

# Individual configuration 245

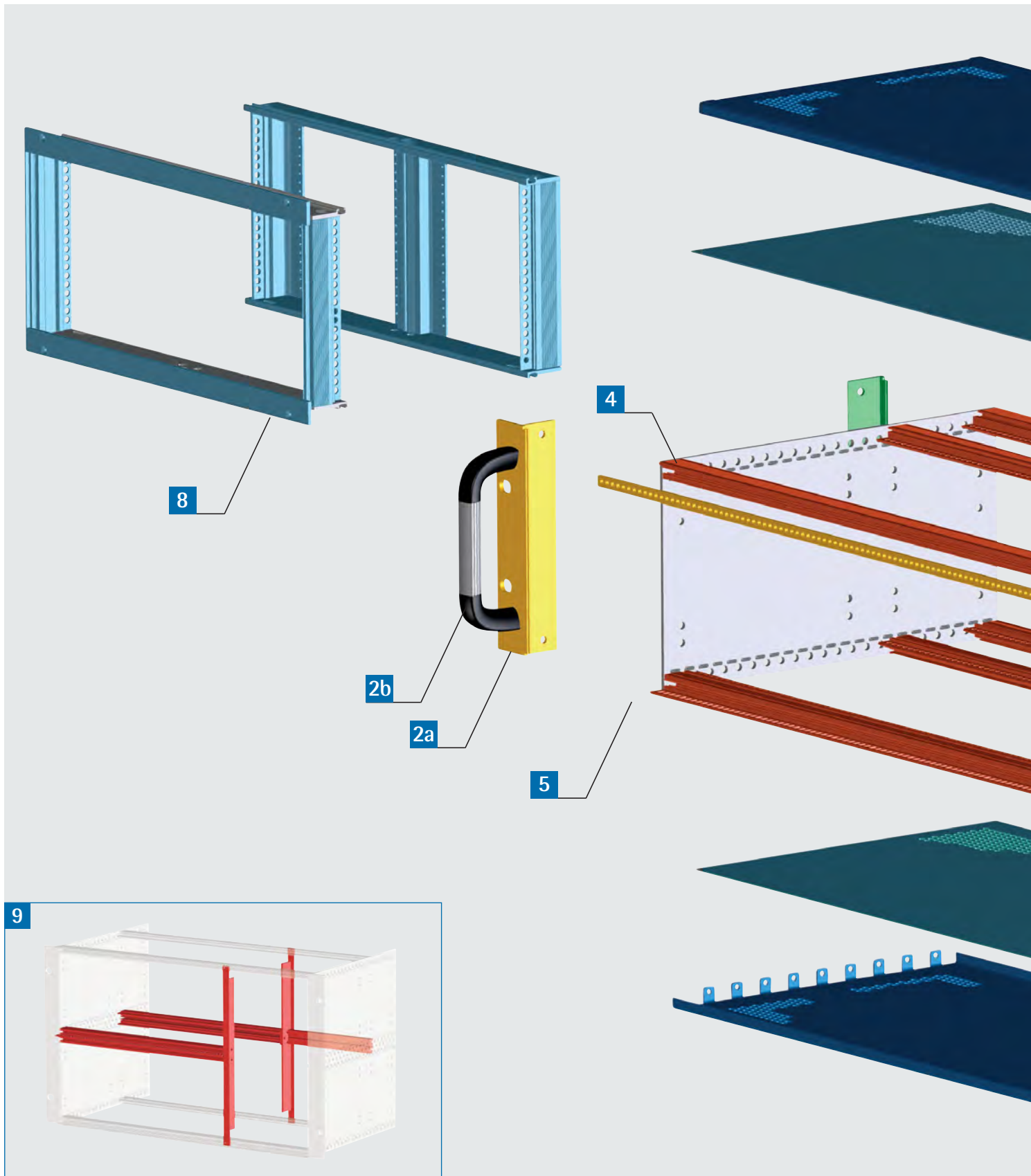


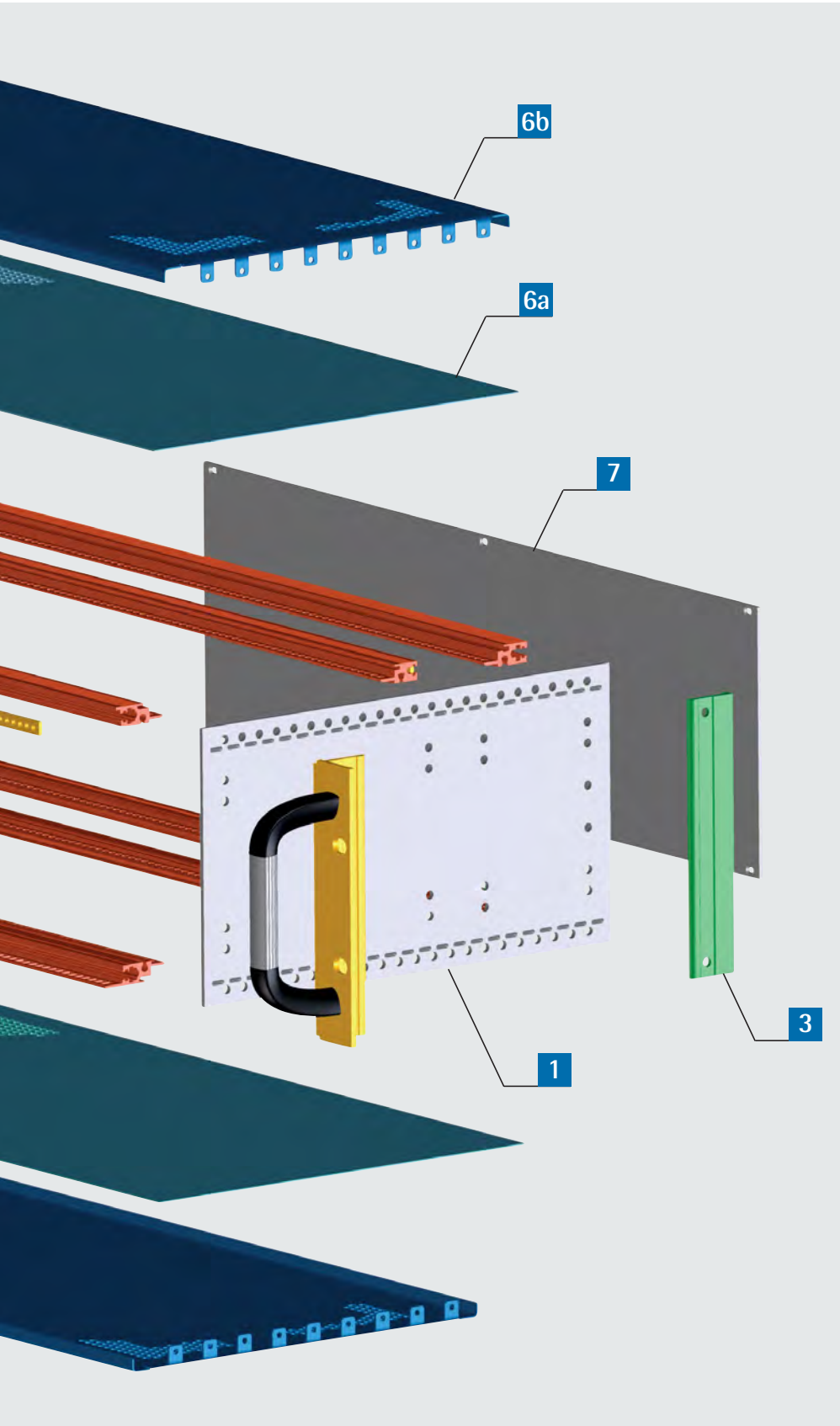
... the perfect shell for valuable electronics



## 245 • 19" subrack, individual configuration

Individual configuration: Design your customised subrack 245.





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Other dimensions and electromechanical components on request!



Customised front panels including print, foils, input systems or keyboards –

please ask for our front panel express!



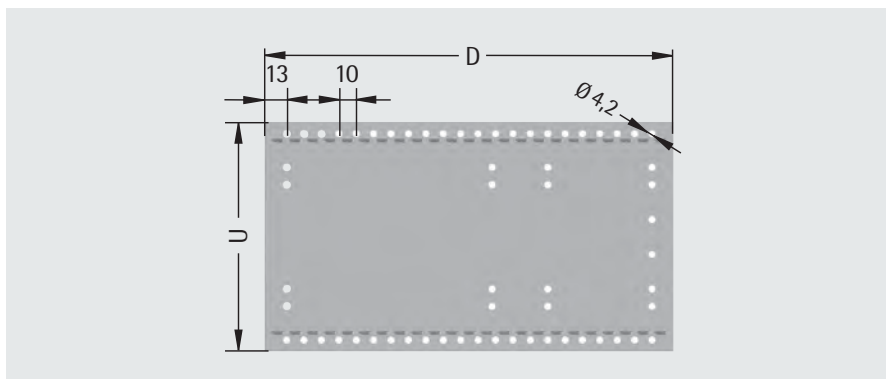


## 245 • 19" subrack, individual configuration

### 1a Side panel, not ventilated

- side panels can be expanded by use of the expansion kit (see page 122)

**Material:**  
aluminium 2,5 mm



U	H mm	D mm	Order no.
3	132,5	176	245-301-50
		236	245-302-50
		296	245-303-50
		336	245-309-53
		356	245-304-50
4 (3+2 x 1/2)	177	296	245-403-50
		356	245-404-50
4	177	296	245-943-50
6	266	176	245-601-50
		236	245-602-50
		296	245-603-50
		336	245-609-53
		356	245-604-50
7 (6+2x 1/2)	310,5	296	245-703-50
		356	245-704-50

Other dimensions on request!

### 1b Side panel, perforated

- prepared with ventilation holes and studs for the mounting of fans
- side panels can be expanded by use of the expansion kit (see page 122)

**Material:** aluminium 2,5 mm

#### Matching fan 2 U

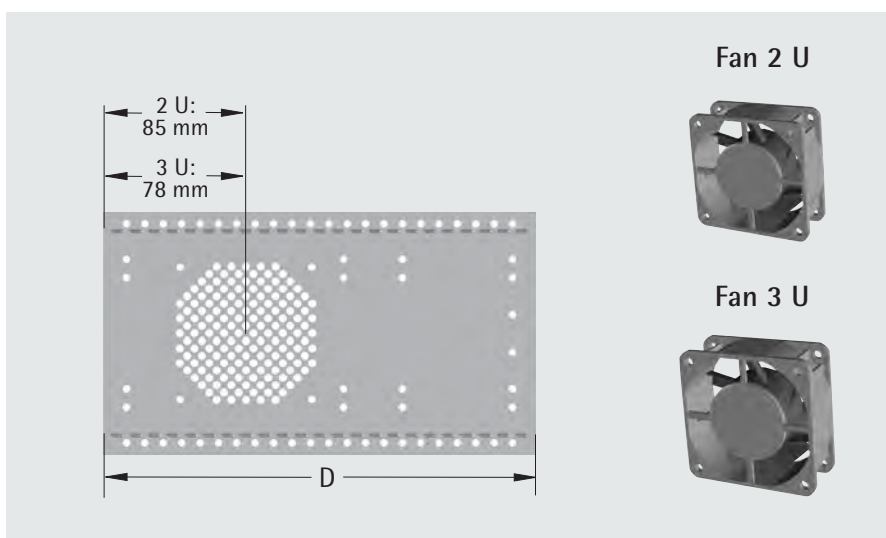
- dimensions: 60 x 60 x 25 mm
- voltage: 12 V
- fan output: 40 m<sup>3</sup>/h

Order no.
230-825

#### Matching fan 3 U

- dimensions: 80 x 80 x 25 mm
- voltage: 12 V
- fan output: 58 m<sup>3</sup>/h

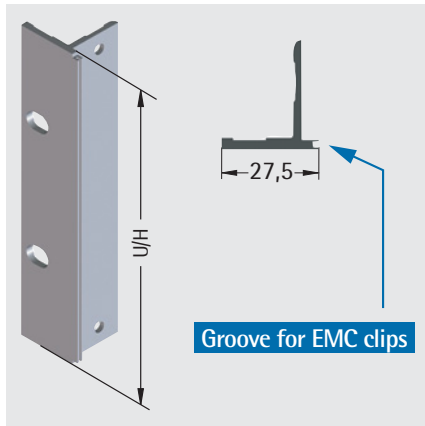
Order no.
230-828



U	H mm	D mm	Order no.
2	88	236	245-202-50
		296	245-203-50
3	132,5	176	245-301-58
		236	245-302-58
		296	245-303-58
		356	245-304-58



**2a** Front bracket without holes for handle



- with integrated groove for inserting EMC contact springs [11] (see p. 113)

**Material:**

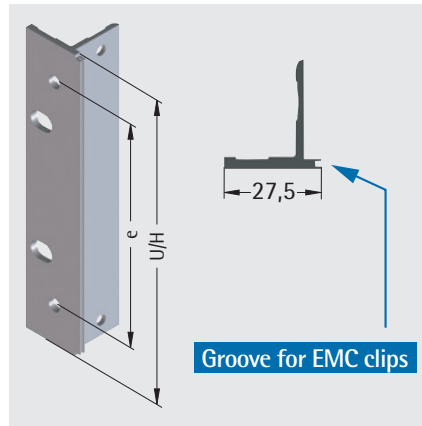
aluminium

**Surface:**

visible surface anodised, contact surfaces partially chromated

U	H mm	Order no.
2	88	240-038-12
3	132,5	240-038-13
4	177	240-038-14
4 (3+2x 1/2)	177	240-038-54
6	266	240-038-16
7	310,5	240-038-17

**2a** Front bracket with holes for handle



- with integrated groove for inserting EMC contact springs [11] (see p. 113)

**Material:**

aluminium

**Surface:**

visible surface anodised, contact surfaces partially chromated

U	H mm	e	Order no.
3	132,5	98	240-038-03
4	177	142	240-038-04
4 (3+2x 1/2)	177	142	240-038-44
6	266	232	240-038-06
7	310,5	276	240-038-07

**2b** Front panel handles



- fits 19" subracks

**Material:**

end pieces: plastic, black (with M 5)

handle extrusion: anodised aluminium

**Delivery:**

assembled

**Delivery**

Item	Pc.	Description
1	2	End pieces
2	1	Handle extrusion

U	e mm	Order no. (1 piece)
3	98	611-336-00
4	142	611-334-00
6	231,5	611-337-00
7	276	611-337-10

**Countersunk screw M5 x 12 for handle mounting**

- Set = 100 pieces

Order no.
630-121



### 3 Cover bracket

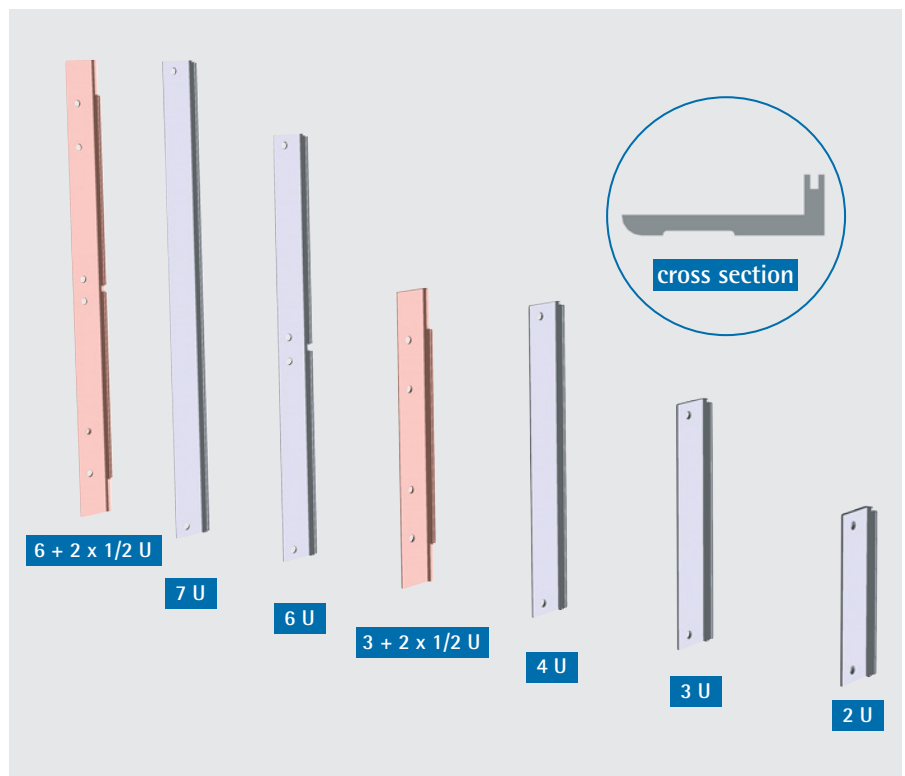
- for covering the gap between side and rear or front panel
- with groove for EMC contact clips [11] (see p. 113) for EMC protection of the rear

**Material:**

aluminium

**Surface:**

visible surface anodised, contact surfaces partially chromated



U	H mm	Order no.
2	88	240-037-52
3	132,5	240-037-53
4	177	240-037-54
4 (3 + 2 x 1/2)	177	240-037-64
6	266	240-037-56
7	310,5	240-037-57



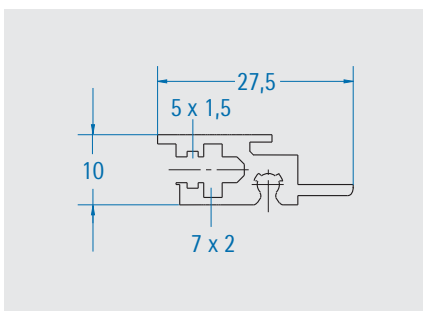
#### 4 Module rails

The following module rails are available:



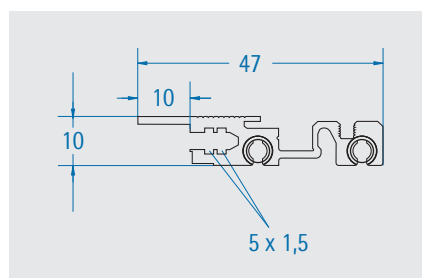
Module rails are 1 HP longer than the subrack's nominal width. Other lengths available on request.

##### Standard module rail



- for mounting plug-in units and back panels
- with grooves for threaded inserts
- mounting in upper or lower position

##### Reinforced module rail with 10 mm clearance



- for plug-in units with IEEE-handle
- for higher mechanical loads
- with grooves for threaded inserts
- mounting in upper or lower position

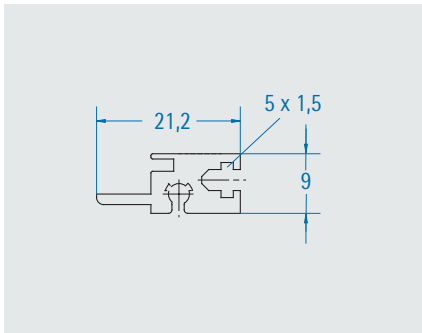
See p. 137 for matching IEEE handles!

HP	L mm	Order no.
85	431,90	241-022-01
64	325,20	241-022-05
57	289,70	241-022-02
43	218,50	241-022-03
29	147,40	241-022-04

HP	L mm	Order no.
85	431,90	241-500-85
64	325,20	241-500-64
57	289,70	241-500-57
43	218,50	241-500-43
29	147,40	241-500-29



### BUS module rail

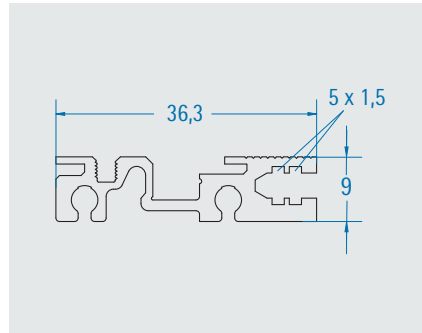


- for mounting BUS cards and back-planes **using EMC springs or insulating strips** (see section beginning on p. 115)
- with grooves for threaded inserts
- mounting in upper or lower position

Please order insulating strips or contact strips separately (see p.115).

HP	L mm	Order no.
85	431,90	241-013-01
64	325,20	241-013-05
57	289,70	241-013-02
43	218,50	241-013-03
29	147,40	241-013-04

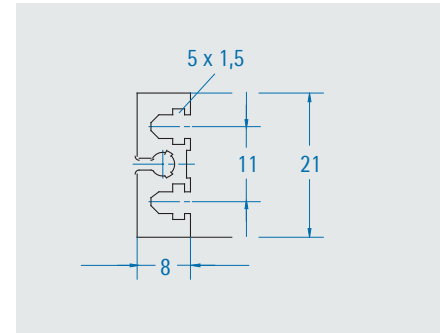
### Reinforced BUS module rail



- with integrated contact strips
- for mounting BUS cards and back-planes
- with grooves for threaded inserts
- mounting in upper and lower position

HP	L mm	Order no.
85	431,90	240-513-85
64	325,20	240-513-64
57	289,70	240-513-57
43	218,50	240-513-43
29	147,40	240-513-29

### BUS support rail

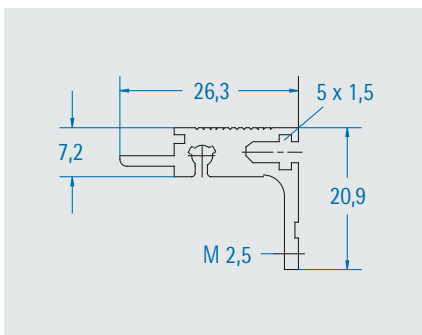


- for mounting BUS cards and back-planes **using EMC springs or insulating strips** (see section beginning on p. 115)
- with grooves for threaded inserts
- mounting in middle position

Please order insulating strips or contact strips separately (see p.115).

HP	L mm	Order no.
85	431,90	241-020-01
64	325,20	241-020-64
57	289,70	241-020-57
43	218,50	241-020-43
29	147,40	241-020-29

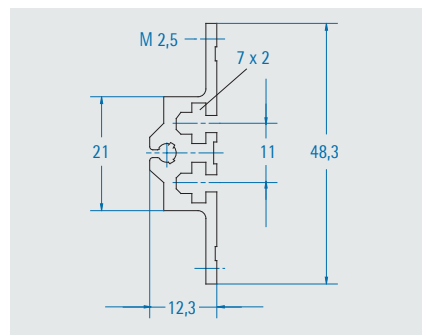
### Narrow module rail, integrated



- with integrated mounting rail for connectors acc. to IEC 60603-2
- with grooves for threaded inserts
- mounting in upper or lower position
- notched

HP	L mm	Order no.
85	431,90	267-919-01
64	325,20	267-919-05
57	289,70	267-919-02
43	218,50	267-919-03
29	147,40	267-919-04

### Support rail



- with integrated mounting rail for plug-in connections acc. to IEC 60603-2
- with grooves for threaded inserts
- mounting in middle position
- notched

HP	L mm	Order no.
85	431,90	241-108-85
64	325,20	241-108-64
57	289,70	241-108-57
43	218,50	241-108-43
29	147,40	241-108-29



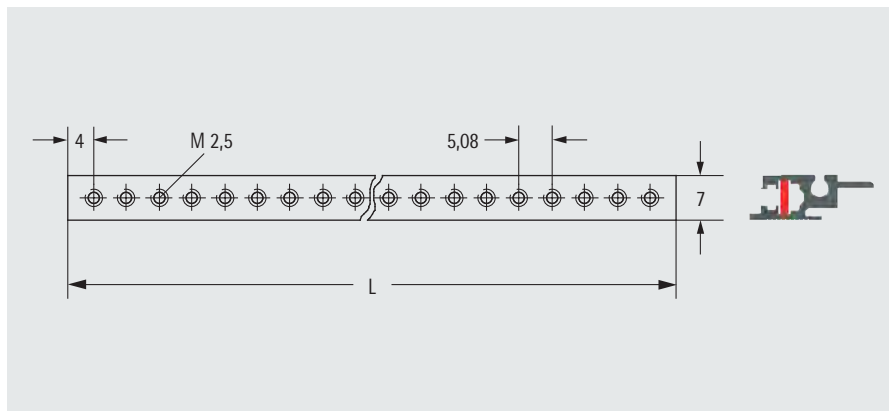


## 5 Threaded inserts

### M 2,5 threaded insert 7 x 2 mm

- threaded inserts, galvanised 7 x 2 mm for use with standard module rails
- Finish:** galvanised

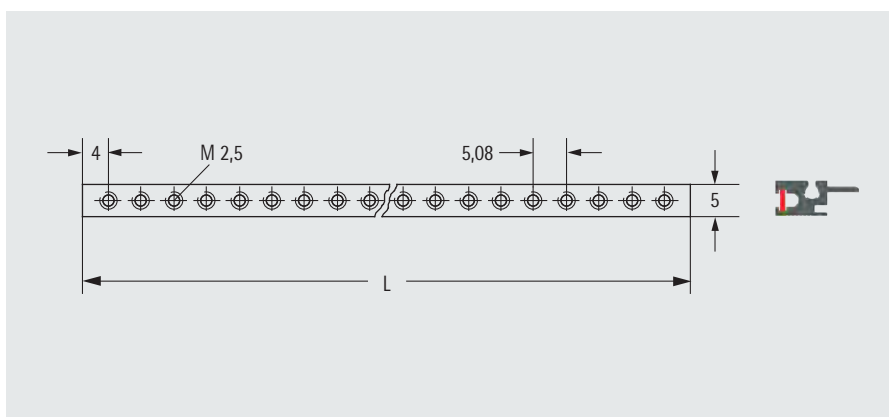
HP	L mm	Order no.
85	429,90	240-051
64	323,20	240-055
57	287,70	240-052
43	216,50	240-053
29	145,40	240-054



### M 2,5 threaded insert 5 x 1.5 mm

- threaded insert M 2,5 for use with BUS module rails/ BUS support rails as well as reinforced module rails
- Finish:** galvanised

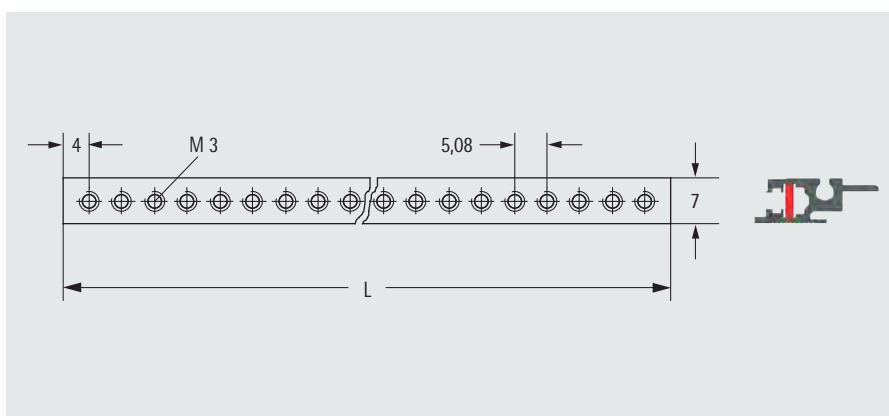
HP	L mm	Order no.
85	429,90	240-061
64	323,20	240-065
57	287,70	240-062
43	216,50	240-063
29	145,40	240-064



### M 3 threaded insert 7 x 2mm

- threaded insert, 7 x 2 mm for use with standard module rails
- Finish:** galvanised

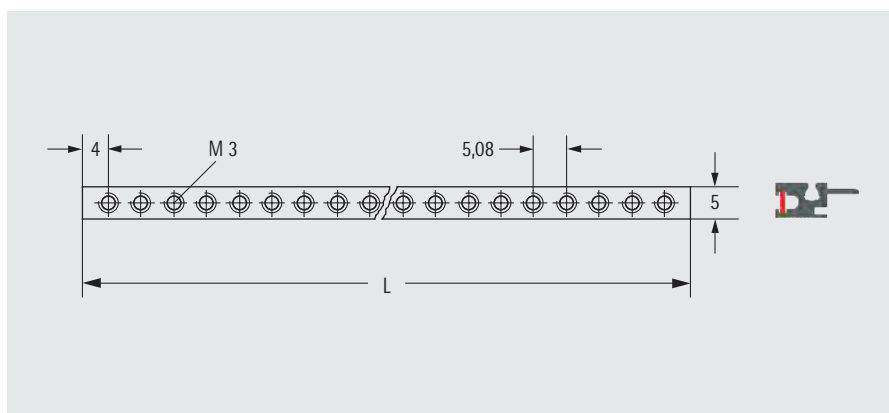
HP	L mm	Order no.
85	429,90	240-059-85
64	323,20	240-059-64
57	287,70	240-059-57
43	216,50	240-059-43
29	145,40	240-059-29



### M3 threaded insert 5 x 1.5mm

- threaded insert M 3 for use with BUS module rails / BUS support rails
- Finish:** galvanised

HP	L mm	Order no.
85	429,90	240-069-85
64	323,20	240-069-64
57	287,70	240-069-57
43	216,50	240-069-43
29	145,40	240-069-29





## 245 • 19" subrack, individual configuration

### 6a Cover panel

- for mechanical shielding of subracks
- perforated or closed

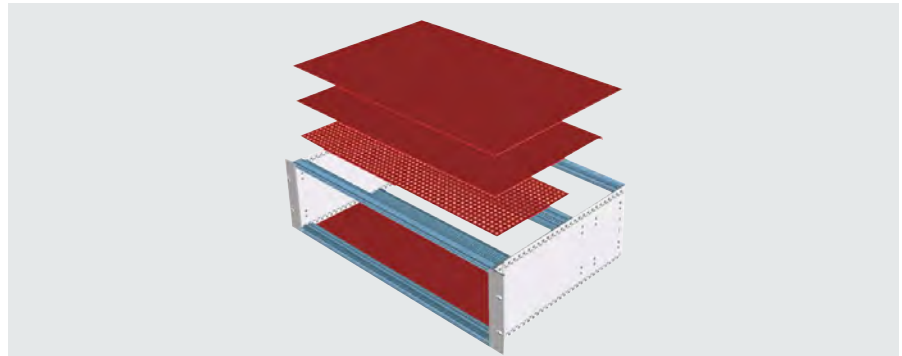
**Material:**

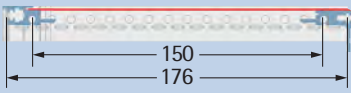
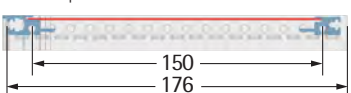
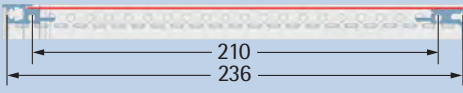
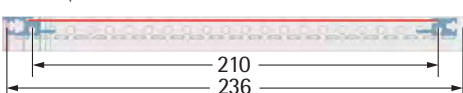
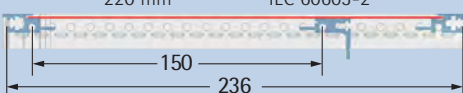
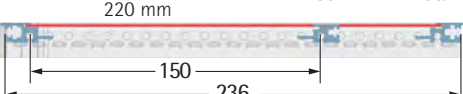
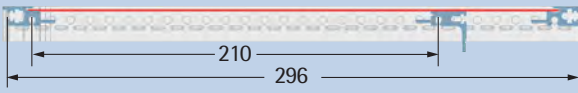
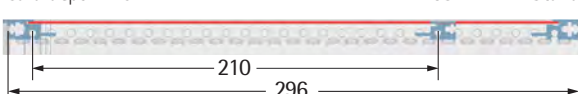
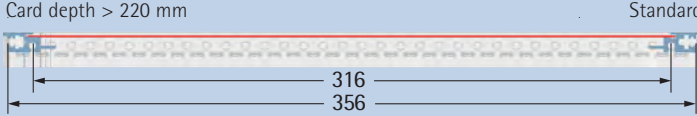
aluminium panel or perforated aluminium panel 1,0 mm

**Degree of protection:**

IP 30: closed

IP 20: perforated



Application	Order no. 84 HP		Order no. 42 HP	
	closed	perforated	closed	perforated
Card depth 160 mm plug-in connector IEC 60603-2 	245-011-10	245-011-18	245-031-10	245-031-18
Card depth 160 mm BUS 	240-662-85	240-468-85	240-662-43	240-468-43
Card depth 220 mm plug-in connector IEC 60603-2 	245-012-10	245-012-18	245-032-10	245-032-18
Card depth 220 mm BUS 	240-672-85	240-478-85	240-672-43	240-478-43
Card depth 160 mm / 220 mm plug-in connector Standard IEC 60603-2 	240-671-85	240-475-85	240-671-43	240-475-43
Card depth 160 mm / 220 mm BUS Standard 	240-671-85	240-475-85	240-671-43	240-475-43
Card depth 220 mm plug-in connector IEC 60603-2 Standard 	245-013-10	245-013-18	245-033-10	245-033-18
Card depth 220 mm BUS Standard 	245-013-10	245-013-18	245-033-10	245-033-18
Card depth > 220 mm Standard 	245-014-10	245-014-18	-	-



**6b EMC cover panel**

- perforated/ closed
- with honeycomb perforations for optimum air flow (approx. 63%)
- EMC-compliant design
- including assembly material

**Material:**

aluminium

\* EMC cover panel 4 U and 7 U are suitable for a x + 2 1/2 U configuration

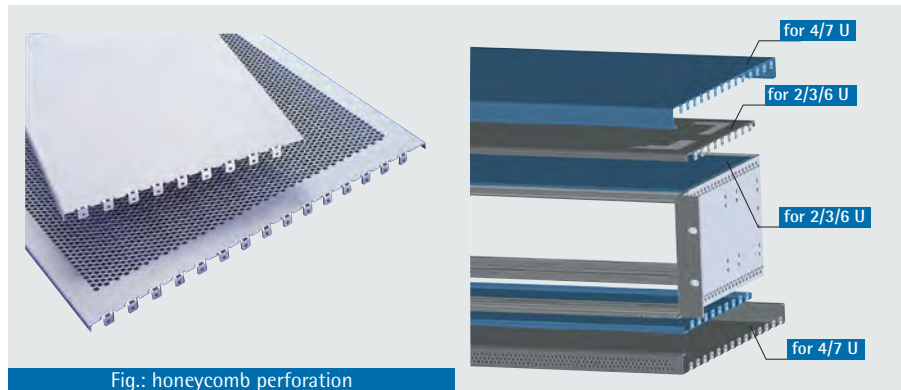


Fig.: honeycomb perforation

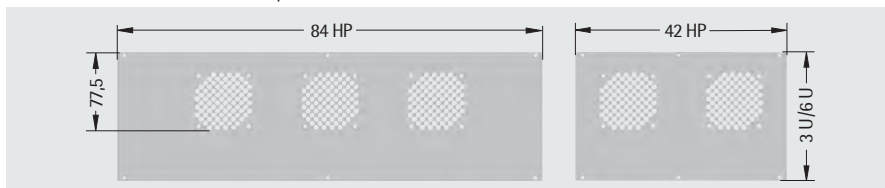
HP	H	D mm	Feature	Order no.
42	2, 3, 6 U	176	not ventilated	245-031-40
			perforated	245-031-48
		236	not ventilated	245-032-40
			perforated	245-032-48
		296	not ventilated	245-033-40
			perforated	245-033-48
84	2, 3, 6 U	176	not ventilated	245-011-40
			perforated	245-011-48
		236	not ventilated	245-012-40
			perforated	245-012-48
		296	not ventilated	245-013-40
			perforated	245-013-48
		356	not ventilated	245-014-40
			perforated	245-014-48
	4, 7 U *	296	not ventilated	245-413-40
			perforated	245-413-48

**7 Rear panel**

- up to 3 fans can be installed in 84 HP subracks and 2 fans in 42 HP (perforated version)
- including assembly material

**Material:** aluminium 2.5 mm

**Finish:** front side: anodised, rear side: conductive



HP	U	Feature	Order no.
42	3	not ventilated	243-042-45
		perforated	243-803-02
84		not ventilated	243-084-45
		perforated	243-803-01
42	6	not ventilated	243-642-45
		perforated	243-806-02
84		not ventilated	243-684-45
		perforated	243-806-01

**Fan, 12 V**



- for installation in the rear panel
- high-power [PAPST] fan
- flow rate: 40 m³/h
- noise level: 40 dB(A)
- W x H x D: 60 mm x 60 mm x 25 mm
- incl. assembly material

<b>Order no.</b>
230-825



## 245 • 19" subrack, individual configuration

### 9 Horizontal expansion kit 6 U/20 HP

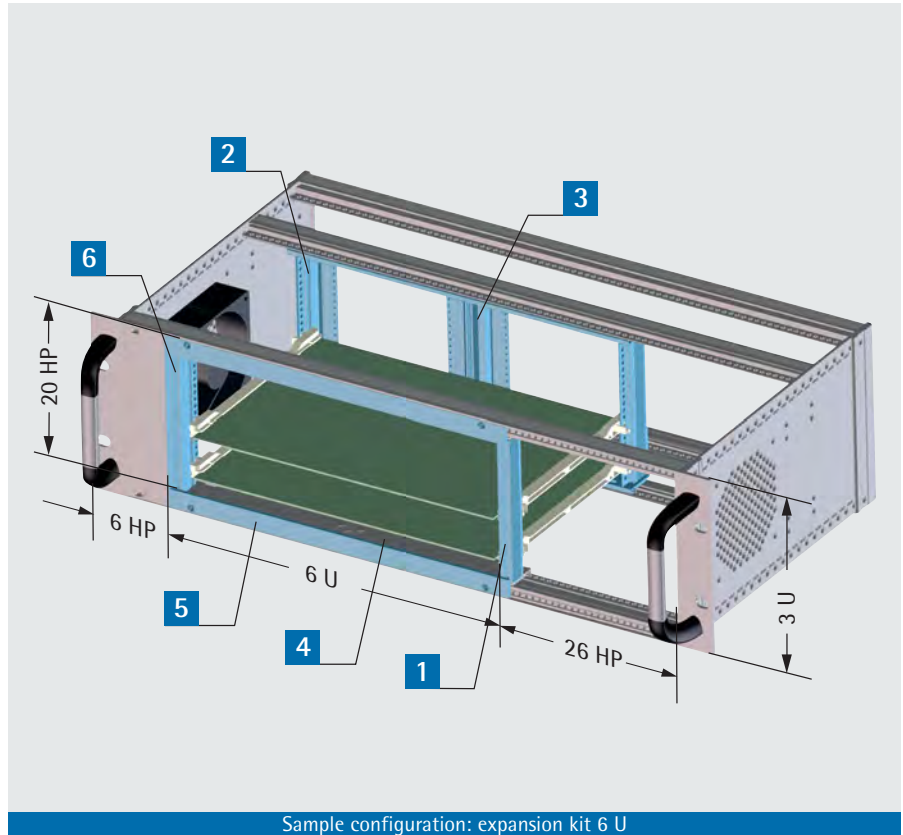
- for installation in 3 U subracks with BUS module rail
- for installing double eurocards horizontally
- PCB's cooled optimally when installed in a subrack with perforated side panels (see fig.)

#### Application:

for plug-in modules acc. to IEC 60297-3-101/-102/-103 and IEEE 1101.10/1101.11

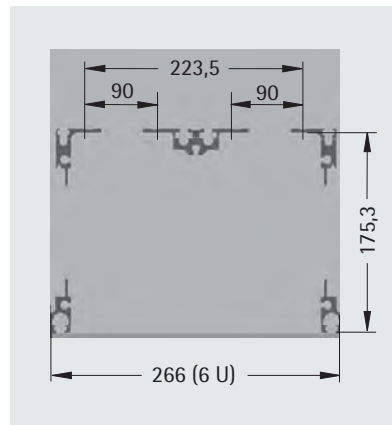
#### Delivery:

kit form



Sample configuration: expansion kit 6 U

#### Expansion kit model 1

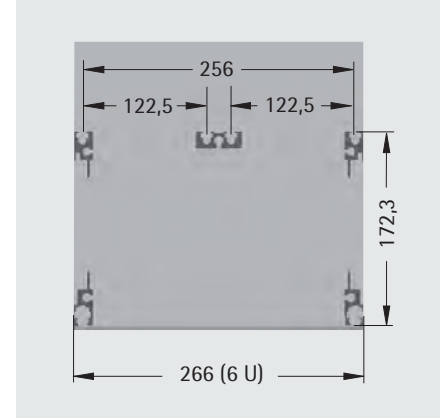


- depth: 236 mm
- front:**
  - standard module rails, profile no. 241-022
- rear:**
  - narrow module rails with integrated mounting rails, profile no. 241-019 and
  - support rail with integrated mounting rail, profile no. 241-008 for plug-in connections acc. to IEC 60603-2

Order no.

245-620-61

#### Expansion kit model 2



- depth: 236 mm
- front:**
  - standard module rails, profile no. 241-022
- rear:**
  - BUS module rails, profile no. 241-013 and
  - BUS support rail, profile no. 241-020

Order no.

245-620-62

#### Delivery

Item	Pc.	Description
1	2	Module rails, front
2	2	Module rails, rear
3	1	Mounting rail, rear
4	4	Flat rails
5	2	Panels
6	2	Threaded inserts M 2,5 7 mm x 2 mm
7	(4)	Threaded inserts M 2,5 5 mm x 1,5 mm (Model 2)
8		Assembly material



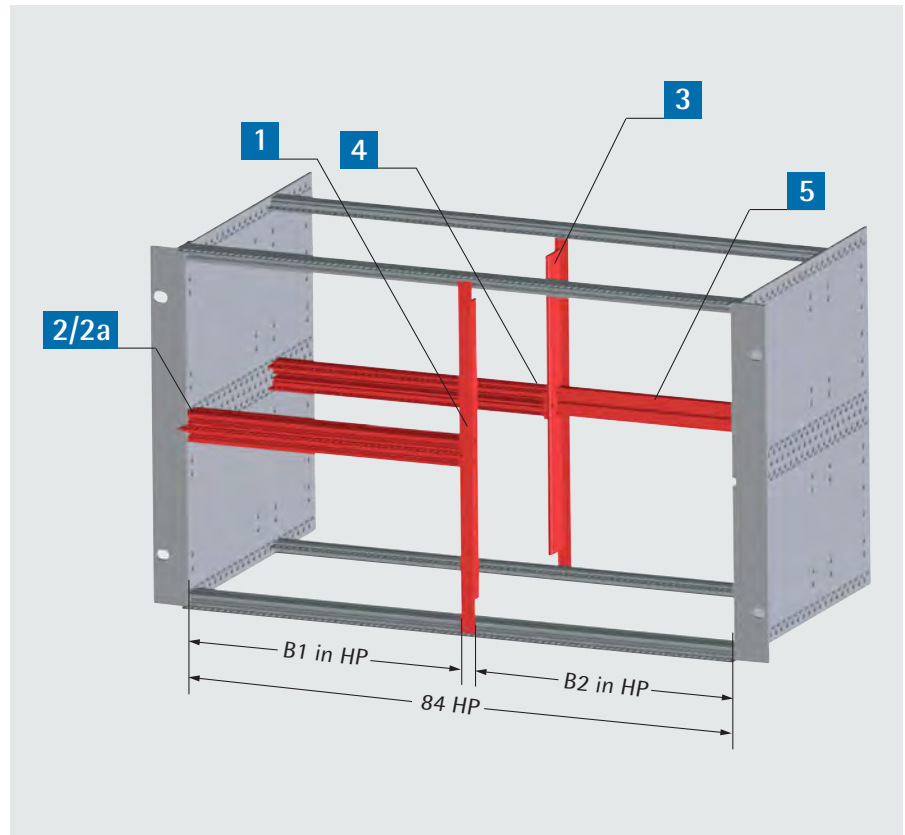
**10 Vertical expansion kit 2 x 3 U**

- for the separation of the 6 U installation space into 2 x 3 U and 1x 6 U

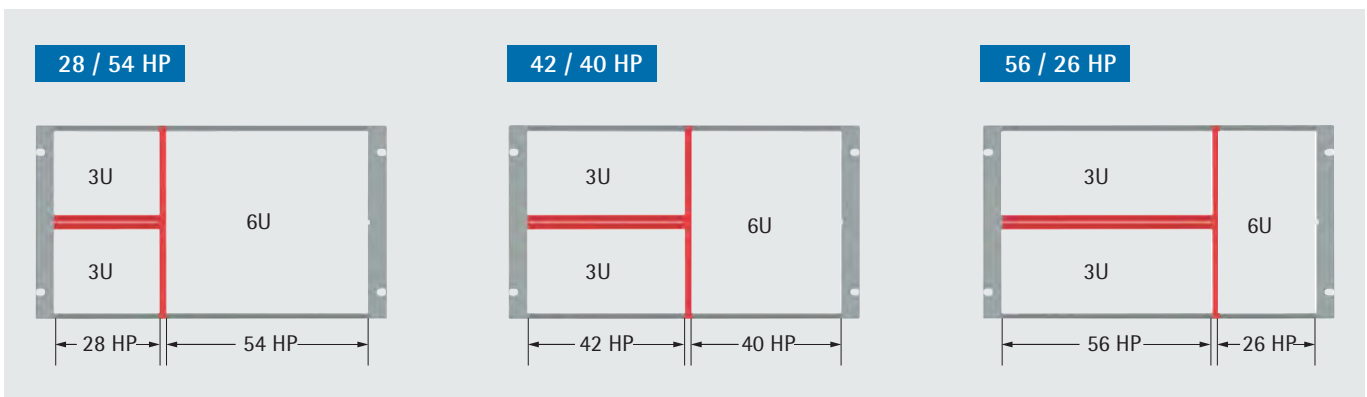
**Application:**

for plug-in modules acc. to IEC 60297-3-101/-102/-103 and IEEE 1101.10/1101.11

By use of the mounting rails, the usable installation space will be reduced to 82 HP.



**Versions**



Basic design for plug-in components acc. to IEC 60297-3-101/-102/-103				
Item	Description	Installation space B1 2 x 3 U	Installation space B2 6 U	Order no.
1	Front mounting strut	-	-	241-087
2	Standard module rails	28 HP	54 HP	241-022-04
		42 HP	40 HP	241-022-03
		56 HP	26 HP	241-022-02
2a	Threaded inserts M 2,5	28 HP	54 HP	240-054
		42 HP	40 HP	240-053
		56 HP	26 HP	240-052



## 245 • 19" subrack, individual configuration

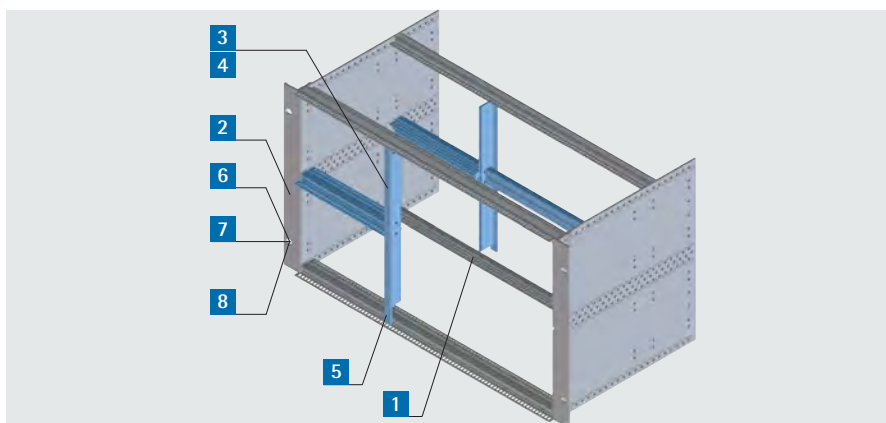
Components combinable with type A for plug-in connector acc. to IEC 60603-2				
Item	Description	Installation space B1 2 x 3 U	Installation space B2 6 U	Order no.
3	Rear mounting strut for narrow module rail with integrated mounting rail	-	-	241-088
4	Narrow module rail with integrated mounting rail	28 HP	54 HP	267-919-04
		42 HP	40 HP	267-919-03
		56 HP	26 HP	267-919-02
5	Mounting rail, integrated	28 HP	54 HP	241-108-02
		42 HP	40 HP	241-108-03
		56 HP	26 HP	241-108-04
Components combinable with type B for BUS cards				
Item	Description	Installation space B1 2 x 3 U	Installation space B2 6 U	Order no.
3	Rear mounting strut for BUS module rail	-	-	241-089
4	BUS module rail	28 HP	54 HP	241-013-04
		42 HP	40 HP	241-013-03
		56 HP	26 HP	241-013-02
4	Threaded inserts M 2,5	28 HP	54 HP	240-064
		42 HP	40 HP	240-063
		56 HP	26 HP	240-062
5	Mounting rail BUS	28 HP	54 HP	241-020-02
		42 HP	40 HP	241-020-03
		56 HP	26 HP	241-020-04
5	Threaded inserts M 2,5	28 HP	54 HP	250-060-54
		42 HP	40 HP	250-060-40
		56 HP	26 HP	250-060-26

### 11 Mounting screws for subracks

- Packaging unit: 100 pieces

#### Material:

nickel-plated/galvanised (Item 1, 3, 6)  
galvanised (Item 2, 4, 5, 8)  
plastic, black (Item 7)



Item	Description	Order no.
1	Oval head screw M 4 x 12 with serration for screw retention	630-096
2	Countersunk screw M 5 x 12 (for mounting of handles)	630-121
3	Oval head screw M 2,5 x 10	630-094
4	Washers ø 2,6	630-152
5	Countersunk screw M 4 x 10	630-119
6	Oval head screw M 5 x 16	630-098
7	Decorative washer with collar (M 5)	610-095
8	Captive nut, gauge number 0,7 mm - 1,7 mm	630-359
8	Captive nut, gauge number 1,8 mm - 2,6 mm	630-362



### EMC contact springs

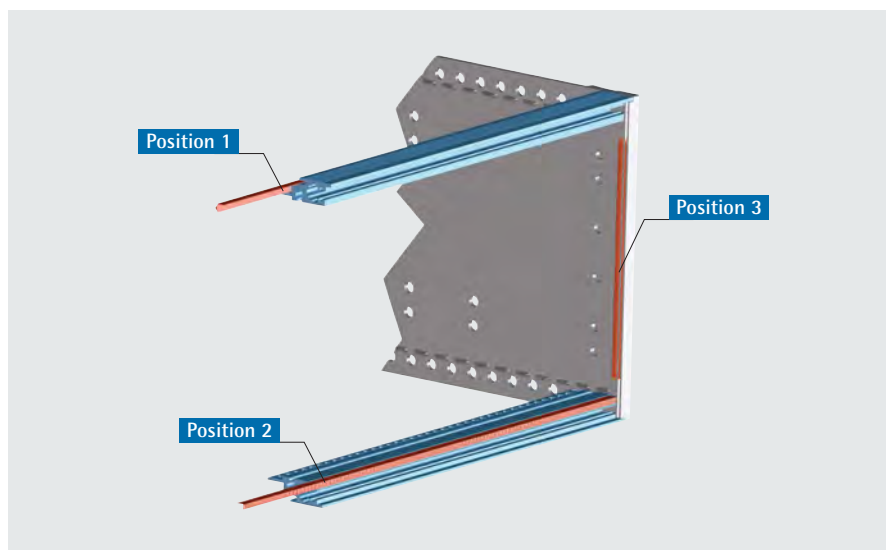
High-quality EMC contact springs increase shield attenuation by bringing individual components into continuous contact with each other.

**Material:**

copper beryllium

**Finish:**

tin-plated



#### Position 1

Horizontal EMC contact gasket 1 contacts module rail and cover panel.

HP	L mm	Order no.
84	427,00	671-182
63	318,00	671-163
42	210,30	671-142

#### Position 2

Horizontal EMC contact gasket 2 contacts module rail and front or rear panel.

HP	L mm	Order no.
84	427,00	671-183
63	318,00	671-164
42	210,50	671-143

#### Position 3

Vertical EMC contact gasket for connecting all front panels with each other and with the front or rear brackets.

U	L mm	Order no.
3	97,00	671-184
6	232,00	671-185

### EMC fabric gasket

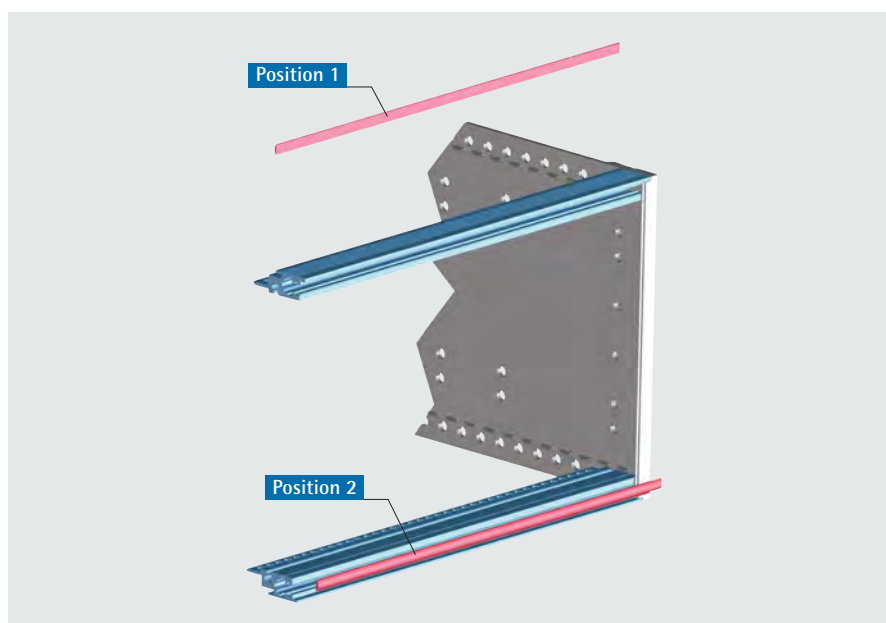
High-quality EMC fabric gaskets increase the shielding by contacting several components

**Material:**

polyester-ripstop-nylon

**Finish:**

nickel-copper coated



#### Position 1

Horizontal EMC fabric gasket 1 contacts module rail and EMC cover panel

HP	L mm	Order no.
84	430,00	671-227-85

#### Position 2

Horizontal EMC fabric gasket 2 contacts module rail and front or rear panel

HP	L mm	Order no.
84	427,00	671-229-85



### Z-rail, version 1

- for 32-, 64- and 96-pole connectors acc. to IEC 60603-2
- fits with **BUS module rails** without insulating strip or EMC springs

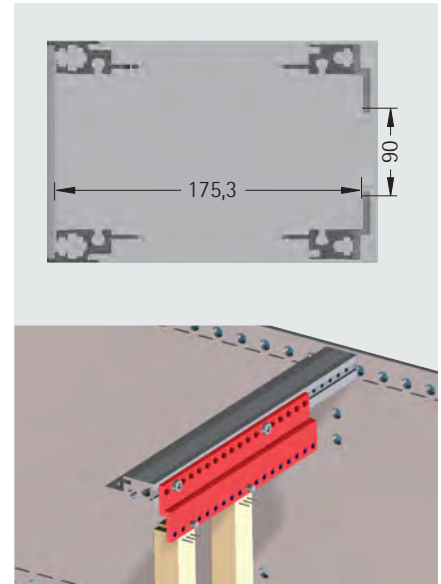
**Material:**  
aluminium

HP	Order no.
85	240-411
57	240-412
43	240-413
29	240-414
10	240-410-10
8	240-410-08
6	240-410-06
4	240-410-04

#### Assembly material

Order no.
630-092

The Z-rails are 1 HP longer than the subrack's nominal width. Other lengths on request.



### Z-rail, version 2

- for 32-, 64- and 96-pole connectors acc. to IEC 60603-2
- fits with **BUS module rails 241-013** with contact or insulating strips and with **BUS module rails 240-513**

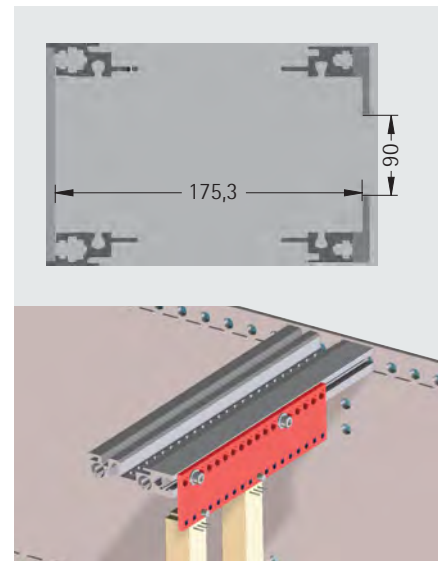
**Material:**  
aluminium

HP	Order no.
85	240-420-85
57	240-420-57
43	240-420-43
29	240-420-29

#### Assembly material

Order no.
630-092

The Z-rails are 1 HP longer than the subrack's nominal width. Other lengths on request.







### Insulating strips

- for insulating backplanes and module rails
- for BUS subracks
- to be used as spacer in order to achieve the required installation depth for plug-in units

**Material:**

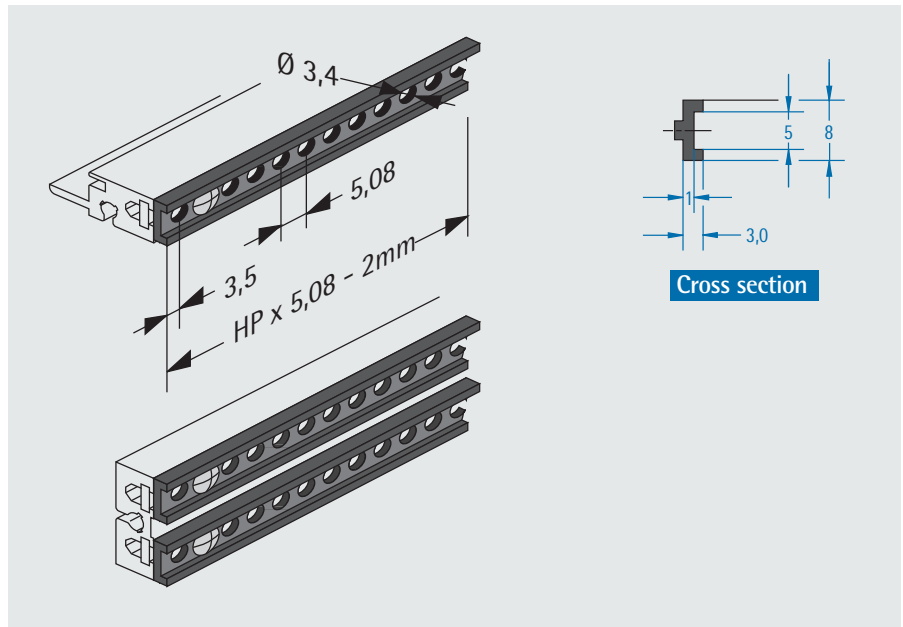
plastic, Noryl UL 94 V-0

**Finish:**

black

Other lengths available on request.

HP	Order no.
84	250-719
42	250-720
28	250-719-28



### Contact strip

- for contacting backplanes and module rails
- to be used as spacer in order to achieve the required installation depth for plug-in units

**Material:**

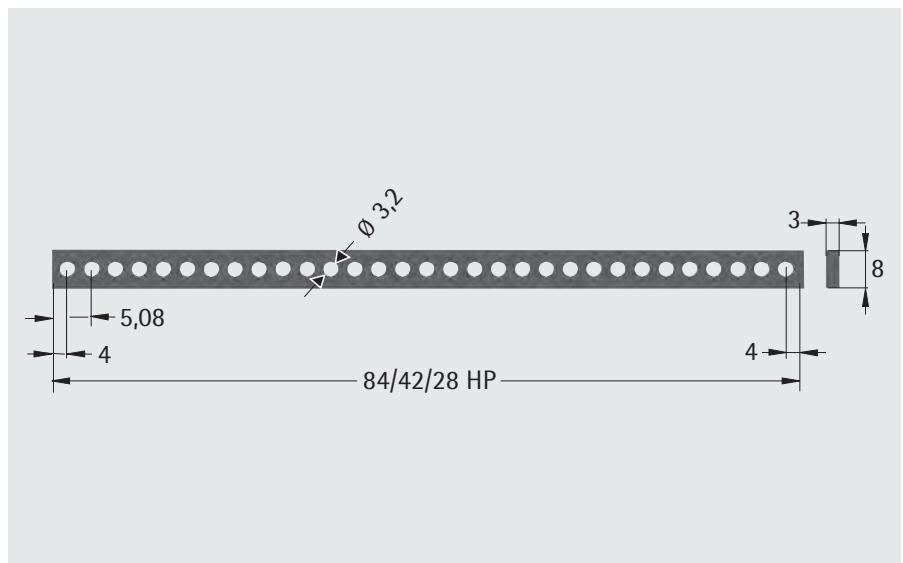
aluminium 3,0 mm

**Finish:**

transparent chromated

Other lengths available on request.

HP	Order no.
84	250-725-84
42	250-725-42
28	250-725-28





## Card guides



### Available card guides:

- standard card guide
- integrated card guide
- card guide with IEEE coding
- divided card guide

### Standard card guide

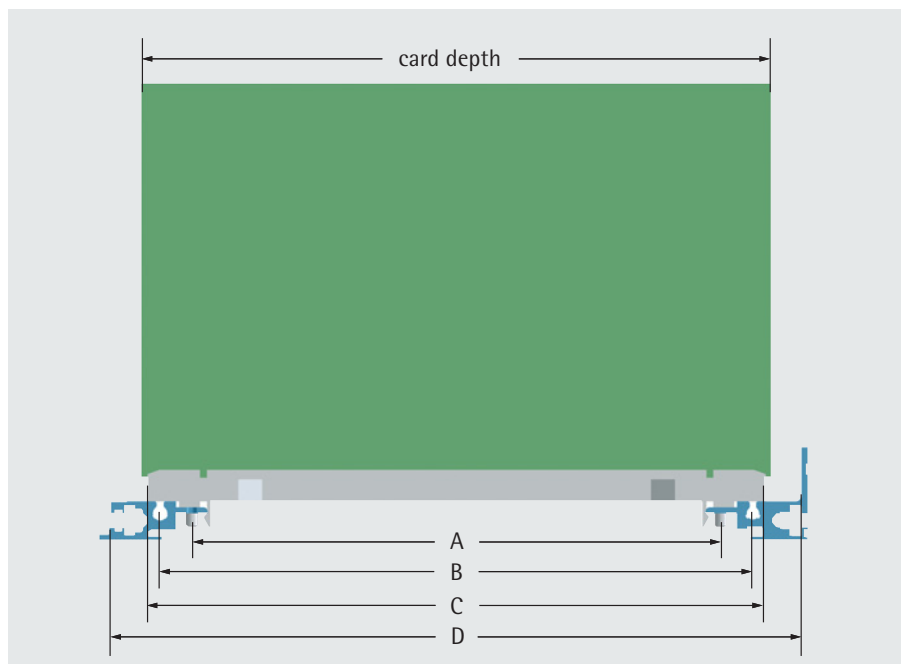
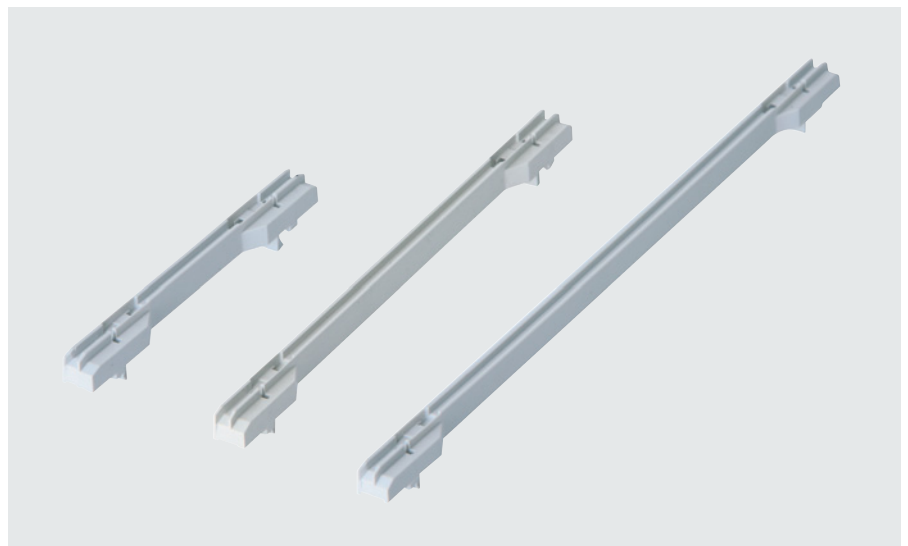
- for installing plug-in modules acc. to IEC 297-3-101/-102/-103
- groove width 2.6 mm for PCB thickness 1.6 mm
- for each card guide two ESD clips can be mounted in order to achieve up to 4 ESD contact points for the PCB
- card guides can be easily assembled to the module rails by simple clipfixation. If required, card guides can be secured with additional screws

### Material:

plastic, classified acc. to UL 94-V 0

### Finish:

similar RAL 7035 light grey

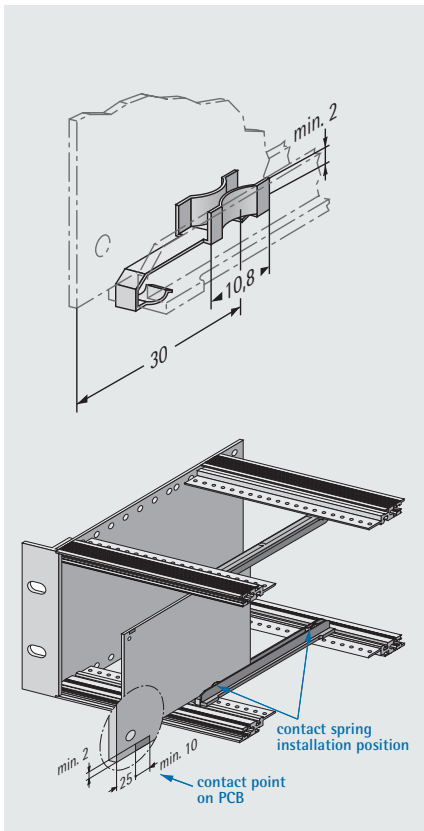


Card depth d mm	Order no.
220	240-406-00
160	240-401-00
100	240-402-00

Card depth mm	Dimensions mm			
	A	B	C	D
220	194	210	216,5	235,3
160	134	150	156,5	175,3
100	74	90	96,5	115,3



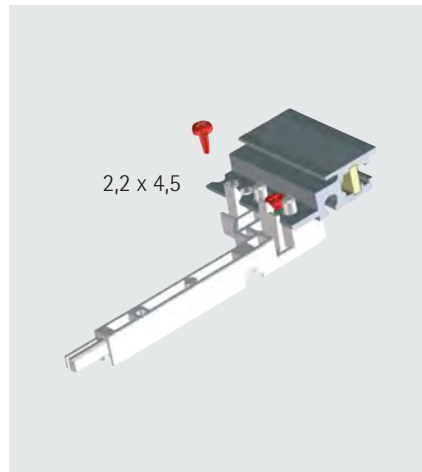
### ESD clips for standard card guide



- allows conductive connection of PCB and module rail
- one contact gasket per card guide advised, however two possible

<b>Order no.</b>
240-400-30

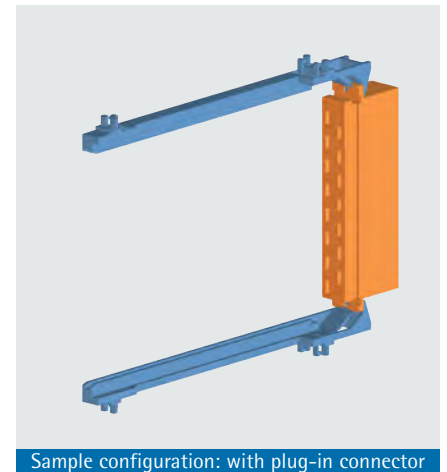
### Fixing screw



- for fixing the IEEE card guide

<b>Order no.</b>
631-200

### Card guide, integrated



Sample configuration: with plug-in connector

- with integrated attachment for connectors acc. to IEC 60603-2 (cannot be used with profile no. 241-019)
- can be used instead of a z-shaped module rail or the integrated module rail
- particularly suitable for extending a plug-in location of a 3 U backplane (for example power supply)

**Material:**

plastic, classified acc. to UL 94V-0

**Finish:**

similar RAL 7035 light grey

Card depth d mm	Order no.
160	240-407-00
220	240-408-00

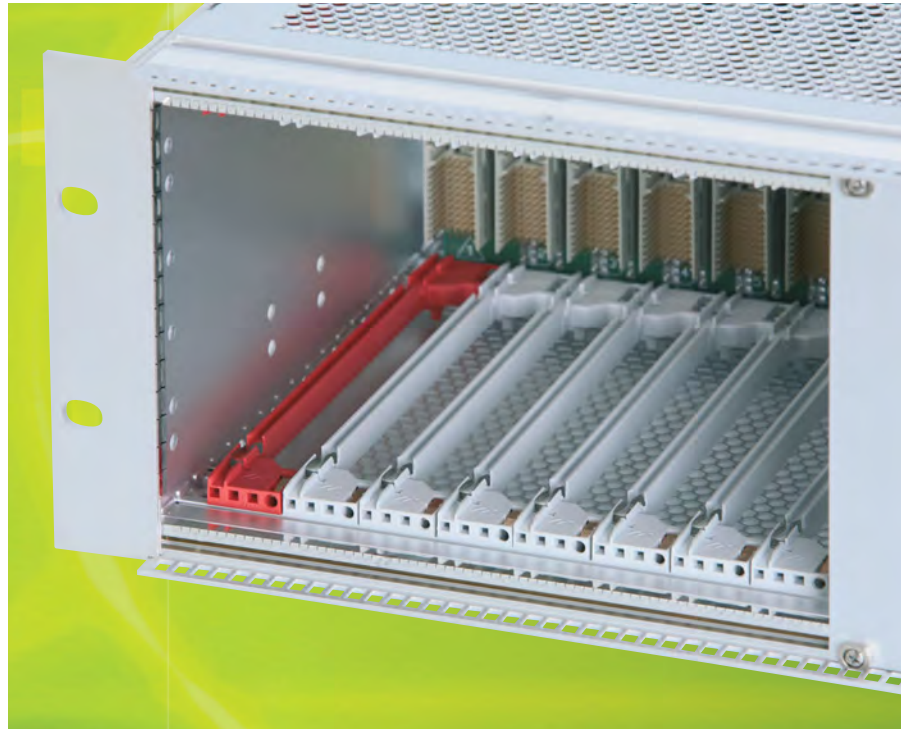


### Card guide with IEEE coding

- with pin-chambers for reception of coding pins
- groove width 2.6 mm for PCB thickness 1.6 - 2.0 mm
- can be fitted with 2 ESD clips for discharge of electrostatic charges (recommended: 1x per card guide)
- can be used with ESD clip for contacting the alignment pin of the insertion / extraction handles of front panels

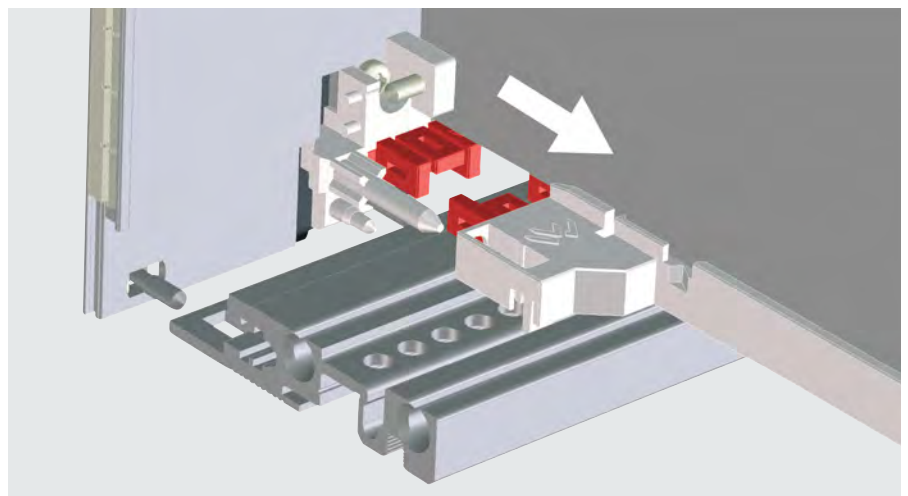
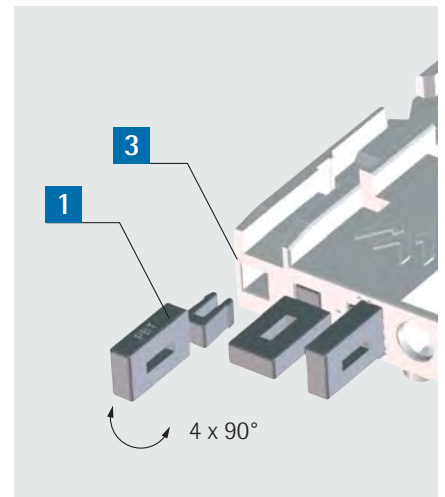
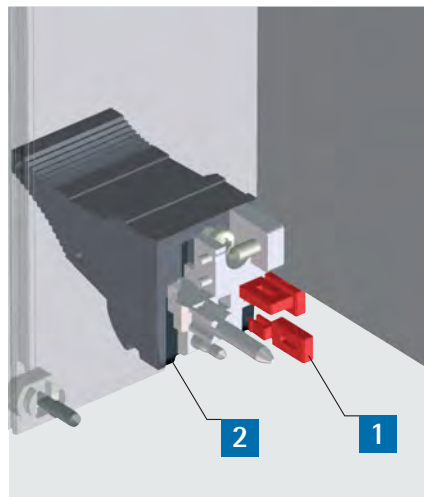
#### Material:

plastic, classified acc. to UL 94V-0



### Application

Coding pins **1** can be inserted into the pin-chambers of the handle **2** and the card guide **3** with function acc. to DIN EN 60297-3-103. By use of the coding pins, the PCB is protected and it is not possible to insert boards by mistake at the wrong position.



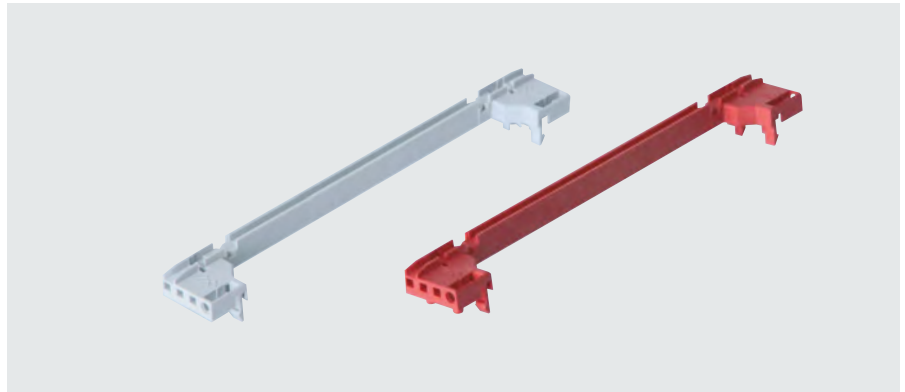


**Card guide with IEEE coding 4 HP for card depths of 160 mm**

- red colour for system slot / CPU-boards

**Finish:**  
similar RAL 7035 light grey or RAL 3001 signal red

Description	Order no.
grey	240-160-10
red	240-160-20

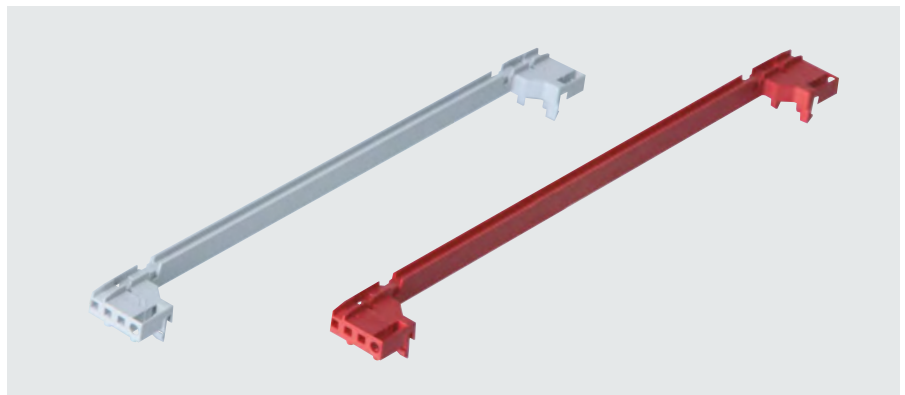


**Card guide with IEEE coding 4 HP for card depths of 220 mm**

- red colour for system slot / CPU-boards

**Finish:**  
similar RAL 7035 light grey or RAL 3001 signal red

Description	Order no.
grey	240-220-10
red	240-220-20

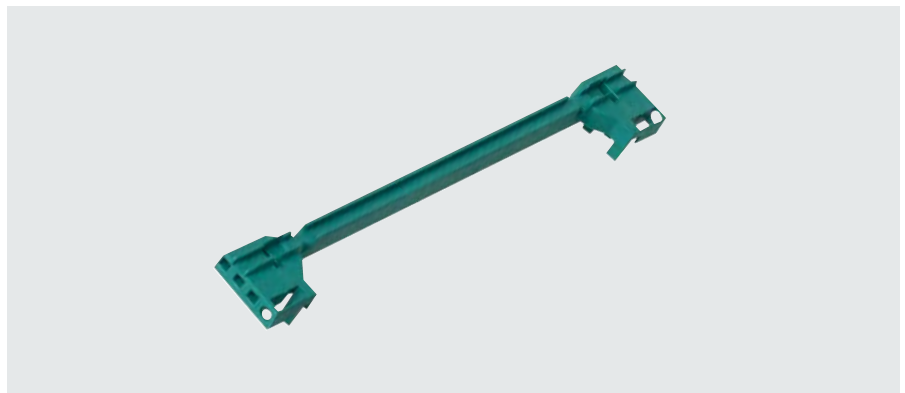


**Card guide with IEEE coding, offset 1/2 HP • for card depths of 160 mm**

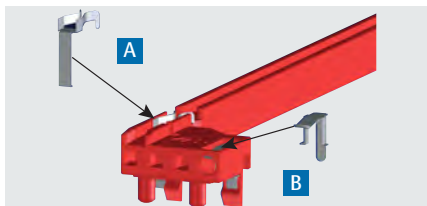
- allows PCB to be populated on both sides, e.g. for power supplies

**Finish:**  
green

Order no.
240-160-50



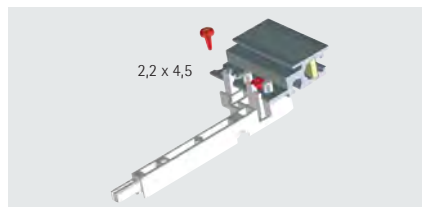
**ESD clip**



- for discharging electrostatic charges from the PCB [A]
- for discharging electrostatic charges in conjunction with an ESD pin of an injector/ extractor handle [B]

Description	Order no.
ESD spring	240-161-03
ESDspring (alignment pin)	240-162-00

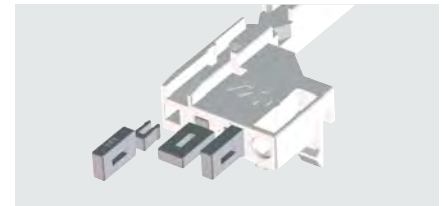
**Fixing screw**



- for fixing the IEEE card guide

Order no.
631-200

**Coding pin**



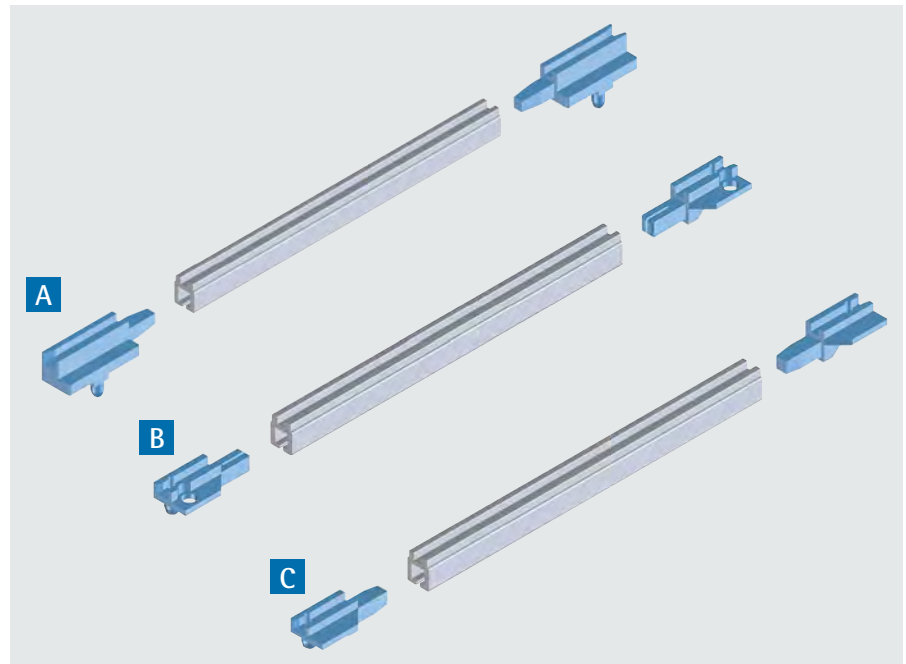
**Material:**  
polycarbonate, classified acc.to UL 94-V 0  
**Finish:**  
grey

Order no.
240-163-50

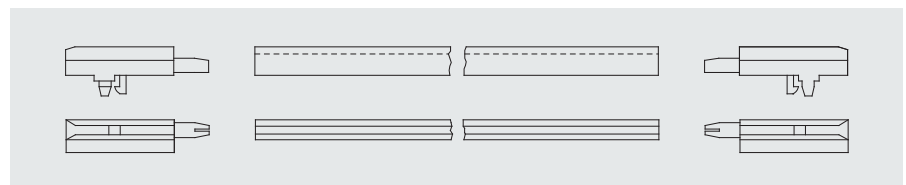


### Divided card guides

- consists of 2 end pieces and an aluminium or plastic middle extrusion piece
- middle part: 1000 mm, (can be cut to requested length)



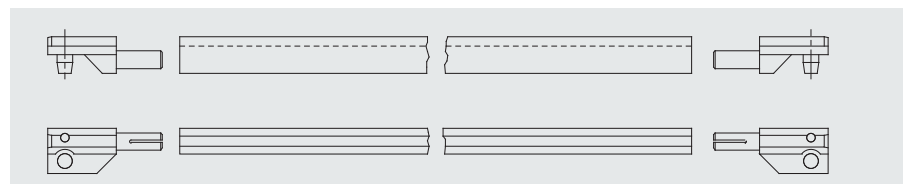
#### A Divided card guide (standard) for any card depth



Description	Length mm	Material	Order no.
End pieces (pair)	-	plastic (black)	250-721
Middle piece	1000	aluminium	240-005-00
Middle piece	1000	plastic (black)	250-723-00

#### B Card guide for ISEP PCBs

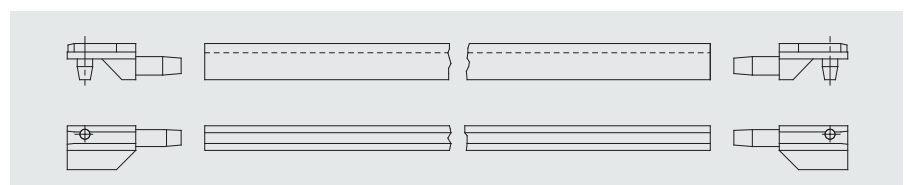
- PCB height in 3 U subracks is 110.49 mm



Description	Length mm	Material	Order no.
End pieces (pair)	-	plastic (black)	250-722
Middle piece	1000	aluminium	240-005-00
Middle piece	1000	plastic (black)	250-723-00

#### C Card guide for 112.5mm installation headroom in 3 U subrack

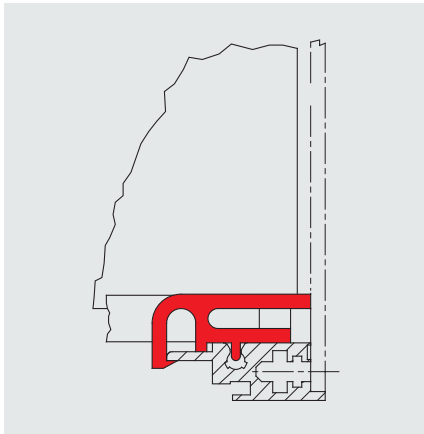
Minimum order quantity 500 pairs!



Description	Length mm	Material	Order no.
End pieces (pair)	-	plastic (black)	250-724
Middle piece	1000	aluminium	240-005-00
Middle piece	1000	plastic (black)	250-723-00



### PCB lock



- for fastening PCB's to prevent them from falling out
- can be used with front panels
- snaps into place easily

**Material:**

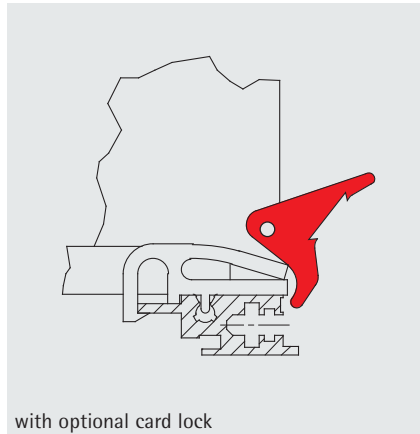
plastics, classified acc. to UL 94-V 0

**Finish:**

similar RAL 7035 light grey

<b>Order no.</b>
250-716

### Extraction handle



with optional card lock

- for extracting PCB's
- the optional PCB lock is opened automatically
- with space for attaching designation strips

**Material:**

plastics

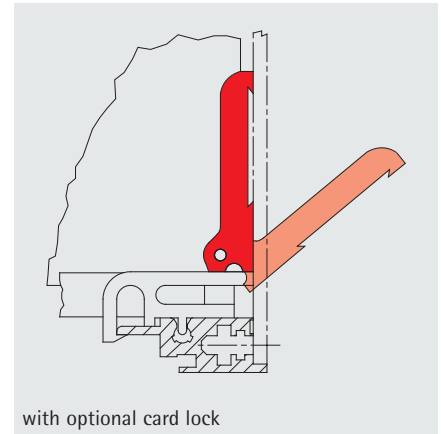
**Finish:**

matt black

Cannot be used in combination with a front panel.

<b>Order no.</b>
250-715

### Extraction handle, flat version



with optional card lock

- can be used with front panels
- the optional PCB lock is opened automatically

**Material:**

plastics, classified acc. to UL 94-V 0

**Finish:**

similar RAL 7035 light grey

<b>Order no.</b>
250-717

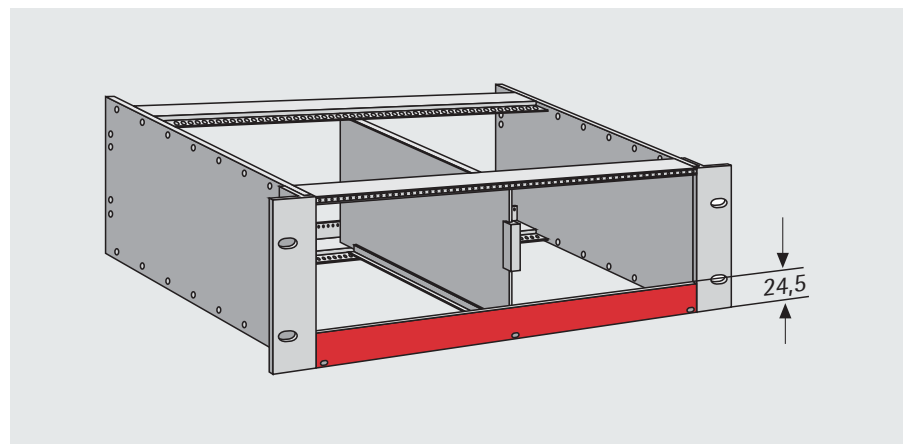
### Group lock extrusion

- the aluminium group lock extrusion secures all PCB's
- can be printed with customer-specific information if required

**Delivery**

Pc.	Description
1	Group lock extrusion, anodised
1	Rubber seal
3/4	Knurled screw
3/4	Screw holder

HP	Order no.
84	240-110-84
63	240-110-63
42	240-110-42





## 245 • 19" subrack, accessories

### Extension kit

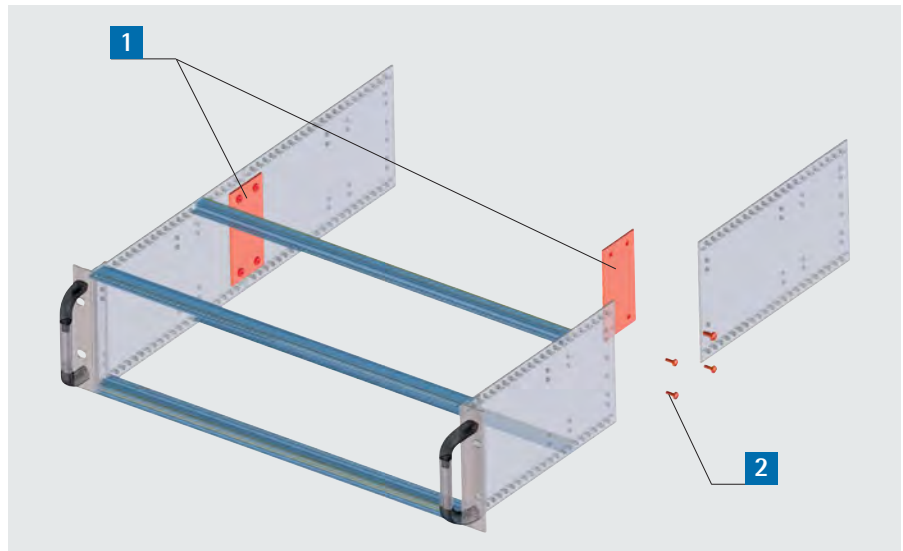
- for extending the side wall of the 245 subrack with one or more side panels

**Material:**  
aluminium 2,0 mm

### Delivery

Item	Pc.	Description
1	2	Extension plates
2	8	Oval-head screws M 4 x 5

Order no.
245-000-70



### Connecting kit

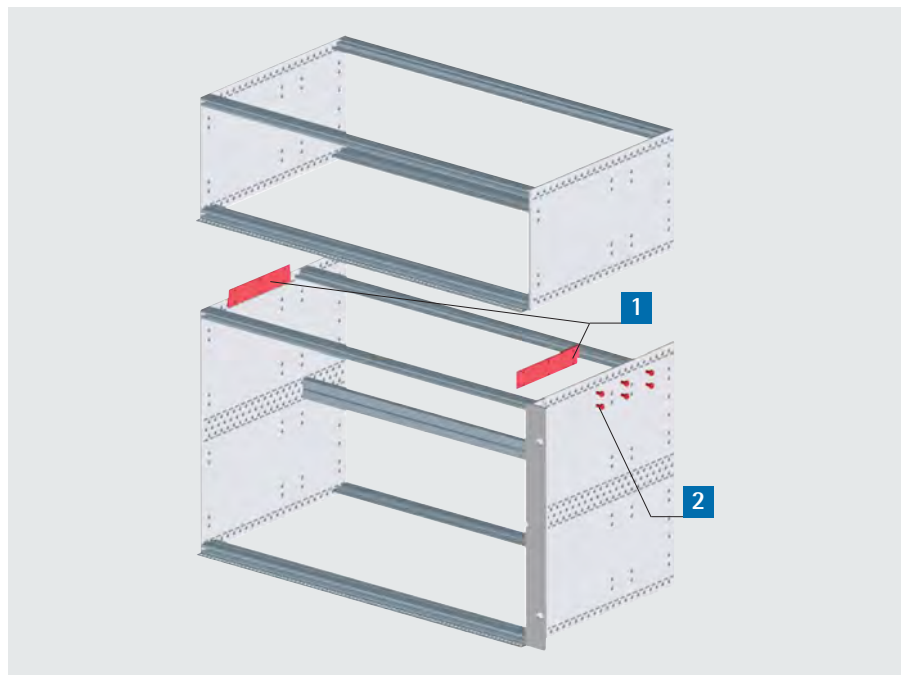
- for connecting individual subracks to a module subrack

**Material:**  
aluminium 1,5 mm

### Delivery

Item	Pc.	Description
1	2	Connecting plates
2	12	Oval-head screws M 3 x 6

Order no.
245-000-80



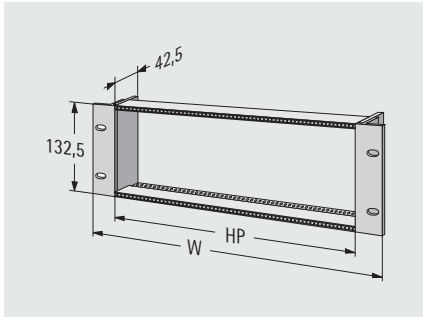
### Other accessory parts

Additional components and parts i.e. ETSI adapters or 23" adapters and other parts can be supplied. Please ask us for further information and specifications – we will be glad to design your customised product.





### Frame, 3 U



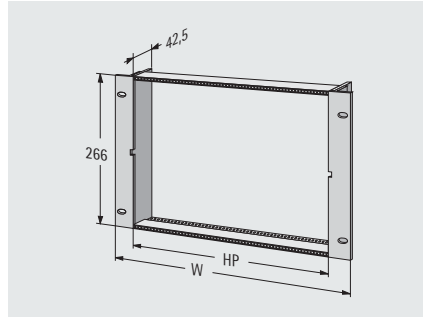
- single row with 2 threaded inserts

#### Delivery

Item	Pc.	Description
1	2	Front bracket
2	2	Module rails, chromated
3	2	Side pieces
4	2	Threaded inserts
5		Assembly material

HP	W mm	Order no.
84	482,60	242-901
42	269,40	242-911

### Frame, 6 U

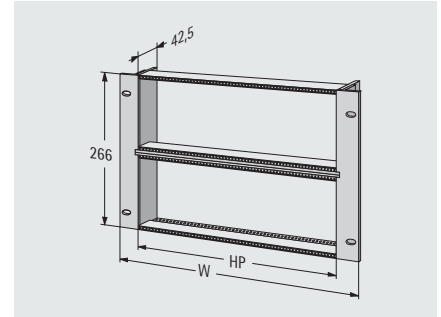


- with 2 threaded inserts

#### Delivery

Item	Pc.	Description
1	2	Front bracket
2	2	Module rails, chromated
3	2	Side pieces
4	2	Threaded inserts
5		Assembly material

HP	W mm	Order no.
84	482,60	242-903
42	269,40	242-913



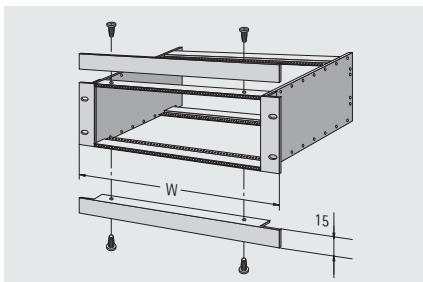
- double row with 4 threaded inserts

#### Delivery

Item	Pc.	Description
1	2	Front bracket
2	4	Module rails, chromated
3	2	Side pieces
4	4	Threaded inserts
5		Assembly material

HP	W mm	Order no.
84	482,60	242-902
42	269,40	242-912

### Cover bracket



- for subracks in control panels, bracket 15 x 15 x 2 mm
- bracket overlap the cut-out in a control panel

**Delivery:** unmounted

For the installation of the mounting brackets, additional M3 threads need to be added in the front module rails. The module rail 241-113 (84 HP) can be used alternatively.

#### Delivery

Item	Pc.	Description
1	1	Bracket
2	2	Countersunk screw M 3 x 8

HP	W mm	Order no.
84	482,60	240-111
42	269,40	240-112