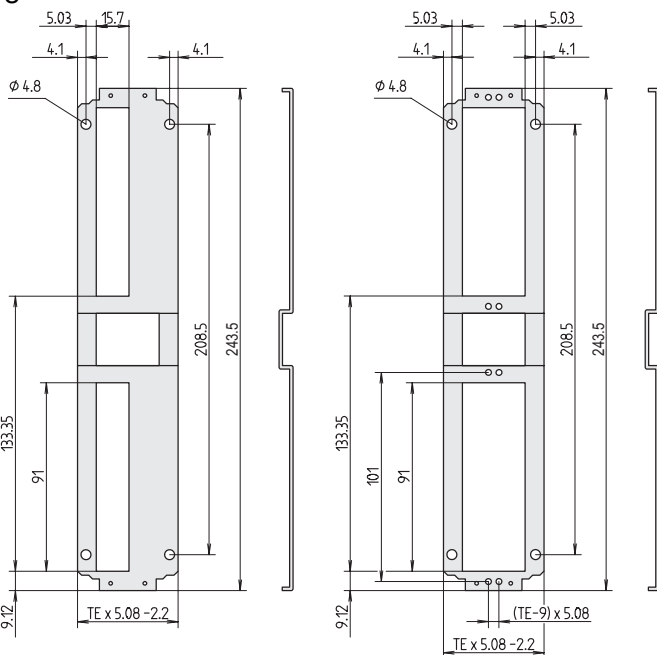
3 U

KAA46404



6 U

04802068



04802069

TE = HP

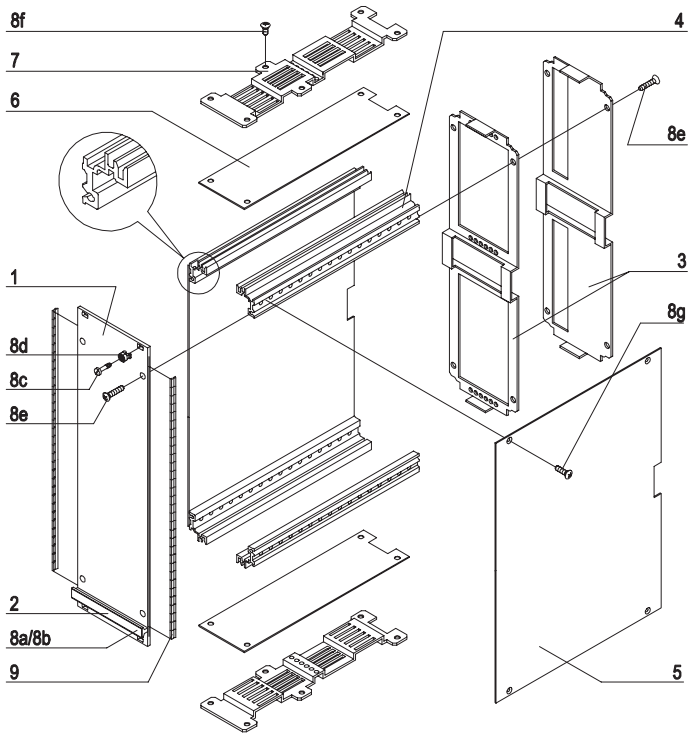


For further information www.schroff.biz/oneclick
oneClick code = Order no.



Frame type plug-in units – Components

Assembly kit for plug-in units 3/6 U



Delivery comprises

Item	Qty	Description	Application
8a	2	Square nut, M2.5, St, nickel-plated	Assembly of handle on front panel
8b	2	Countersunk screw, M2.5 x 12, St, nickel-plated	Assembly of handle on front panel
8c	4	Collar screw, M2.5 x 11 and 12.3, St, nickel-plated	Assembly of front panel on horizontal rail
8d	4	Sleeve for form hole 5.9 x 3.3	Collar screw guide
8e	8	Raised countersunk head screw, M3 x 20, St, zinc-plated	Assembly of front and rear panel on extruded side panel/side panel rear angle
8f	16	Countersunk screw, M2.5 x 5.3, St, zinc-plated	Assembly of cover
8g	12	Countersunk screw, M2.5 x 6, St, zinc-plated	Assembly of side cover

Order Information

Description	Qty / PU	Order no.
Assembly kit (items 8a ... 8g)	1	21101-567
Raised countersunk head screw item 8e	100	21101-598
Countersunk screw item 8f	100	21101-597

KAA46416

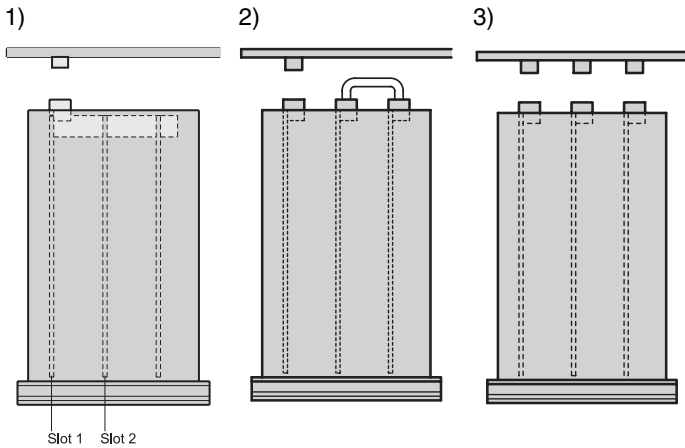
Frame type plug-in units – Components

Printed board assembly on plug-in units

The printed board assembly is dependent on:

- The wiring method of the printed boards in the plug-in unit type 5
- The wiring method of the subrack into which the plug-in unit is assembled

Plug-in unit wiring options



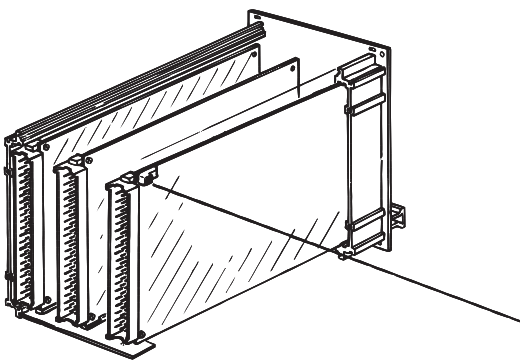
KAA4617

BGA45171

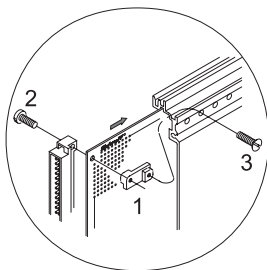
BGA42785

- 1) Slot 1: Male connector assembled on the rear panel of the plug-in unit.
Connector assembled on the subrack.
Assembly of printed board type A or B.
Slot 2 to x: Printed boards assembled on the rear panel of the plug-in unit (type B).
- 2) Slot 1: Male connector assembled on the rear panel of the plug-in unit.
Connector assembled on the subrack.
Assembly of printed board type A or B.
Slot 2 to x: Printed boards assembled on the rear panel of the plug-in unit (type C).
- 3) Slot 1: All male connectors assembled on the plug-in unit.
All connectors assembled on the subrack.
Slot 1: Printed board assembly type A or B
Slot 2 to x: Printed board assembly type B

Printed board assembly on extruded side panel, type A



A4-2669



KAA45902

- Assembly of a printed board on extruded side panel or depth extrusion
- Connection to subrack with a connector

Order Information

Item	Description	Qty / PU	Order no.
1	Printed board assembly, St, 1.5 mm, RAL 7035, die-cast	1	60809-032
2	Cheesehead screw with slot, St, 1.5 mm, RAL 7035, M2.5 × 12, St, nickel-plated	100	21100-148
3	Pozidrive c/sk screw, St, 1.5 mm, RAL 7035, M2.5 × 8, St, nickel-plated	100	21101-568

Delivery may be in standard pack quantity: Please order 10 pieces of Printed board assembly or a multiple. Pricing is per individual item.

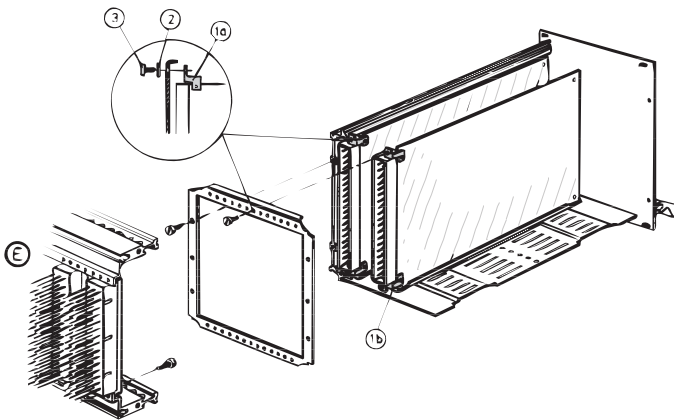


For further information www.schroff.biz/oneclick
oneClick code = Order no.



Frame type plug-in units – Components

Printed board assembly on plug-in unit rear panel, type B



a2-109

- Assembly of printed board with brackets on the plug-in unit type 5 rear panel (items 1a and 1b)
- Connection to subrack with several connectors

Order Information

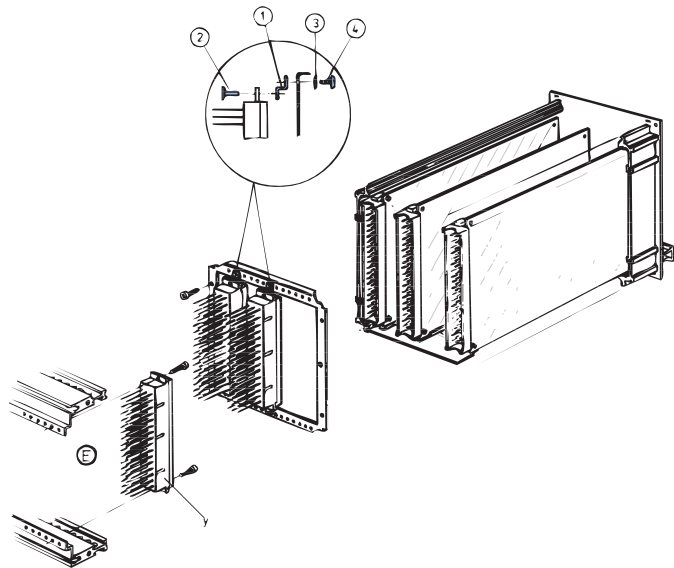
Item	Description	Qty / PU	Order no.
1a		1	30809-412
b1	Bracket bottom, St, 1.5 mm	1	30809-411
2	Shakeproof washer, St, 1.5 mm, 2.6, nickel-plated	100	21100-142
3	Countersunk screw, St, 1.5 mm, M2.5 x 4, St, nickel-plated, with slot	100	21101-218

Delivery may be in standard pack quantity: Please order 10 pieces of brackets or a multiple. Pricing is per individual item.



For further information www.schroff.biz/oneclick
oneClick code = Order no.

Assembly, type C



A1-44

- Assembly of connectors on plug-in unit rear panel (see wiring option 2)
- Connection to subrack with only one connector

Order Information

Item	Description	Qty / PU	Order no.
1	Bracket, St, 1.5 mm	1	30809-211
2	Tubular rivet, St, 1.5 mm, B 2.5 x 0.25 x 5	100	21100-459
2	Shakeproof washer, St, 1.5 mm, A2.6, nickel-plated	100	21100-142
3	Pozidrive pan head screw, St, 1.5 mm, M2.5 x 4, St, nickel-plated	100	21101-218

Delivery may be in standard pack quantity: Please order 10 pieces of brackets or a multiple. Pricing is per individual item.



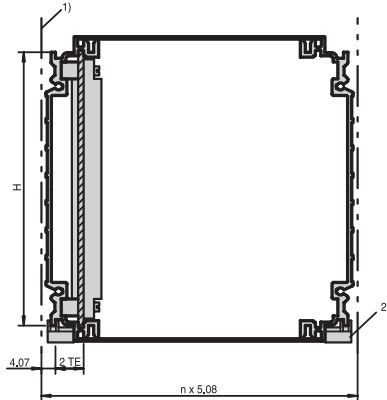
For further information www.schroff.biz/oneclick
oneClick code = Order no.

Frame type plug-in units – Components

Assembly instructions for plug-in units

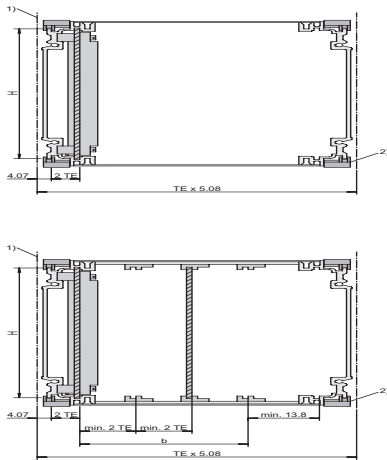
- Assembly grid for guide rails: 1 HP
- Minimum gap between 2 guide rails: 2 HP

1 printed board
(plug-in unit type 4)



KAA44869

Several printed boards
(plug-in unit type 5)



KAA44869

- 1) Division line
- 2) Guide rail assembly turned by 180° to general position

Plug-in unit width		Maximum quantity of printed boards
HP	mm	
10	–	1
12	20.32	3
14	30.48	4
21	66.04	7
28	101.60	11