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«14» ноября 2008 г.

FXP Platform Assembly BOM[1], RatiopacPRO air Case (½+3+½ =4U, 42HP, 375.5 mm)

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[1] Примечание: данная спецификация содержит компоненты для двух вариантов – под ячейки с лицевыми панелями и без них. При заказе необходимо выбрать соответствующие позиции!

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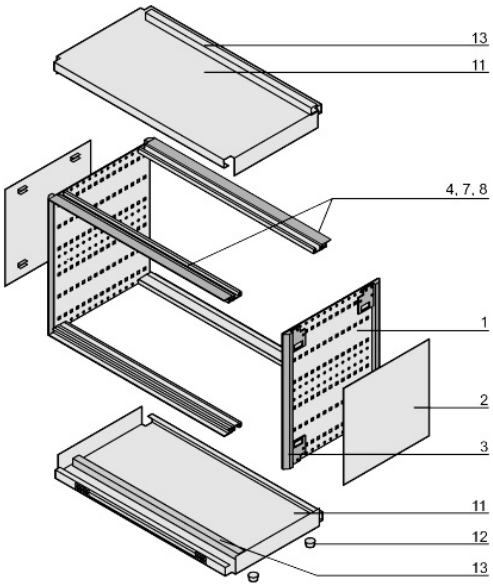
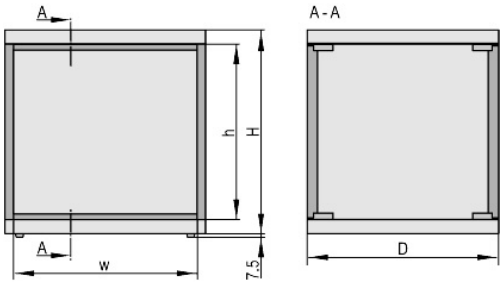
Case

RatiopacPRO air (4U42HP375.5)





Article number: 24571-162

- With integrated ventilation. The case has 2 x 1/2 U free space for ventilation. The exterior, it is 1 U higher than ratiopacPRO. Inside, the same installation conditions apply.
- With front trim
- **Delivery comprises:** in kit form

Item	Qty	Description
1	2	Side panel, Al, clear chromate
2	2	Side panel, Al, visible surface powder-coated, RAL 9006
3	2	Rear trim, diecast zinc, powder-coated, RAL 7016
3a	2	Front trim, diecast zinc, powder-coated, RAL 7016
4	4	Horizontal rail, Al, visible surface, powder-coated, RAL 7016
11	2	Top cover and base plate, Al, internal surface conductive, visible surface powder-coated, RAL 9006, with GND/earthing connection, top cover and base plate with vent slots
12	4	Case foot, PC, black, with anti-slip protection
13	2	Filter mat
14	1	Assembly kit

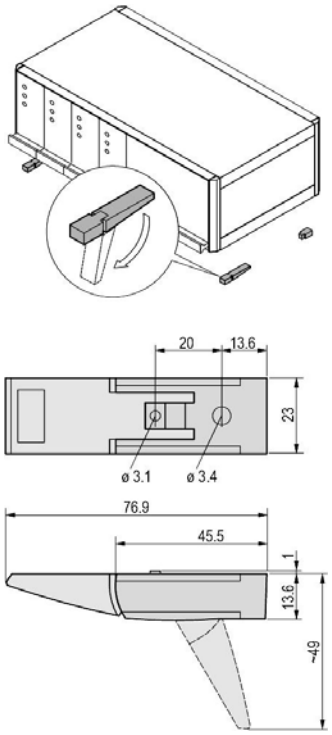
Technical data:

Description	Height	Width W	Width W	Depth D

With front trim	4 U	42 HP	235,74 mm	375,5 mm

Feet

Tip-up feet made of plastic



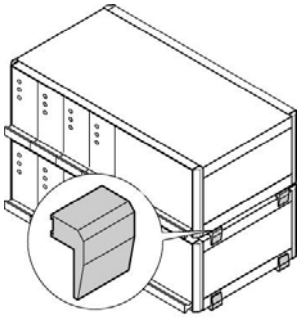
Article number: 20603-001
Load-carrying capacity 25 kg per foot, max. case weight: 50 kg
Delivery comprises: kit

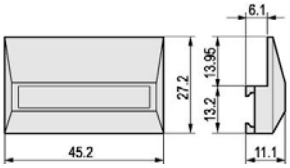
Item	Qty	Description
1	4	Foot, PA UL 94 V-0
2	4	Slide safety, TPE
3	2	Set up, PA UL 94 V-0
4	1	Assermbly kit

Technical data:

Description
Tip-up feet, silver, similar to RAL 9006

Stacking aid





Article number: 20603-004

- A stacking aid can be rearranged into a design element

Delivery comprises: kit

Item	Qty	Description
1	4	Stacking aid, PA UL 94 V-0

Technical data:

Description
Stacking aid, silver, similar to RAL 9006

Accessories:

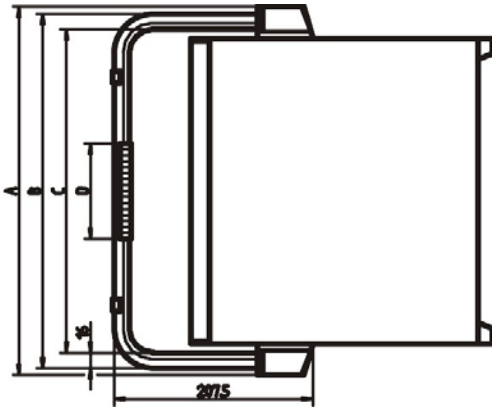
Article number	Description
20603-002	Tip-up foot 2, plastic anthracite, similar to RAL 7016
20603-001	Tip-up foot 2, plastic silver, similar to RAL 9006

Notes:

- Assembly only possible on tip-up foot 2

Tip-up Handle

Tip-up carrying handle



Article number: **24571-320**

- Retrofittable without mechanical reworking of the case
- Adjustable in 30° grid
- Load-carrying capacity 30 kg

Delivery comprises: kit

Item	Qty	Description
1	1	Carrying bar, Al extrusion, powder coated, RAL 9006
2	1	Handle shell, ABS, UL 94 V-0, RAL 7016
3	2	Tip-up protection, ABS, UL 94 V-0, RAL 7016
4	2	Notch device, Al die-cast
5	2	Cover cap, ABS, UL 94 V-0, RAL 7016

Technical data:

For case height	For case width	A	B	C	D
3, 4, 4-air, 5-air U	42 HP	283,4 mm	279,4 mm	247,4 mm	115 mm

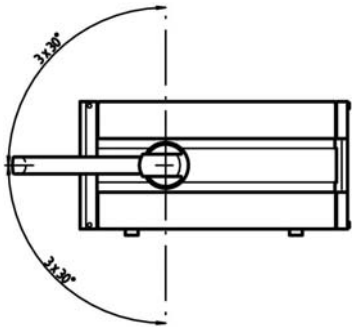
Accessories:

Article number	Description
24571-356	Assembly kit for tip-up carrying handle for case height 3 and 3/4 U, for case depth 495 mm
24571-359	Assembly kit for tip-up carrying handle for case height 4 and 4/5 U, fore case depth 255 mm
24571-361	Assembly kit for tip-up carrying handle for case height 4 and 4/5 U, for case depth 375 mm
24571-352	Assembly kit for tip-up carrying handle for case height 4 and 4/5 U, fore case depth 255 mm
24571-363	Assembly kit for tip-up carrying handle for case height 4 and 4/5 U, fore case depth 495 mm
24571-354	Assembly kit for tip-up carrying handle for case height 3 and 3/4 U, for case depth 375 mm
24571-360	Assembly kit for tip-up carrying handle for case height 4 and 4/5 U, for case depth 315 mm
24571-353	Assembly kit for tip-up carrying handle for case height 3 and 3/4 U, fore case depth 315 mm
24571-362	Assembly kit for tip-up carrying handle for case height 4 and 4/5 U, for case depth 435 mm
24571-355	Assembly kit for tip-up carrying handle for case height 3 and 3/4 U, fore case depth 435 mm

Notes:

- Not in conjunction with front handles for 4, 5-air U
- Please order assembly kit for tip-up carrying handle separately

Assembly kit for tip-up carrying handle



Article number: 24571-354

- Retrofittable without mechanical reworking of the case
- Adjustable in 30° grid
- Load-carrying capacity 30 kg

Delivery comprises: kit

Item	Qty	Description
1	2	Side plate, Al, powder-coated, RAL 9006
2	2	Handle adapter, Al diecast, powder-coated, RAL 7016
3	1	Assembly kit

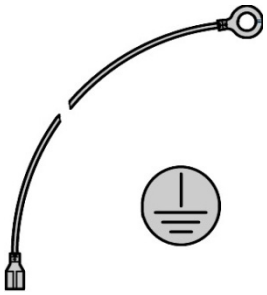
Technical data:

Description	Description
Assembly kit for tip-up carrying handle	for case height 3 and 3/4 U, for case depth 375 mm

Notes:

- Not in conjunction with front handles for 4, 5-air U
- Please order assembly kit for tip-up carrying handle separately

Earthing kit



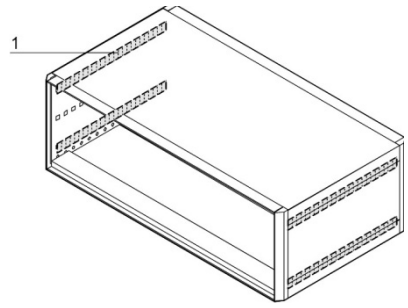
Article number: 24571-380

- Establishes protective earth connections between side panels, base and cover plates and rear panel
- The earth connections comply with:
  - EN 50178
  - EN 60950
  - EN 61010-1
  - EN 61010-1A2

Technical data:

Description
GND/earthing kit, 1 kit, Cu wire 1.5 mm^2, PVC sheeting

EMC gasketing side panel – cover plate



Article number: 24571-340

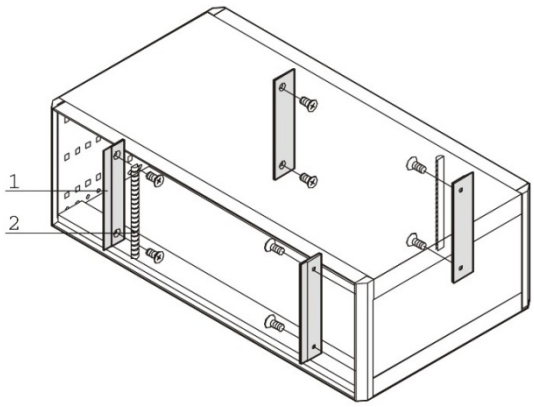
- For horizontal EMC shielding between side panels and cover plates
- **Delivery comprises:** kit

Item	Qty	Description
1	4	Contact strip, stainless steel

Technical data:

Depth
375 mm

EMC gasketing front panel / rear hood - side panel



Article number: 24571-331

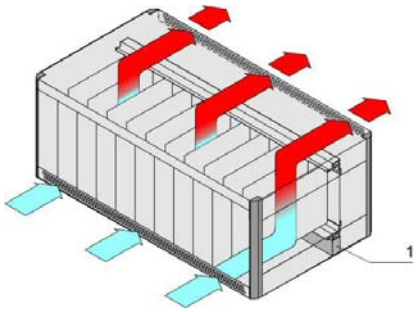
- For vertical EMC shielding between shielded plug-in units and side panel
- Sufficient for one case
- **Delivery comprises:** kit

Item	Qty	Description
1	4	EMC contact strip, Al extrusion
2	2	EMC profile seal, core: foam, sleeve: textile cladding with CuNi coating
3	1	Assembly kit

Technical data:

Height
3 U

Air baffle



Article number: 20833-351

- The air baffle (item 1) closes the space (1/2 U) between rear horizontal rail and base cover

Delivery comprises: in kit form

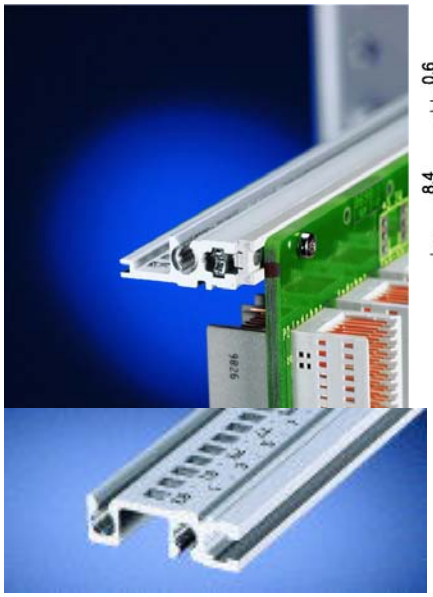
Item	Qty	Description
1	1	Air baffle: PE foam, self-adhesive, temperature range: –20 °C ... +120 °C

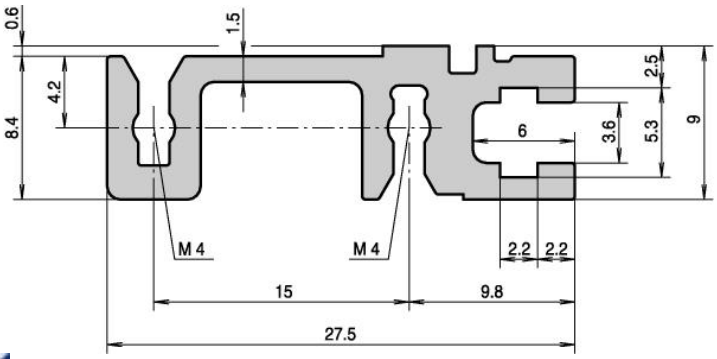
Technical data:

Width	Length
42 HP	218,4 mm

Horizontal Rails

Type H-ST stabile, standard (42HP for Backplane)





Article number: 34560-542 (x2)
Standard pack quantity: 10

- Standard for high mechanical load (H-ST)
- For indirect backplane assembly with insulation strips
- Installation top and at bottom

Delivery comprises:

Item	Qty	Description
1	1	Horizontal rail, AI-Profile, anodised

Technical data:

Description	Usable length	Length
Type H-ST heavy duty, standard	42 HP	218,44 mm

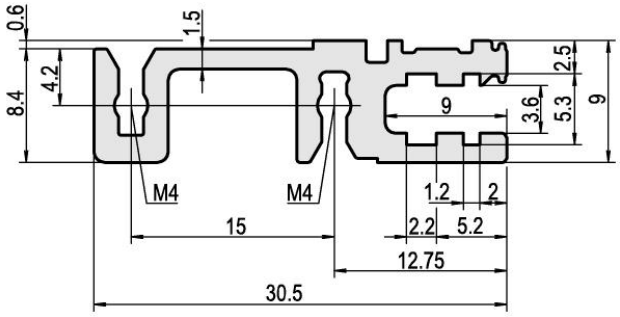
Accessories:

Article number	Description
24560-155	Torx pan head screw M4 x 10, St, zinc-plated, 100 pieces
24571-371	Torx pan head screws M4 × 14, St, zinc-plated, PU 100 pieces
24560-130	Screws Zinc-plated finish
24562-542	EMC gasketing kit between horizontal rail and horizontal rail

Notes:

- Delivery is in standard pack multiples. Pricing is per individual item

Type H-VT stable, deepened installation (42HP Deepened Front for Pi-Us w/o front panels)



Article number: 34560-742 (x2)
Standard pack quantity: 10

- With additional 3 mm for high mechanical load (H-RC)
- For direct backplane assembly
- Installation top and at bottom

Delivery comprises:

Item	Qty	Description
1	1	Horizontal rail, aluminium extrusion, anodised, conductive contact surfaces

Technical data:

Description	Usable length	Length
Type H-RC heavy duty, +3 mm	42 HP	218,44 mm

Accessories:

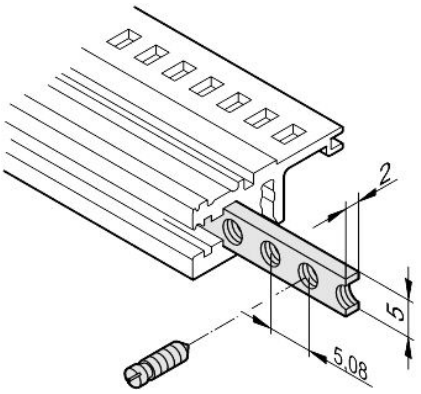
Article number	Description
24560-155	Torx pan head screw M4 x 10, St, zinc-plated, 100 pieces
24571-371	Torx pan head screws

	M4 × 14, St, zinc-plated, PU 100 pieces
24560-130	Screws Zinc-plated finish
24562-542	EMC gasketing kit between horizontal rail and horizontal rail

Notes:

- Delivery is in standard pack multiples. Pricing is per individual item

Threaded strip (42HP)



Article number: 34561-342 (x6)
Standard pack quantity: 10

- Can be used for all horizontal rails
- The collar screws for mounting front panels must be 12.3 mm long
- **Delivery comprises:**

Item	Qty	Description
1	1	Threaded inserts, zinc-plated steel

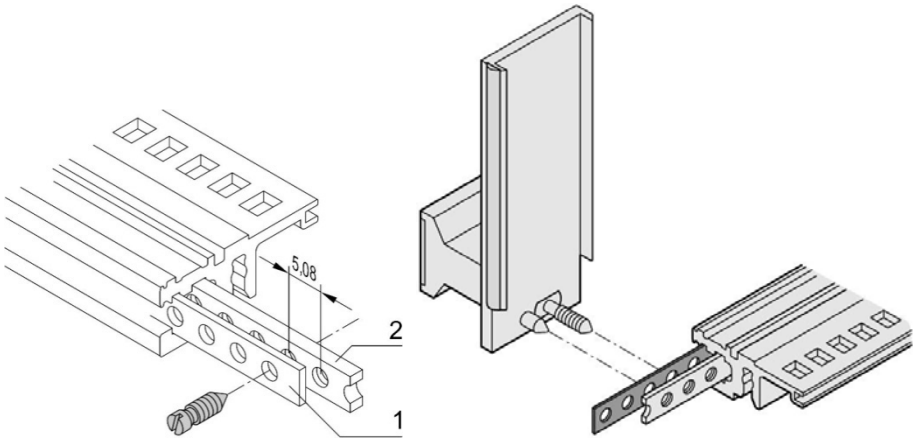
Technical data:

Description	Dimensions	Usable length	Length	Qty/PU
Threaded strip	2,5	42 HP	217,94 mm	1

Accessories:

Article number	Description
21100-276	Grub screw M2,5 × 8, PU 100 pieces, finish nickel-plated

Perforated strip (42HP)



Article number: 30845-211 (x4)
Standard pack quantity: 10

- For centring the shielded plug-in units

Delivery comprises:

Item	Qty	Description
1	1	Perforated strip, aluminium, 1 mm

Technical data:

Usable length	Length
42 HP	218,24 mm

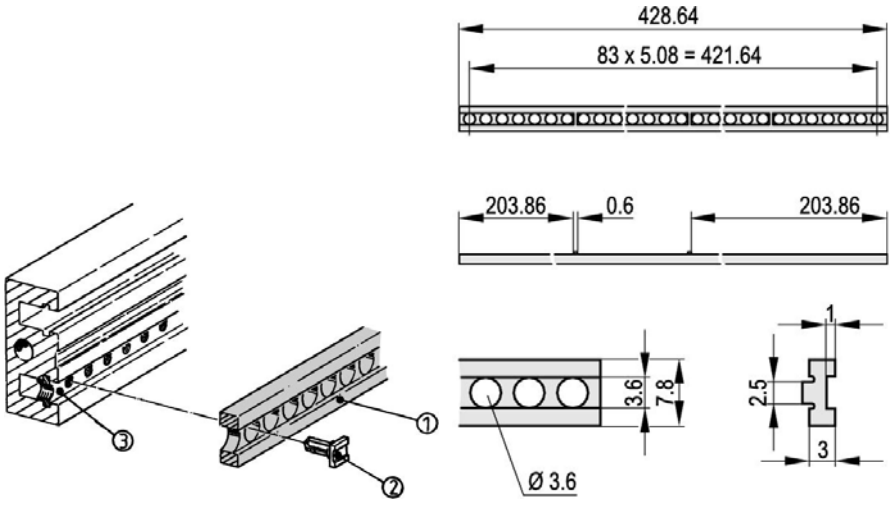
Accessories:

Article number	Description
21101-359	Grub screw M2,5 × 9, PU 100 pieces

Notes:

- Only usable with double-T threaded insert

Insulation strip (42HP)



Article number: 24560-842 (x2)

- For insulated mounting of backplanes or mounting of metal plates as holders for connectors
- Setting up standardised mounting depth for plug-in units in the subrack
- **Delivery comprises:**

Item	Qty	Description
1	1	Insulation strip, PBT UL 94 V-O, grey

Technical data:

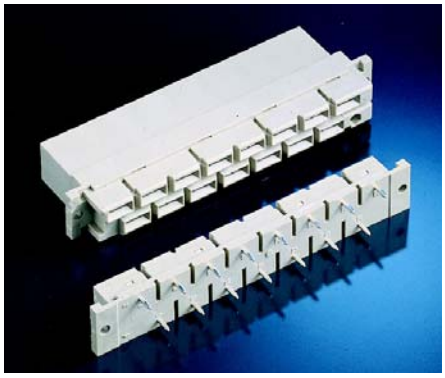
Usable length	Length	Qty/PU
42 HP	210,4 mm	10

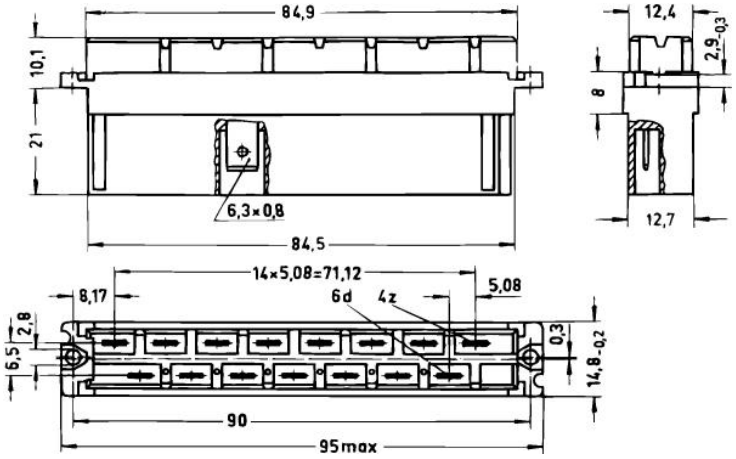
Accessories:

Article number	Description
21100-824	Clips for securing the insulation strip Item 2, PPO UL 94 V-0, PU 100 pieces

Parts for Power Supply Section

Connector H 15 F





Article number: 69001-733

- Mating connector (female) for wiring of inputs and outputs (6.3 mm FASTON)

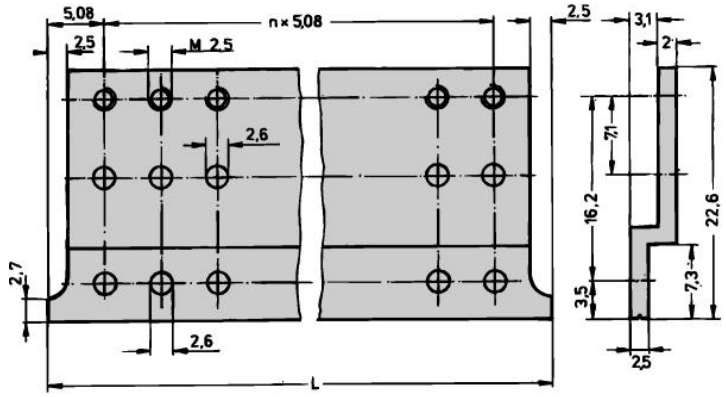
Technical data:

Item	Description	Qty/PU
1	Connector H 15 F, wiring with FASTON connector 6.3 x 0.8 mm	1

Notes:

- Female connector EN 60603 (DIN 41612) H 15F for 6.3 mm FASTON
- compatible with H15M connectors on e.g. 19-inch plug-in equipment

Z-rail, 4 HP



Article number: 30822-166 (x2)

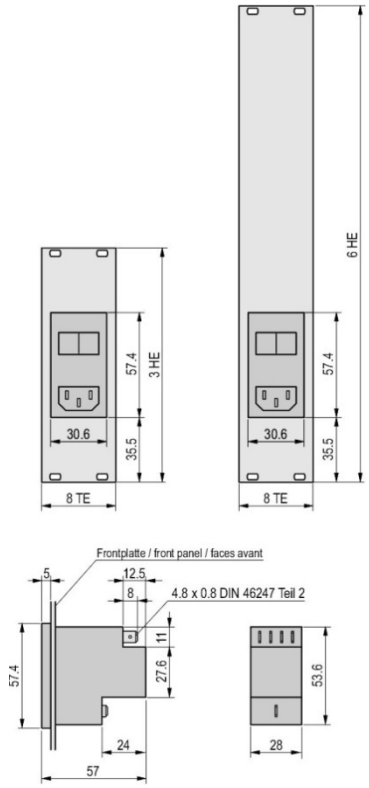
- For fixing the mating connector H 15 F onto the rear horizontal rail (item 6)
- Serves to create the standard mounting depth of the power supplies

Technical data:

Description	Qty/PU
Z-rail, 4 HP (20.32 mm)	1

Notes: Two Z-rails are required per connector

Mains/line voltage input module with U-front panel



Article number: 24579-058

- Shielded front panel (U front panel)
- Voltage 110 VAC ... 250 VAC, 50 Hz ... 60 Hz
- Max. current 8.8 A

Delivery comprises:

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

Technical data:

Height H	Width B
3 U	8 HP

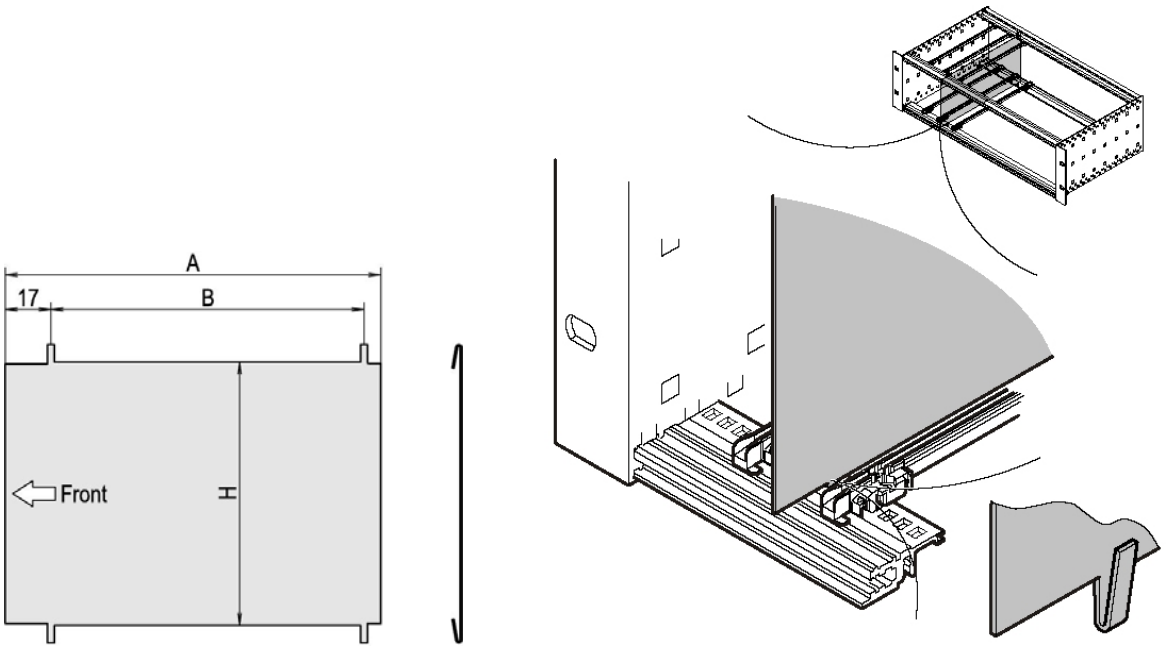
Accessories:

Article number	Description
21101-853	Textile EMC gasket 3 U, PU 10 pieces
21101-854	EMC textile gasket 3 U, PU 100 pieces

Notes:

- EMC profile gaskets are required for shielding the front panel

Divider plate (3U220)



Article number: 34562-762

- Assembly by clipping into horizontal rails
- Space requirement on component side: 2.0 mm
- Assembly in accordance with gasketing concept

Delivery comprises:

Item	Qty	Description
1	1	Divider plate, 1 mm stainless steel

Technical data:

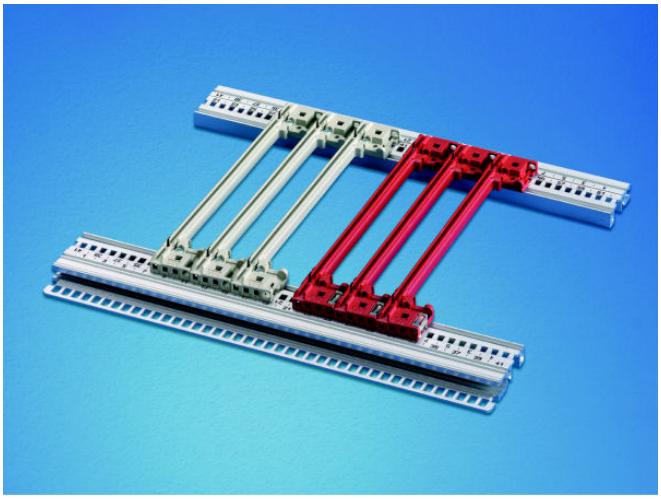
Height	Depth	A	B	H
3 U	220 mm	218,3 mm	195 mm	113,55 mm

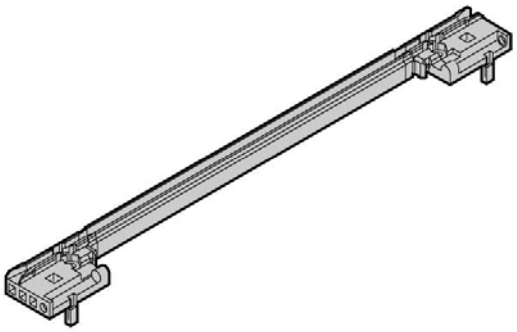
Notes:

- Subsequent installation of the divider plate in a mounted subrack requires removal of the horizontal rails beforehand

Guide Rails

Guide rails for CompactPCI, VME64x with coding according to 1101.10 (220mm)





Article number: 64560-092 (x18)
Standard pack quantity: 50

- With keying/coding block
- The ESD clip ensures a conductive contact between the printed board and horizontal rail, both on the solder side and on the component side
- The ESD clip for alignment pins (complying with IEEE) can be mounted in the guide rails with keying/coding and in the keying/coding block. It ensures a conductive contact between the alignment pin of the insertion/extraction handle (IES or IET handle) and the horizontal rail
- With Qty: 1, standard pack quantity 50 pieces

Technical data:

Description	Qty/PU	Material	Board length	Groove width	Colour
In accordance with IEEE 1101.10	1	PBT, UL 94 V-0	220 mm	2 mm	grey

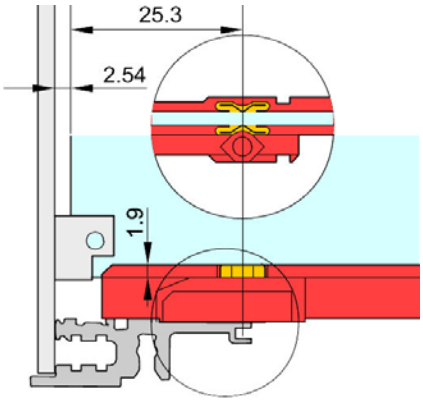
Accessories:

Article number	Description
20817-501	Coding peg PC, UL 94 V-0, RAL 7035, PU 100 pieces
24560-141	Pan head screw with Torx M2.5 × 9.3, zinc-plated, PU 100 pieces
24560-256	ESD clip for alignment pin of the CompactPCI/ VME64x handles PU 50 pieces
24560-255	ESD clip for guide rail PU 50 pieces

Notes:

- Delivery is in standard pack multiples. Pricing is per individual item

ESD clip for guide rails



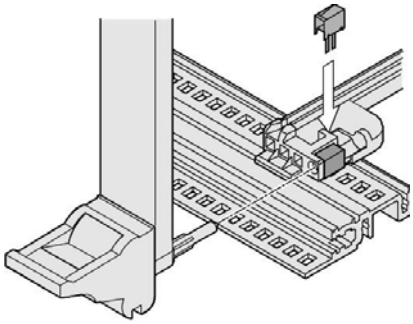
Article number: 24560-255

- with Keying/coding block
- The ESD clip ensures a conductive contact between the printed board and horizontal rail, both on the solder side and on the component side
- The ESD clip for alignment pins (complying with IEEE) can be mounted in the guide rails with keying/coding and in the keying/coding block. It ensures a conductive contact between the alignment pin of the insertion/extraction handle (IEL-, or IET-handle) and the horizontal rail

Technical data:

Description
ESD clip for guide rail

ESD clip for alignment pin of IEEE handles



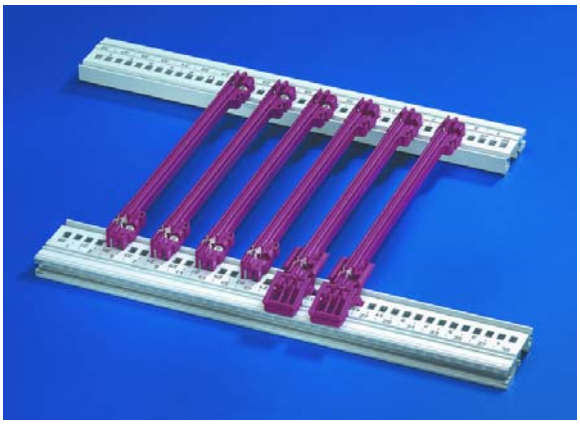
Article number: 24560-256

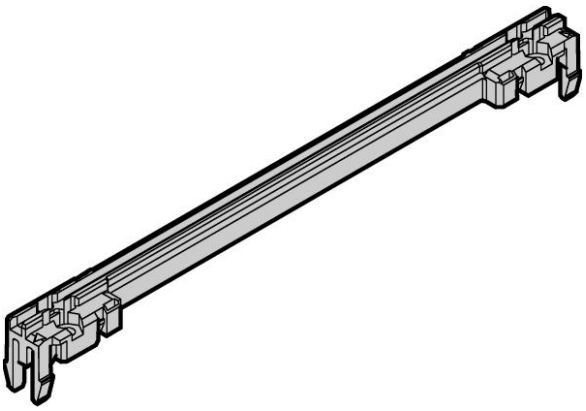
- The ESD clip ensures a conductive contact between the printed board and horizontal rail, both on the solder side and on the component side
- The ESD clip for alignment pins (complying with IEEE) can be mounted in the guide rails with keying/coding and in the keying/coding block. It ensures a conductive contact between the alignment pin of the insertion/extraction handle (IEL-, or IET-handle) and the horizontal rail
- Material: Spring steel tin-plated

Technical data:

Description	Description
ESD clip for alignment pin of the CompactPCI/ VME64x handles	PU 50 pieces

Guide rails for boards without front panels "Accessories" (220mm)





Article number: 24560-374 (x18)

- To mount board retainers and coding blocks

Delivery comprises:

Item	Qty	Description
1	10	Guide rail, one-piece, groove width 2.0 mm, 220 mm deep, material PBT, UL 94 V-0, red

Technical data:

Board length	Groove width	Material	Colour	Qty/PU	Description
220 mm	2 mm	PBT, UL 94 V-0	red	10	"Accessories"

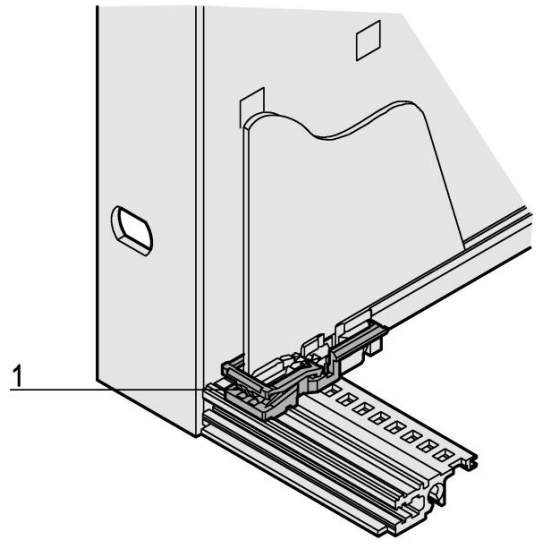
Accessories:

Article number	Description
34579-234	Keying/coding block for horizontal rail accessories at bottom, red, 50 pieces
24560-377	Printed board retainer PBT, UL 94 V-0, red, PU 10 pieces
20817-501	Coding peg PC, UL 94 V-0, RAL 7035, PU 100 pieces
60817-228	Label strips 1 sheet (438 units)
34579-233	Keying/coding block for horizontal rail accessories top, grey, 50 pieces
24560-255	ESD clip for guide rail PU 50 pieces
34579-235	Keying/coding block for horizontal rail accessories at bottom, grey, 50 pieces
24560-378	Printed circuit board handle PBT, UL 94 V-0, red, PU 10 pieces
34579-232	Keying/coding block for horizontal rail accessories top, red, 50 pieces
24560-141	Pan head screw with Torx M2.5 × 9.3, zinc-plated, PU 100 pieces

Notes:

- Other guide rails, see chapter "europacPRO accessories"

Printed board locking, red (for bards w/o front panel)



Article number: 24560-377 (x18)

- For fixing the printed circuit board in the subrack
- Can also be used without a printed circuit board handle
- Application to upper and lower horizontal rail possible
- Can also be used at pin position "1"

Technical data:

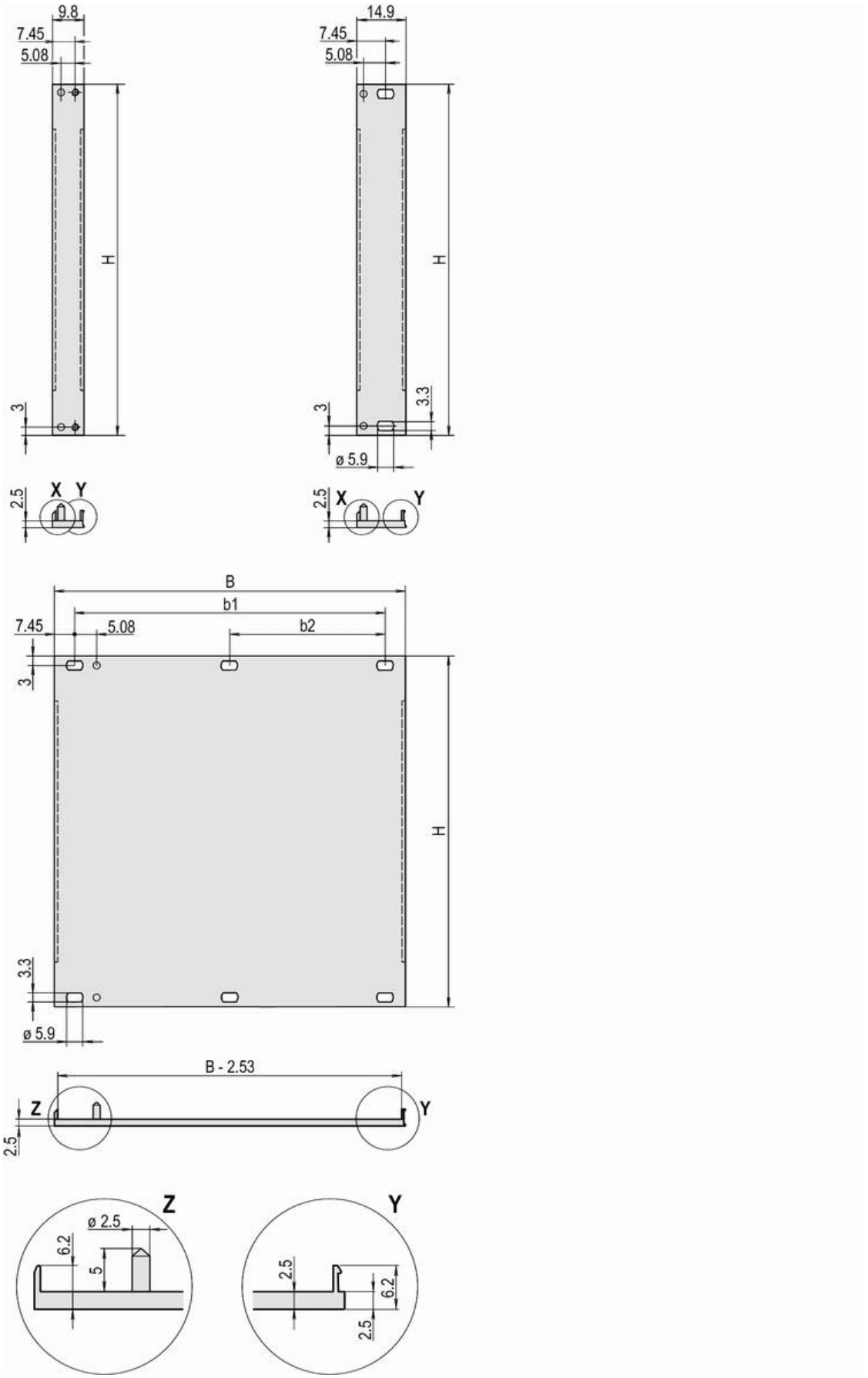
Description	Description
Printed board retainer	PBT, UL 94 V-0, red, PU 10 pieces

Notes:

- Only together with guide rail for accessories usable
- Minimum distance between the guide rails by the use of printed circuit board retainer 3 HP
- Not usable for case propac, compac, inpac

Front Panels

Front panel shielded, U profile



Front Panel (2HP)

Article number: 30849-001 (x2)
Standard pack quantity: 5

- High stability (U profile)
- Front panel, U profile, Al, front anodised, rear conductive, 2 pressed-in alignment pins, stainless steel
- Differences in finish between 2 ... 12 HP and 14 ... 84 HP

Technical data:

Height	Height	Width	B	b1	b2	Alignment pin
3 U	128,4 mm	2 HP	9,8 mm			x

Accessories:

Article number	Description
21101-853	Textile EMC gasket 3 U, PU 10 pieces
21101-854	EMC textile gasket 3 U, PU 100 pieces

Notes:

- Standard pack quantity:
  2 to 28 HP: 5 pieces,
  42 to 84 HP: 1 piece, -
  Delivery is exclusively in standard pack quantity
- Please order EMC profile gasketing and assembly kit separately

Front Panel (4HP)

Article number: 30848-354 (x4/7)

Technical data:

Height	Height	Width	B	b1	b2	Alignment pin
3 U	128,4 mm	4 HP	20 mm			x

Front Panel (12HP)

Article number: 30848-358 (x1/0)
Standard pack quantity: 5
Technical data:

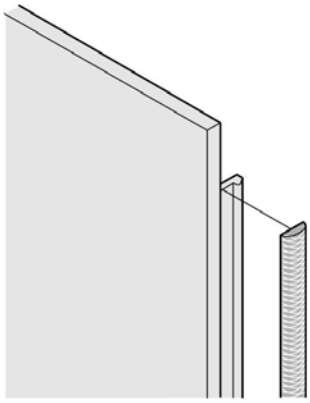
Height	Height	Width	B	b1	b2	Alignment pin
3 U	128,4 mm	12 HP	60,6 mm	45,7 mm		x

Front Panel (28HP)

Article number: 20848-027 (x1)
Technical data:

Height	Height	Width	B	b1	b2	Alignment pin
3 U	128,4 mm	28 HP	141,9 mm	127 mm		x

The EMC textile gasket



Article number: 21101-853

- The EMC textile gasket is stuck onto the front panels on the right hand side of the profile

Delivery comprises: kit

Item	Qty	Description
1	10	EMC stainless steel gasketing, core: foam, sleeve: textile cladding with CuNi coating, temperature range -40 ... 70 °C

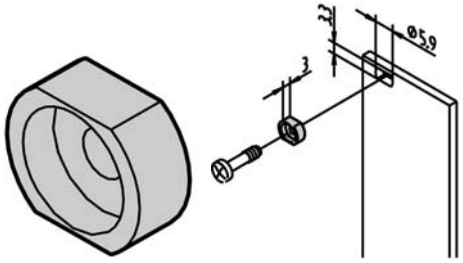
Technical data:

Height	Height	Qty/PU
3 U	97 mm	10

Notes:

- To shield the front panels EMC textile gaskets are necessary
- Operating temperature: -40 °C to +70 °C

Metal Sleeve



Article number: 21100-660

- Metal sleeves allow low ohmic contact between the collar screw and anodised partial front panel

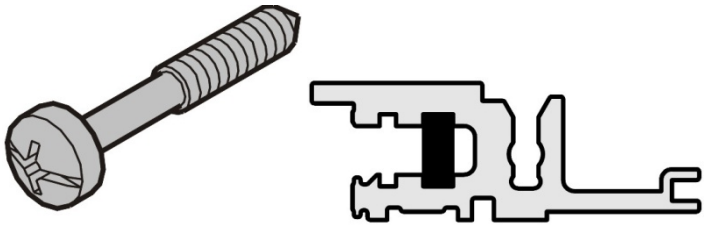
Technical data:

Item	Description	Qty/PU
1	Metal sleeve, brass, nickel-plated	100

Notes:

- Metal sleeves must be pressed into the front panels
- Not for partial width front panel 2 HP

Collar screw M2.5x12.3 (for Panels)



Article number: 21101-101
Standard pack quantity: 100

- For assembly of partial width front panels
- For use of threaded inserts
- For europacPRO and ratiopacPRO
- **Delivery comprises:**

Quantity required for IEEE-Plug-in units			
3 U		6 U	
< 8 HP	≥ 8 HP	< 8 HP	≥ 8 HP
1	3	–	2

Quantity required for plug-in units type 2 with extraction handle			
3 U		6 U	
< 8 HP	≥ 8 HP	< 8 HP	≥ 8 HP
2	4	–	–

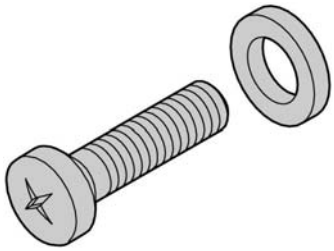
Quantity required for plug-in units type 2 with fixed handle							
3 U				6 U			
unshielded		shielded		unshielded		shielded	
< 8 HP	≥ 8 HP	< 8 HP	≥ 8 HP	< 8 HP	≥ 8 HP	< 8 HP	≥ 8 HP
–	–	2	4	–	–	2	4

Technical data:

Description	Dimension	Material	Qty/PU
Collar screw with pozidrive/slot	M2,5 × 12,3	St, nickel-plated	100

Assembly Parts

Screw with retention washer M2.5x12 (for Backplanes)



Article number: 21100-777

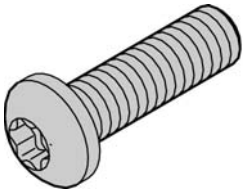
- For backplane assembly

Technical data:

Description	Material	Dimension	Qty/PU

Screw + screw with lock washer	St, nickel-plated	M2,5 × 12	100

Pan head screws M2.5x7 (for Z-rails)



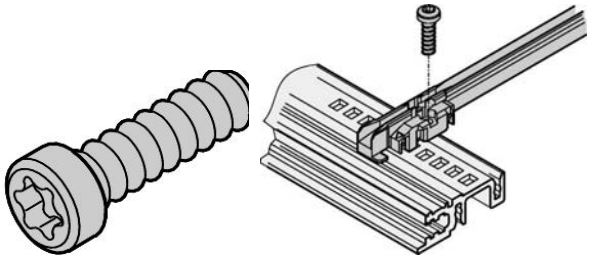
Article number: 24560-147

- For Z-rails and connector mounting

Technical data:

Description	Material	Dimension	Qty/PU
Torx pan head screw	St, nickel-plated	M2,5 × 7	100

Pan head screw, self-forming, Torx (for Guide rails)



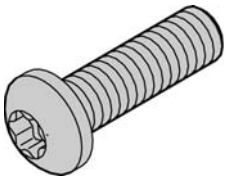
Article number: 24560-141

- For plastic-guide rail on horizontal rail
- For panel-trim on horizontal rail
- Pentaform 2.5 x 9.3

Technical data:

Description	Material	Dimension	Qty/PU
Pan head screw with Torx	St, zinc-plated	M2,5 × 9,3	100

Pan head screws M4x14 (for Horizontal Rails)



Article number: 24560-130

- For horizontal rail on side panel, with earthing function

Technical data:

Description	Material	Dimension	Qty/PU
Screws	St, zinc-plated	M4 × 14	100

Руководитель: Поляков А.Е.

Подпись: _____ Дата: 14.11.2008 г.