

Frame type plug-in units

Overview 7.62

Components

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

Plug-in units

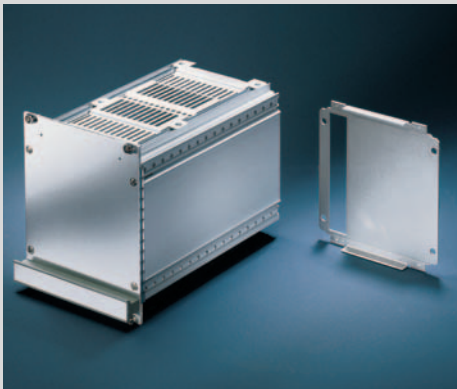
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Shielded plug-in units

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HF plug-in units

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Plug-in units type 4 & 5

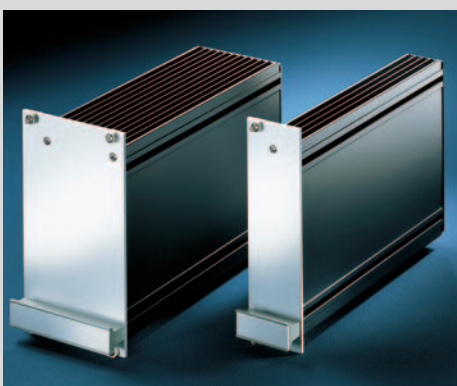
- Available in 3 U and 6 U version
- Suitable for all subracks and cases



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

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

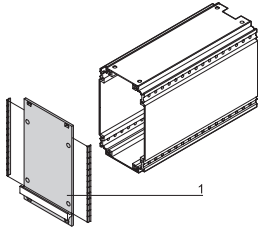
- Guide rails for plug-in unit, see page 7.71
- Printed board assembly, see page 7.74



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

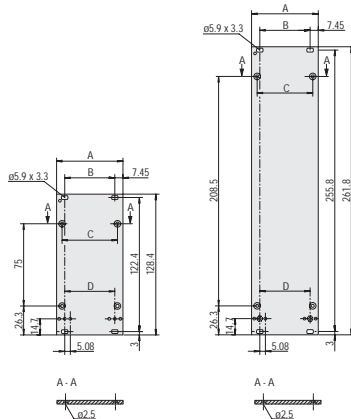


Delivery comprises

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

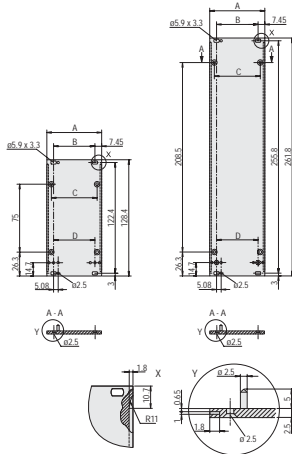
3 U/6 U unshielded

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3 U/6 U with slot for contact strips



04802067

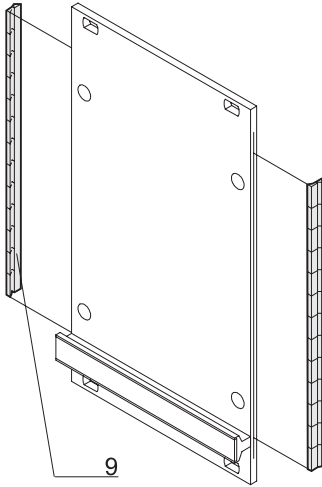
Order Information

Height	Width	A	B	C	D	Unshielded	With slots for EMC stainless steel gasket
U	HP	mm	mm	mm	mm	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

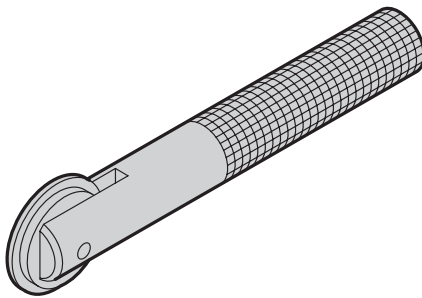
Order Information

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



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- For easier assembly of EMC stainless steel gasket

Order Information

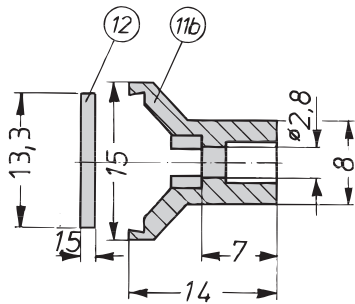
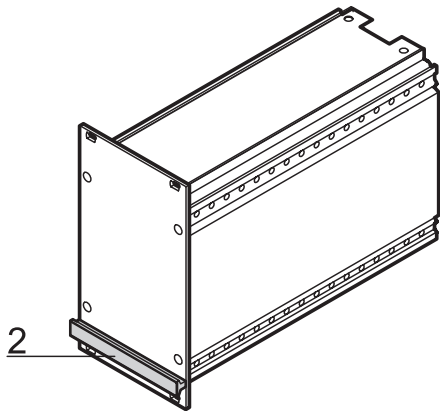
Description	Qty / PU	Order no.
Assembly tool	1	24560-270



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

Frame type plug-in units – Components

Static plastic handle



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A4-328e

- With separate identification plate
- Handles laterally closed

Delivery comprises

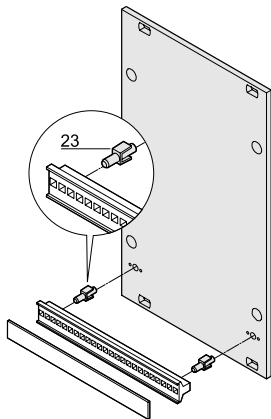
Item	Qty	Description
11b	1	Static plastic handle, PPE UL 94 V-1, grey or black
12	1	Identification plate, Al, 1.5 mm, anodised, cut edges untreated

Order Information

Width HP	Width mm	Grey Order no.	Black 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.

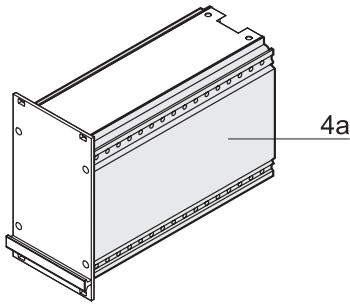
Assembly parts for plastic handle

Order Information

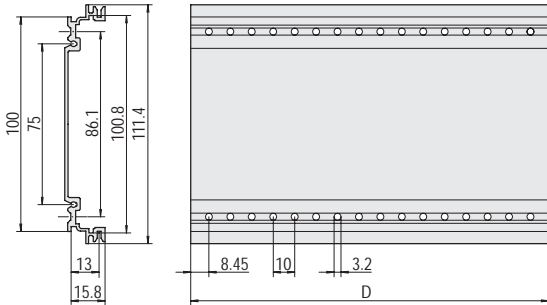
Description		Qty / PU	Order no.
Pozidrive c/sk screw, M2.5	M2.5 × 12, St, nickel-plated	100	21100-507
Square nut	Square nut, M2.5, St, nickel-plated	100	21100-359

Frame type plug-in units – Components

Extruded side panel for plug-in units

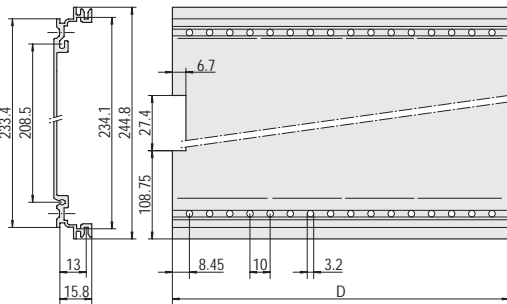


3 U



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.

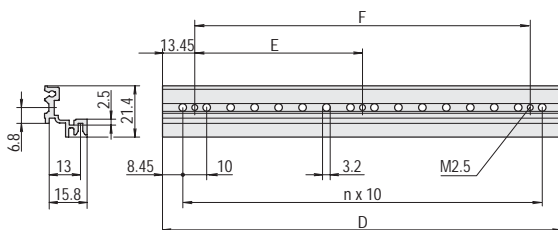
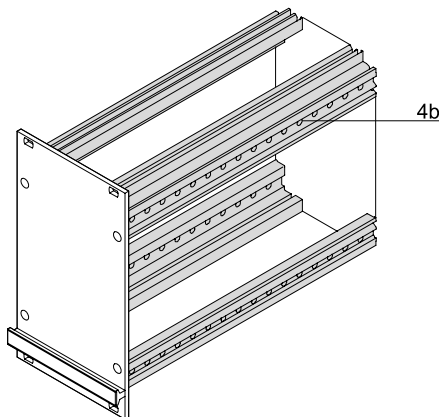
Note

- 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.

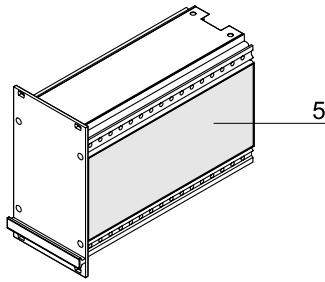


For further information www.schroff.biz/oneclick
oneClick code = Order no.



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

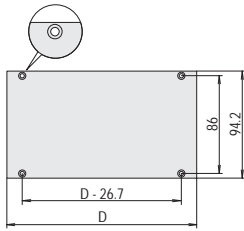
Item	Qty	Description
5	1	Side panel, to screw on, Al, 1 mm

Order Information

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

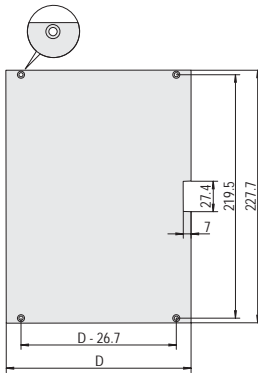
Delivery may be in Standard Pack Quantity: Please order 10 pieces or a multiple. Pricing is per individual item.

3 U



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6 U



KAA44940

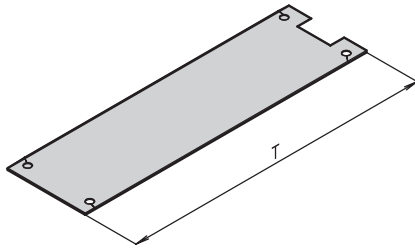


For further information www.schroff.biz/oneclick
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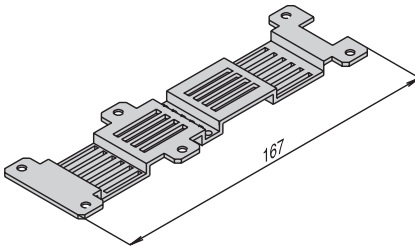
KAA42608

Frame type plug-in units – Components

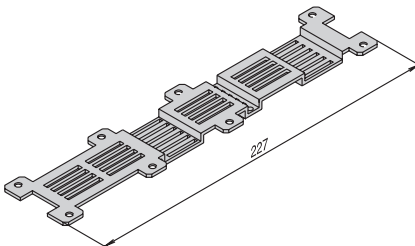
Cover for plug-in units



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

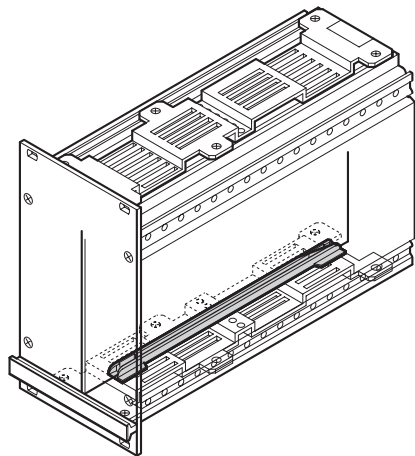
Delivery may be in Standard Pack Quantity: Please order 10 pieces or a multiple. Pricing is per individual item.

HP = Front panel width

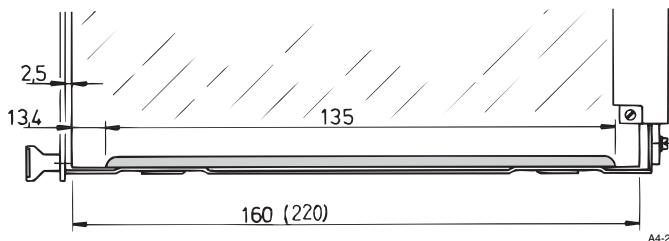


For further information www.schroff.biz/oneclick
oneClick code = Order no.

Guide rails in plug-in units



KAA45903



A4-2687

- 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.

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

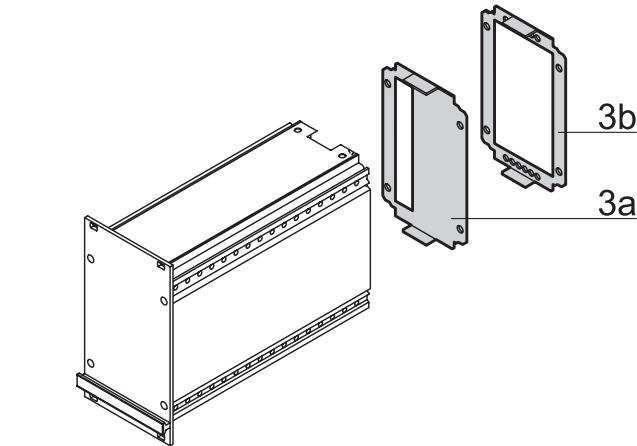
Item	Qty	Description
3a/b	1	Rear panel, Al, 1.5 mm

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

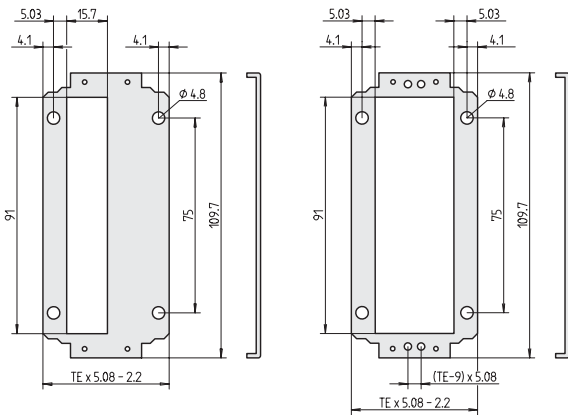
1) Rear panel without cut-out

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



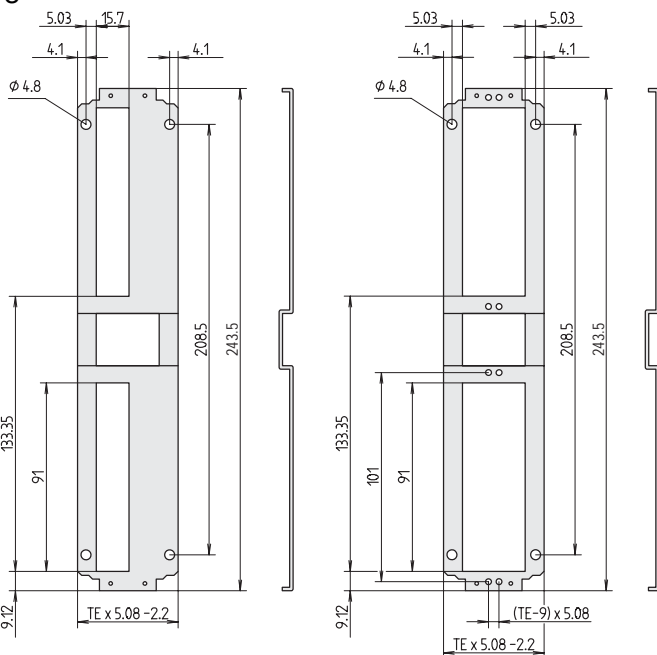
3 U

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6 U

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04802069

TE = HP

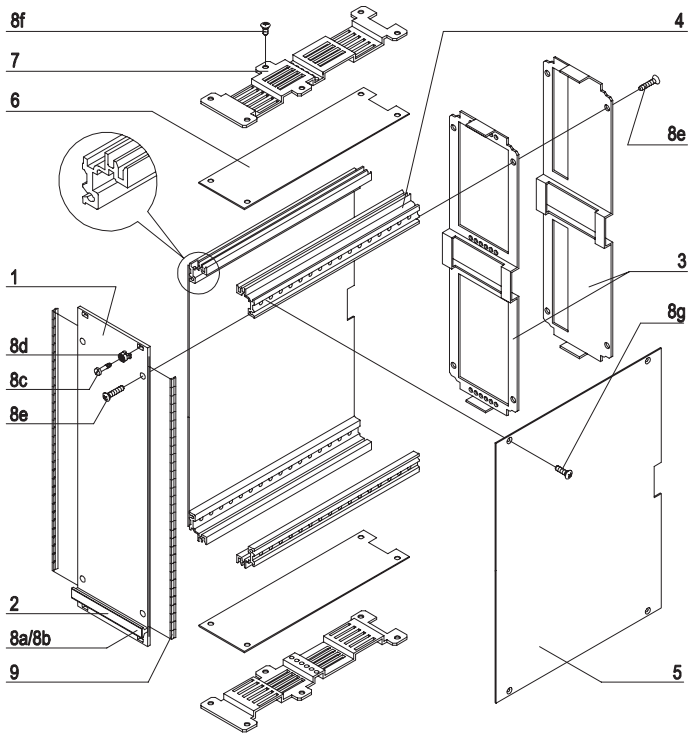


For further information www.schroff.biz/oneclick
oneClick code = Order no.



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

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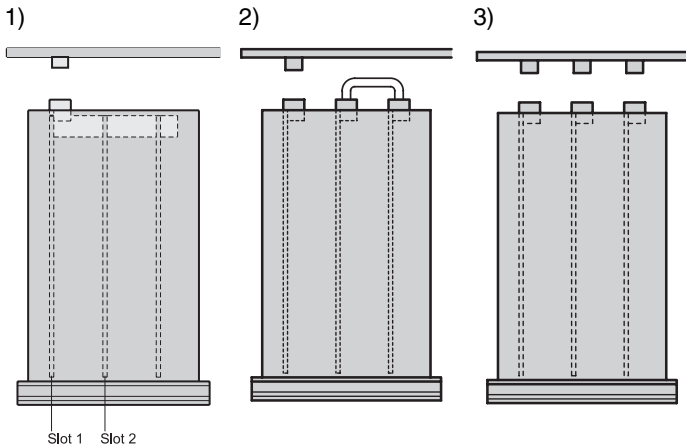
Frame type plug-in units – Components

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



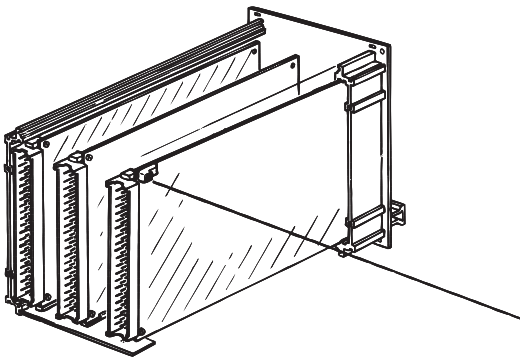
KAA4617

BGA45171

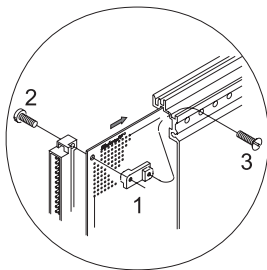
BGA42785

- 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.

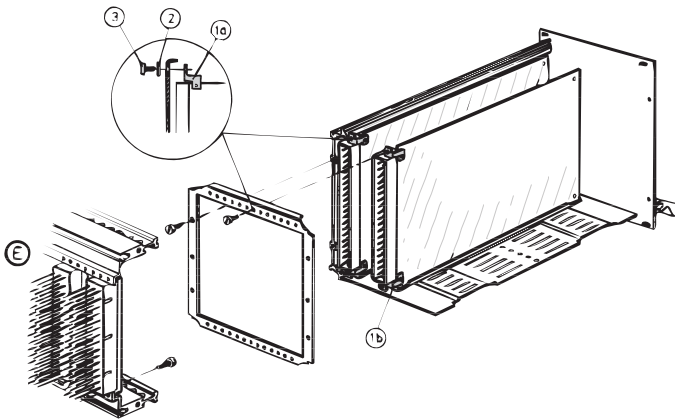


For further information www.schroff.biz/oneclick
oneClick code = Order no.



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

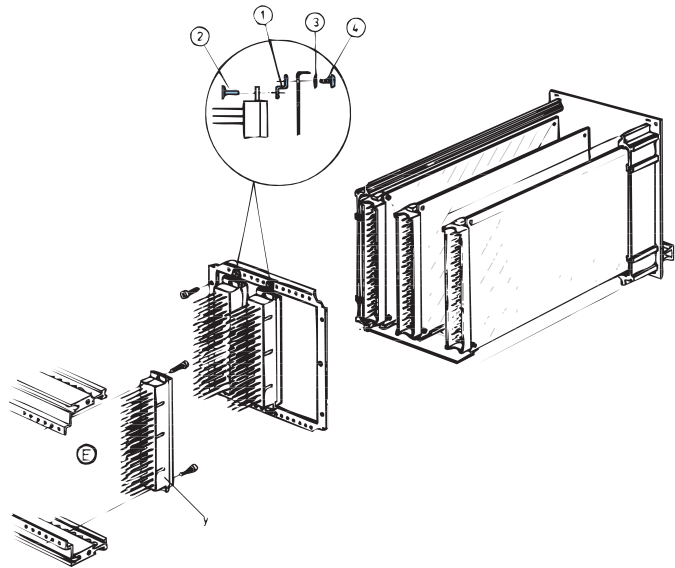
Item	Description	Qty / PU	Order no.
1a		1	30809-412
b1	Bracket bottom, St, 1.5 mm	1	30809-411
2	Shakeproof washer, St, 1.5 mm, 2.6, nickel-plated	100	21100-142
3	Countersunk screw, St, 1.5 mm, M2.5 x 4, St, nickel-plated, with slot	100	21101-218

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.



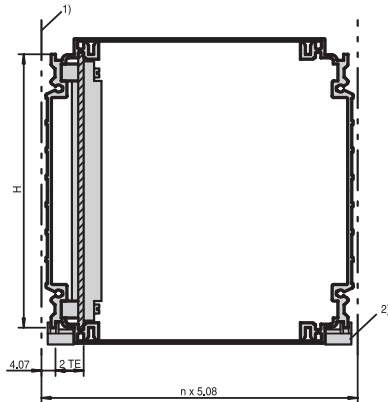
For further information www.schroff.biz/oneclick
oneClick code = Order no.

Frame type plug-in units – Components

Assembly instructions for plug-in units

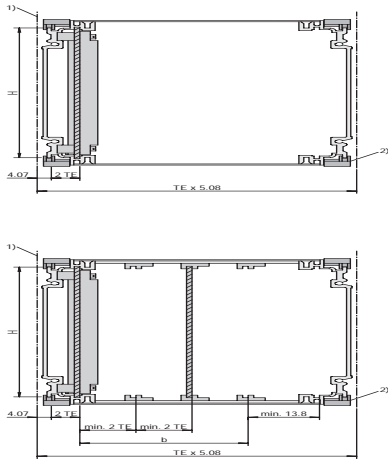
- Assembly grid for guide rails: 1 HP
- Minimum gap between 2 guide rails: 2 HP

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