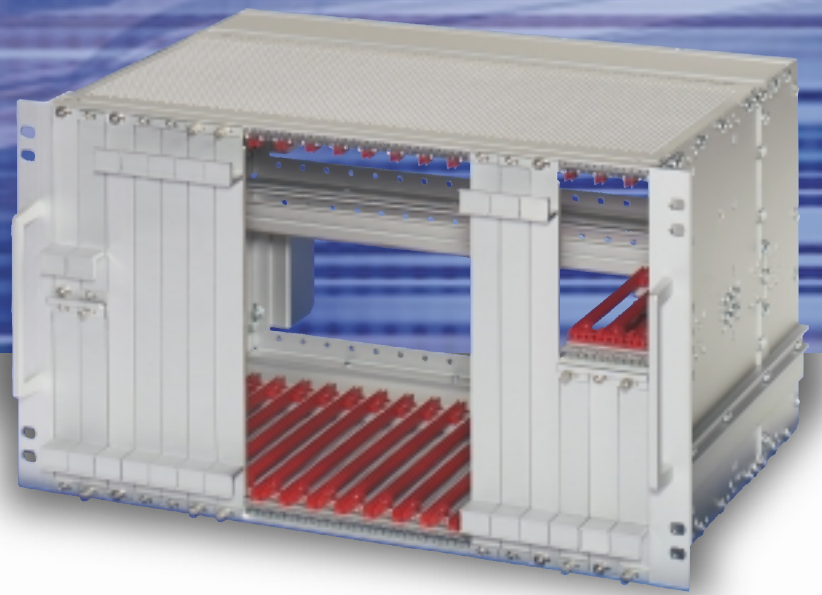# Schroff ®

Electronic Packaging for Railway Technology

Electronic Packaging:
competence for the railways

For more than 40 years Schroff has taken a leading position in terms of reliable protection and sound packaging of electronics.

Schroff develops and manufactures complete solutions on the basis of globally standardised subracks, cases and cabinet systems. These are the core competences that make Schroff a leader in enclosure technology. Electronic Packaging is what Schroff does best!
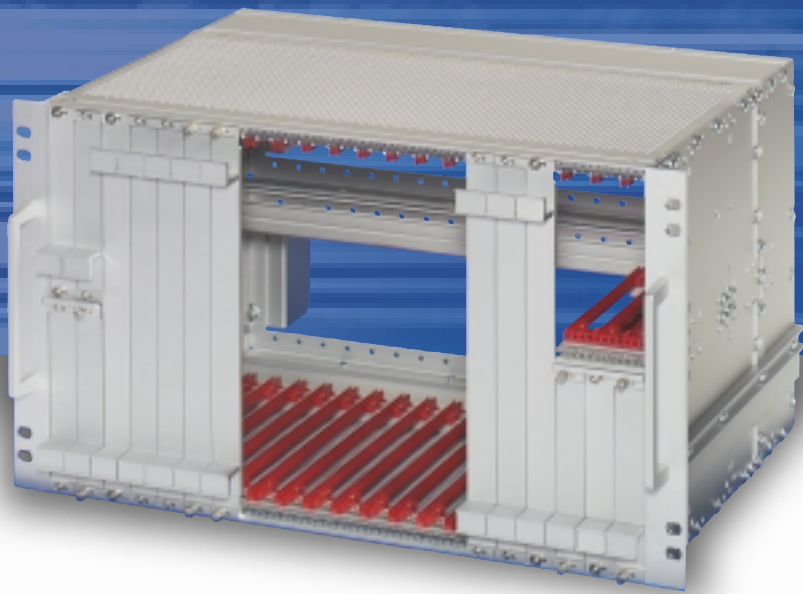

By courtesy of Siemens Transportation Systems,

Alstom

Global partner for

Globally standardised product range

Active involvement with international standard institutions provides Schroff with the best knowledge of global specifications. There are no entry barriers with Schroff solutions on the world market, as its product platform ensures that customers worldwide can fall back on standardised products.

Local project management

With manufacturing plants and numerous distributors throughout Europe Schroff is present at your local markets. Sound market knowledge and long standing experience with technologies in which Schroff products are used make it possible to get the right feel for specific demands. A team of experts is available to customers all around the world and stay with a project from beginning to end.

Schroff®

Where Schroff products convince

Enclosure technology from Schroff. Quality that meets the strong demands for safety of the railways. Perfectly coordinated technology and worldwide service ensure reliability to the smallest component.

Quality with cost advantages

Approximately 80 % of Schroff enclosure solutions are based on standard products which can be used without modifications. Their modular design enables the economical adaptation to individual demands within the shortest possible time. Technical and financial risks are reduced to a minimum.

Large selection and high flexibility

Schroff has at its disposal one of the most extensive ranges of standardised and certified components for complete Electronic Packaging solutions. With modular construction it allows the configuration of standard solutions in almost any combination. This enormous flexibility offers the highest degree of functionality and economy.

border crossing rail traffic

Solid construction mechanics

Electronics for mobile areas of application need heavy duty construction mechanics that stand up to the most extreme environmental conditions. Schroff enclosure solutions protect installed electronics through high mechanical stability and thus contribute to the safe and trouble-free function of the entire system. Only reliability of everything to the smallest detail can accomplish complex safety requirements and prove economic at the same time.
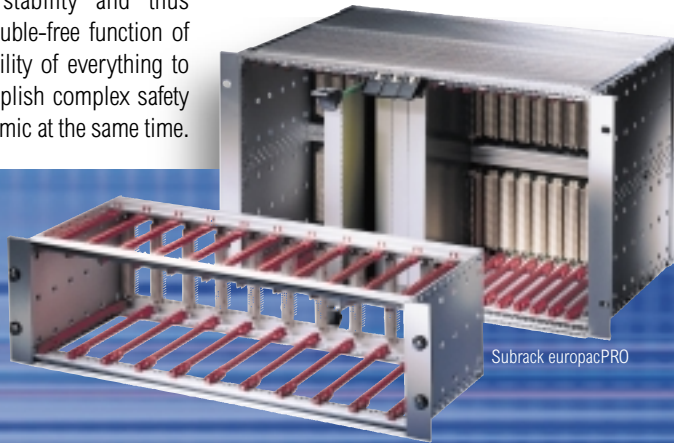
Accreditation of mechanics to DIN EN 50 155

High value, heavy duty and long lasting products are important building blocks for the accreditation of the entire application to DIN EN 50 155.
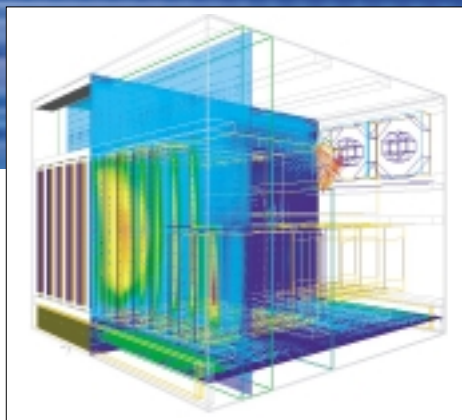

Subrack europacPRO

Certified quality inside the train …

Certificate BN 411002 from TÜV Mannheim

Gasketing concepts are tested in the laboratory at Karlsruhe University for EMC suitability

Example of a thermal simulation

Subracks europacPRO during a shock and vibration test

Added value through expansion of core competences

Schroff is constantly expanding its core competences in order to provide additional value with expertise in areas such as EMC, thermal management, shock and vibration stability.

EMC measures

Even the basic construction of products contains measures for electromagnetic shielding. Depending on the degree of shielding required for the application, cost effective concepts are created singly or as combinations.

Thermal management

With thermal computer simulation alternative solutions can be analysed fast and cost effectively. As a rule, a model of the optimisation test can be used for the final systems test.

Shock- und vibration stability

Schroff products guarantee shock and vibration stability for mobile applications e.g. through the selection of materials and assembly techniques. Tested with typical loads, they offer the best prerequisites for safety and reliability in individual applications and projects.

Subracks europacPRO

Based on the europac system that has already proven itself for railway technology over many years, the new europacPRO product range offers additional technical and economic advantages. It fulfils the relevant standards for subracks relating to dimensions and environmental requirements.

Standard	Europe in general	Deutsche Bahn	SNCF
Dimensions	IEC 60297 IEEE 1101.10/.11	BN 411003	NF F61-005
Shock + vibration	IEC 61587 EN 50155	BN 411002	NF F67-012 NF F60-002
EMC	VG 95373 P15		
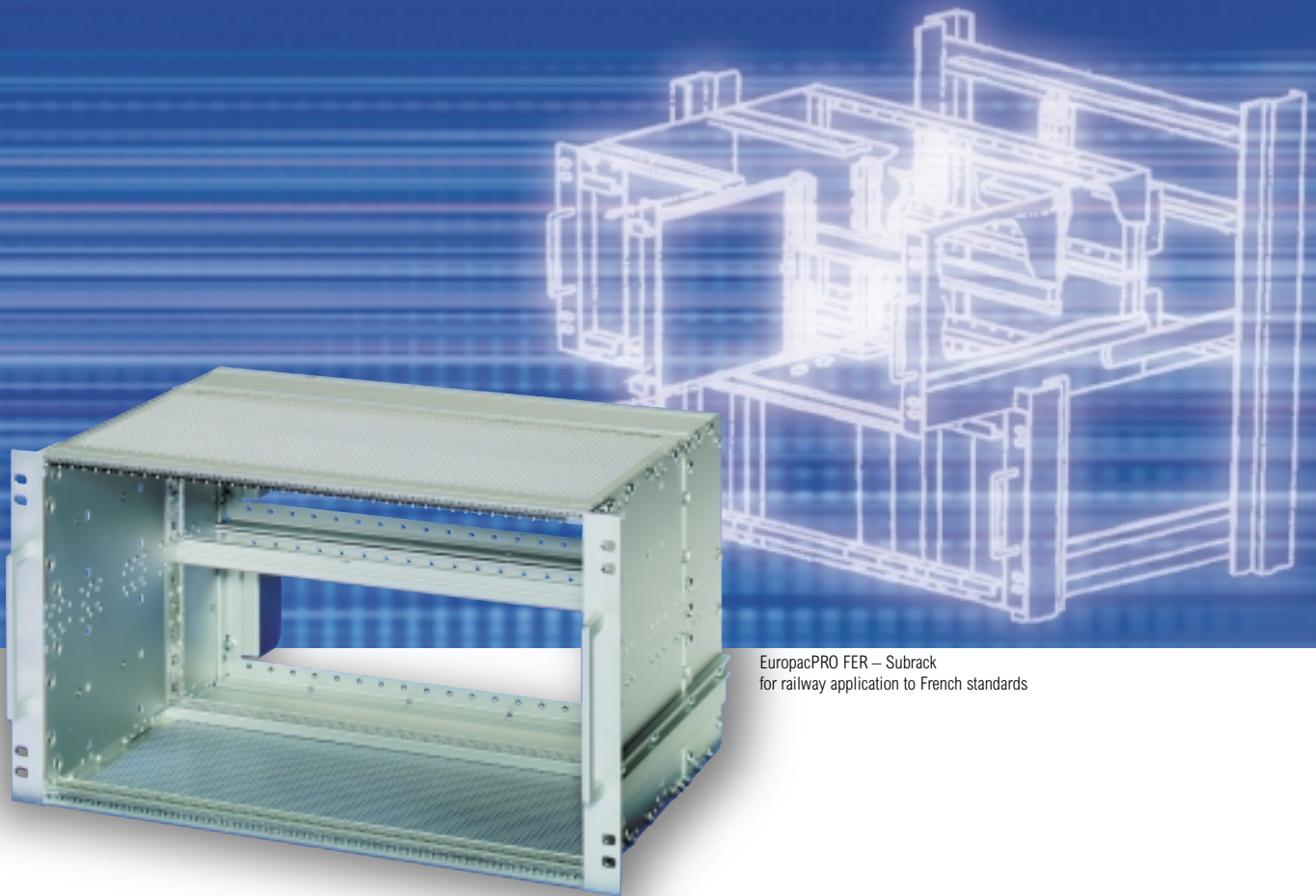
EuropacPRO FER – Subrack
for railway application to French standards

High technical standard

The standard range provides an extensive guide rail program, offering the customer in the railway sector additional advantages: reinforced guide rails, the possibility to screw on guide rails, ESD clips.

Modularity

High flexibility serves for cost effective realisation of specific demands through versatile combinations of standard parts. Custom-made items enhance the product range depending on demand.

Front panels

For each project the front panel of a 19" subrack or case can be individually customised. With CAD data exchange via the Internet fast and comfortable processing is possible.
Detailed information on the web site at:
www.schroff.biz/fpe

Systems

Independently from bus technology, which is used for these applications, Schroff offers complete Electronic Packaging solutions from one source.

… and on route

VME/VME64x Systems:
flexibility through variable modules

Schroff VMEbus systems correspond to the latest standards and customer demands. The mechanical construction is based on the proven 19" subrack europacPRO. Further to a choice of standard configurations, systems can be customised with bus bars, power supplies, fans and drive units. The micro controller monitoring for the fans guarantees high functionality and reduced noise levels.

CompactPCI:
systems from a kit

The product range that is available in kit form offers the user an extremely high degree of flexibility with an optimal price-to-performance ratio. Configuration software that is freely accessible on the Internet, leads the user quickly and comfortably through the range. Detailed information is available on the Internet at:
www.schroff.biz/configurator

AdvancedTCA – the new standard
for fast computer systems

Following the advancement in the area of telecommunications the PICMG (PCI Industrial Computers Manufacturing Group) developed the Advanced Telecom Computing Architecture.
Schroff's experts have not only contributed actively to the development of the ATCA standard, but have already developed a great number of products conforming to these standards, that can be applied in related areas.

Schroff's offer encompasses several ATCA systems in differing designs as well as the complete range of accessories such as front panels, shelf manager, adaptor board for CPCI and various backplanes.

Wall-mounted cases:
space saving and comfortable

Inside vehicles the use of enclosures is often made more difficult because of restricted space. The conceptline case from Schroff offers not only the adjustment of the outer dimensions to the individual area, but also good accessibility of the assembled components.

Furthermore, subracks can be taken out of the enclosure as complete units whilst the cabling remains in the enclosure.

Outdoor cabinets

Schroff's outdoor cabinets, which are based on the standard IEC 61 969 series, are tested rigorously and guarantee the survival of sensitive electronics outdoors. They fulfil the guide lines and standards for shock and vibration stability, are earthquake proof and offer environmental protection tested to IEC 68-2-1, -2, -14.

Further technical advantages lie with the high stability of the cabinets, easy access and special cable inlets. The assembly possibilities are flexible with 19", ETSI or other non-standard accessories. Schroff can integrate outdoor cabinets with basic elements of Electronic Packaging, such as cabling, climate control, power supplies and further EMC measures.

Indoor cabinets

For application in signal boxes and other technical areas the cabinet range PROLINE has proven itself with its versatile usability. From the extensive accessory program many parts can be configured individually. 19" electronics and provisions for switchgear can be housed reliably and cost effectively.

Further products:
- ☑ Network parts
- ☑ Fans
- ☑ 19" Enclosures

See **www.schroff.biz**

Computer based railway control centre
(Photo: CSEE Transport)

Fully electronic railway control centre
(Photo: MEN)

Focussed on our customer

GSMR components for electrically powered locomotives
(Photo: Hörmann Funkwerke Kölleda)

Onboard computer for LZB
(Photo: Alcatel SEL AG)

Outdoor cabinet on route
(Photo: Schroff GmbH)

Individual team of experts

Schroff has made the requirements of its customers their main priority. Therefore the customer has an individual team of experts by his side starting at the consultation phase. The team stays with the project for its entire life cycle and the customer profits from a genuine partnership during all phases of the project.

Computer simulation

Computer simulations 'at first' – this is how a project starts. Only then does the construction and production start. This is how an individually tailored Electronic Packaging solution is created.

System integration

Our customers want Electronic Packaging as a complete solution. Schroff understands all of the basic elements such as cabling, climate control or power supplies in a cabinet or case. Users can avoid interface problems and profit from the fact that they can concentrate on their own core competences.

Tailored „Plug & Play" solutions from one source

Service and reliability

Based on the extensive product range, Schroff is in a position to realise customer specific modifications fast and efficiently. A refined range of accessories enables retro-fitting on demand. It is without question that all parts are available on a long term basis!

- ☑ Better solutions
- ☑ Shorter time to market
- ☑ Less interfaces
- ☑ More efficient logistics

Cabinets – PROLINE

Electronics cabinet with front door

41098005

- Type of protection IP 55
- Front door glazed
- Incl. 19" panel/slide mounts
- Finish RAL 7035

Delivery comprises (assembled)

Item	Qty	Description
1	1	Frame, welded, 2.5 mm steel, RAL 7035
2	2	Side panels, screwed
3	1	Glazed front door, safety glass, incl. lever handle, door opening angle 120°
4	1	Rear door, steel, incl. lever handle, left hand hinged, door opening angle 120°
5	1	Top cover, plain
6	1	Base plate
7	2	19" panel mount, front

Illustration shows cabinet (10127-129) with 2 × depth members (21127-111)

Order Information

Height U	Height mm	Width mm	Depth mm	Cabinet Order no.	Plinth height 100 mm Order no.	Mobile base/plinth Order no.	2 × 19" panel mounts Order no.	2 × depth members Order no.
38	1800	609	600	**10127-129**	**25127-242**	**20127-541**	**24127-516**	**21127-111**
38	1800	609	800	**10127-130**	**25127-243**	**20127-541**	**24127-516**	**21127-112**
43	2000	609	600	**10127-131**	**25127-242**	**20127-541**	**24127-518**	**21127-111**
43	2000	609	800	**10127-132**	**25127-243**	**20127-541**	**24127-518**	**21127-112**
Assembly kit for 2 depth members for mounting rails (cabinet depth, cabinet width), 1 set								**21199-183**
Erdungssatz 7 x Cu wire, 310 mm long incl. assembly kit								**21101-615**

Note
- Earthing kit please order separately
- Further dimensions and accessories in ServicePlus

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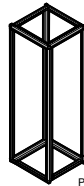oneClick code = Order no.

Cabinets – PROLINE

Universal cabinet with steel door

41003001

■ Type of protection IP 55

■ Front door steel

■ For individual mounting (e.g. with mounting plate, useable as switch gear cabinet

■ Finish RAL 7035

Delivery comprises (assembled)

Item	Qty	Description
1	1	Frame, welded, 2,5 mm steel, RAL 7035
2	2	Side panels screwed
3	1	Steel front door, incl. lever handle, door stop on the left, door opening angle 120°
4	1	Rear panel
5	1	Top cover, plain
6	1	Base plate

Order Information

Height U	Height mm	Width mm	Depth mm	Cabinet Order no.	Plinth height 100 mm Order no.	Mobile base/plinth Order no.	2 × 19" panel mounts Order no.	2 × depth members Order no.
38	1800	609	600	**10127-160**	**25127-243**	**20127-541**	**24127-516**	**21127-111**
38	1800	609	800	**10127-161**	**25127-242**	**20127-541**	**24127-516**	**21127-112**
43	2000	609	600	**10127-162**	**25127-243**	**20127-541**	**24127-518**	**21127-111**
43	2000	609	800	**10127-163**	**25127-242**	**20127-541**	**24127-518**	**21127-112**
Assembly kit for 2 depth members for mounting rails (cabinet depth, cabinet width), 1 set								**21199-183**
Erdungssatz 7 x Cu wire, 310 mm long incl. assembly kit								**21101-615**

Note

■ Earthing kit please order separately

■ EMC Version on request

■ Further dimensions and accessories in ServicePlus

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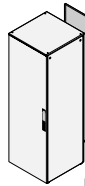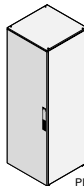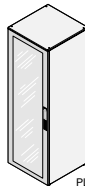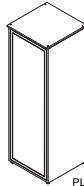oneClick code = Order no.

Cabinets – PROLINE

ServicePLUS

The special assembly service
■ We assemble to your specifications

■ Environmentally friendly by only one package

■ Please talk to our local sales departement concerning availability and delivery time

Order information

					Frame RAL 7035	Side panel RAL 7035	Rear panel RAL 7035	Steel door RAL 7035	Glass door RAL 7035	Cover frame RAL 7035
					PLA45442	PLA45443	PLA45444	PLA45446	PLA45445	PLA45708
Qty					**1 piece**	**2 pieces**	**1 piece**	**1 piece**	**1 piece**	**1 piece**
Cabinet dimensions										
	Height		Width	Depth						
No.	U	mm	mm	mm						
1	29	1400	600	600	20127-613	22127-391	20127-698	22127-408	26127-387	22127-417
2	34	1600	600	600	20127-572	20127-644	20127-686	20127-736	26127-388	22127-076
3	34	1600	600	800	20127-573	20127-645	20127-686	20127-736	26127-388	22127-076
4	38	1800	600	600	20127-576	20127-648	20127-687	20127-737	26127-389	22127-077
5	38	1800	600	800	20127-577	20127-649	20127-687	20127-737	26127-389	22127-077
6	38	1800	800	600	20127-580	20127-648	20127-688	20127-738	26127-390	–
7	38	1800	800	800	20127-581	20127-649	20127-688	20127-738	26127-390	–
8	43	2000	600	600	20127-585	20127-653	20127-689	20127-739	26127-391	22127-078
9	43	2000	600	800	20127-586	20127-654	20127-689	20127-739	26127-391	22127-078
10	43	2000	800	600	20127-589	20127-653	20127-690	20127-740	26127-392	–
11	43	2000	800	800	20127-590	20127-654	20127-690	20127-740	26127-392	–
12	47	2200	600	600	20127-592	20127-656	20127-691	20127-741	26127-393	22127-079
13	47	2200	600	800	20127-593	20127-657	20127-691	20127-741	26127-393	22127-079

■ **How to order?**
After the order no., write the index **/05** (e.g. 20123-456**/05**) and specify the desired installation position. When no position is specified; equipment is mounted in a standard position

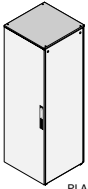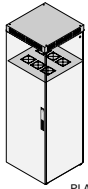**For further information www.schroff.biz/oneclick**
oneClick code = Order no.

Cabinets – PROLINE

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■ **www.schroff.biz/serviceplus**
– further dimensions
– further accessories
– technical data

Order information

No.	U	Height mm	Width mm	Depth mm	Top cover RAL 7035 1 piece	Top cover raised RAL 7035 1 piece	Top cover for fan tray RAL 7035 1 piece	Base plate IP 55 1 piece	Base plate with filter 1 piece	Base/plinth 100 mm 1 piece
1	29	1400	600	600	20127-769	20127-805	21127-656	25127-456	25127-580	25127-242
2	34	1600	600	600	20127-769	20127-805	21127-656	25127-456	25127-580	25127-242
3	34	1600	600	800	20127-770	20127-806	21127-658	25127-457	25127-581	25127-243
4	38	1800	600	600	20127-769	20127-805	21127-656	25127-456	25127-580	25127-242
5	38	1800	600	800	20127-770	20127-806	21127-658	25127-457	25127-581	25127-243
6	38	1800	800	600	20127-773	20127-809	21127-661	25127-461	25127-585	25127-246
7	38	1800	800	800	20127-774	20127-810	21127-663	25127-462	25127-586	25127-247
8	43	2000	600	600	20127-769	20127-805	21127-656	25127-456	25127-580	25127-242
9	43	2000	600	800	20127-770	20127-806	21127-658	25127-457	25127-581	25127-243
10	43	2000	800	600	20127-773	20127-809	21127-661	25127-461	25127-585	25127-246
11	43	2000	800	800	20127-774	20127-810	21127-663	25127-462	25127-586	25127-247
12	47	2200	600	600	20127-769	20127-805	21127-656	25127-456	25127-580	25127-242
13	47	2200	600	800	20127-770	20127-806	21127-658	25127-457	25127-581	25127-243

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

Cabinets – PROLINE

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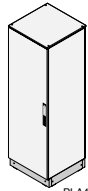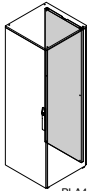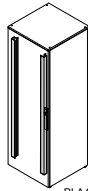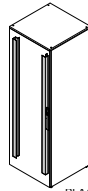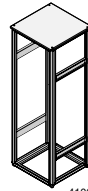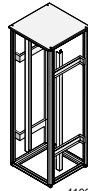
■ **www.schroff.biz/serviceplus**
  – further dimensions
  – further accessories
  – technical data

Order information

No.	U	Height mm	Width mm	Depth mm	Ventilated base/plinth 100 mm 1 piece	Mounting plate zinc-plated 1 piece	19"-Panel mount RAL 7035 1) 2 pieces	Panel/slide mount metric 515 1) 2 pieces	Depth member 2) 2 pieces	Reduced width depth member 2 pieces
1	29	1400	600	600	25127-424	–	24127-512	–	21127-111	–
2	34	1600	600	600	25127-424	21127-055	24127-514	–	21127-111	–
3	34	1600	600	800	25127-425	21127-055	24127-514	–	21127-112	–
4	38	1800	600	600	25127-424	21127-057	24127-516	24127-749	21127-111	–
5	38	1800	600	800	25127-425	21127-057	24127-516	24127-749	21127-112	–
6	38	1800	800	600	25127-428	21127-058	24127-516	24127-749	–	22127-474
7	38	1800	800	800	25127-429	21127-058	24127-516	24127-749	–	22127-476
8	43	2000	600	600	25127-424	21127-059	24127-518	24127-753	21127-111	–
9	43	2000	600	800	25127-425	21127-059	24127-518	24127-753	21127-112	–
10	43	2000	800	600	25127-428	21127-060	24127-518	24127-753	–	22127-474
11	43	2000	800	800	25127-429	21127-060	24127-518	24127-753	–	22127-476
12	47	2200	600	600	25127-424	21127-061	24127-520	24127-757	21127-111	–
13	47	2200	600	800	25127-425	21127-061	24127-520	24127-757	21127-112	–

(PLA45449, PLA45453, PLA45451, PLA45451, 41001557, 41001561)

1) cabinet width 800 mm reduced width depth member necessary

2) Assembly kit 21199-183 necessary

@ **For further information www.schroff.biz/oneclick**
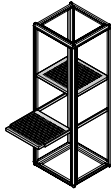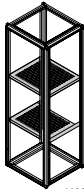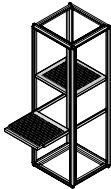oneClick code = Order no.
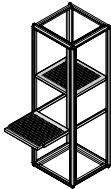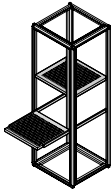
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■ **www.schroff.biz/serviceplus**
  – further dimensions
  – further accessories
  – technical data

Order information

No.	Height U	mm	Width mm	Depth mm	19"-Shelf stationary 3) 1 piece	19"-Shelf telescopic 3) 1 piece	Telescopic Slide 2 pieces	Universal-Shelf stationary 1 piece	Universal-Shelf telescopic 1 piece	Telescopic Slide 2 pieces
1	29	1400	600	600	**21127-162**	**21127-189**	**22114-340**	**21127-147**	**21127-169**	**21127-182**
2	34	1600	600	600	**21127-162**	**21127-189**	**22114-340**	**21127-147**	**21127-169**	**21127-182**
3	34	1600	600	800	**21127-163**	**21127-191**	**22114-342**	**21127-148**	**21127-171**	**21127-183**
4	38	1800	600	600	**21127-162**	**21127-189**	**22114-340**	**21127-147**	**21127-169**	**21127-182**
5	38	1800	600	800	**21127-163**	**21127-191**	**22114-342**	**21127-148**	**21127-171**	**21127-183**
6	38	1800	800	600	**–**	**–**	**–**	**21127-151**	**21127-174**	**21127-182**
7	38	1800	800	800	**–**	**–**	**–**	**21127-152**	**21127-176**	**21127-183**
8	43	2000	600	600	**21127-162**	**21127-189**	**22114-340**	**21127-147**	**21127-169**	**21127-182**
9	43	2000	600	800	**21127-163**	**21127-191**	**22114-342**	**21127-148**	**21127-171**	**21127-183**
10	43	2000	800	600	**–**	**–**	**–**	**21127-151**	**21127-174**	**21127-182**
11	43	2000	800	800	**–**	**–**	**–**	**21127-152**	**21127-176**	**21127-183**
12	47	2200	600	600	**21127-162**	**21127-189**	**22114-340**	**21127-147**	**21127-169**	**21127-182**
13	47	2200	600	800	**21127-163**	**21127-191**	**22114-342**	**21127-148**	**21127-171**	**21127-183**

Qty = Cabinet dimensions

3) for 19" brackets on the frame

41003054 · 41003055 · 41003054 · 41003055

Further accessories

Order information

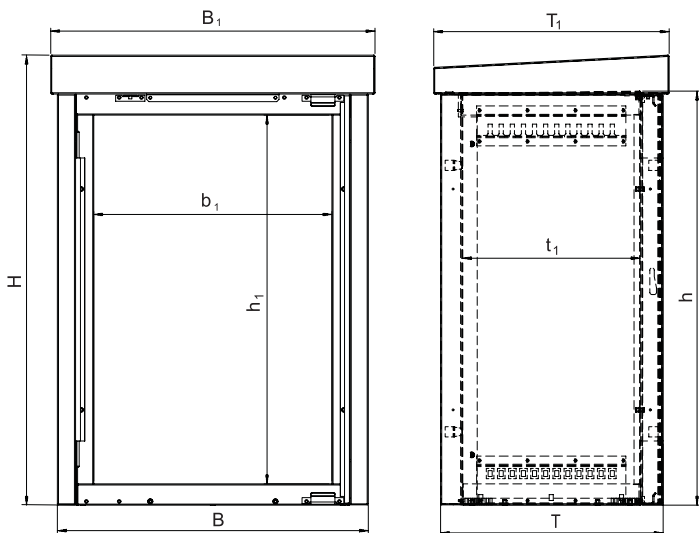| Description	Qty	Order no.
Door hinge 180°	1	**22127-319**
Lever handle	1	**20127-333**
Lifting eye	4	**20114-247**
Adjustable support feet	4	**20127-530**
Earthing kit (cabinet)	1	**21101-615**
Earthing kit (shelf stationary)	1	**21101-616**
Earthing kit (shelf telescopic)	1	**21101-178**
T-bar lock (shelf telescopic)	1	**21101-132**

Outdoor – Unibody

Unibody
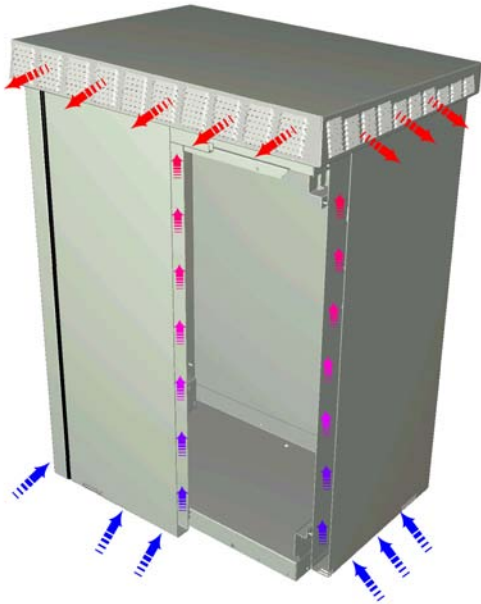
41603054

- Heat dissipation through natural convection
- IP 55
- Double-Walled
- One-piece aluminium frame
- Aluminium outside panels
- Frame RAL 7035 light grey, hinge RAL 7021 dark grey
- Base/plinth or panel mounting necessary, will be mounted on the Unibody when delivered

Delivery comprises (assembled)

Item	Qty	Description
1	1	Inside frame, Al
2	2	Side panel, Al, RAL 7035
3	1	Front door, incl. handle, 3-point lock, door opening angle 135°, door retainer at 120°, door hinged (on left)
4	1	Rear panel, Al, RAL 7035
5	1	Roof, Al, RAL 7035
6	1	Base plate with cable ducting plate, Al
7	4	Mounting angle for 19"/metrical panel/slide mount
8	1	GND/earthing kit, assembled

Order Information

Height U	Height mm	Width mm	Depth mm	q_W W/K	Order no.
16	930	700	500	5	**11249-003**
20	1100	700	500	6	**11249-005**
Base/plinth for Unibody height 100 mm, width 700 mm, depth 500 mm, 1 piece					**21249-013**
Base/plinth for Unibody height 200 mm, width 700 mm, depth 500 mm, 1 piece					**21249-015**
Panel mounting 1 kit					**21249-017**

q_W = specific thermal output

Note
- Base/plinth or panel mounting please order separately

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

41603058

H mm	H U	B mm	T mm	h mm	t_1 mm	b_1 mm	h_1 mm	B_1 mm	T_1 mm
930	16	700	500	838	536	400	736	730	530
1100	20	700	500	1013	536	400	911	730	530

Outdoor – Modular

Modular HEX

41603052
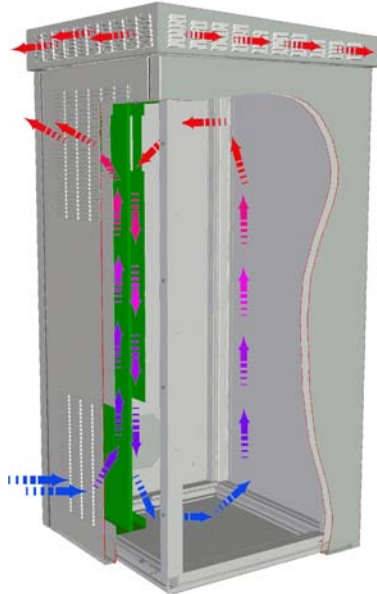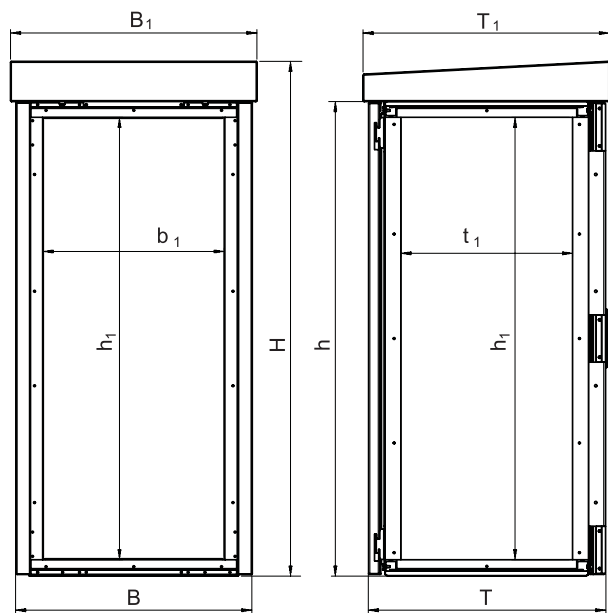
- Forced heat dissipation with integrated heat exchanger in the door
- IP 55
- Double-Walled
- Aluminium frame profile
- Aluminium covers
- Frame RAL 7035 light grey, hinge RAL 7021 dark grey
- Single door (at 700 mm width), double door (at 1300 mm width)
- Base/plinth necessary, will mounted at Modular when delivered

Delivery comprises (assembled)

Item	Qty	Description
1	1	Frame, bolted, Al, RAL 7035
2	2	Double side panel Al, interior raw, exterior RAL 7035
3	1	Front door (at 700 mm width), double door (at 1300 mm width), incl. handle, 3-point lock, door opening angle 135°, door retainer at 120°, door hinged (on left)
4	1	Double rear panel, Al, interior raw, exterior RAL 7035
5	1	Intermediate roof, Al, RAL 7035
6	1	Base plate with cable connection plate
7	4	Depth member for 19"/metrical panel/slide mount
8	1	GND/earthing kit, assembled
9	1	Heat exchanger 48 V_{DC} (electronic regulation with alarm outputs), incl. temperature sensor, heater. Capacity 70 W/K at full fan speed. At reduced noise level from 58 db(A) 40 W/K. Specific thermal output in relation to temperature difference (air input interior - air input exterior)

41603059

Order Information

Height		Width	Depth	q_W	Order no.	Base/plinth height 100 mm	Base/plinth height 200 mm
U	mm	mm	mm	W/K		Order no.	Order no.
25	1330	1300	600	70	**10149-313**	**21149-159**	**21149-162**
29	1510	700	700	70	**10149-315**	**21149-158**	**21149-161**
29	1510	1300	600	70	**10149-316**	**21149-159**	**21149-162**

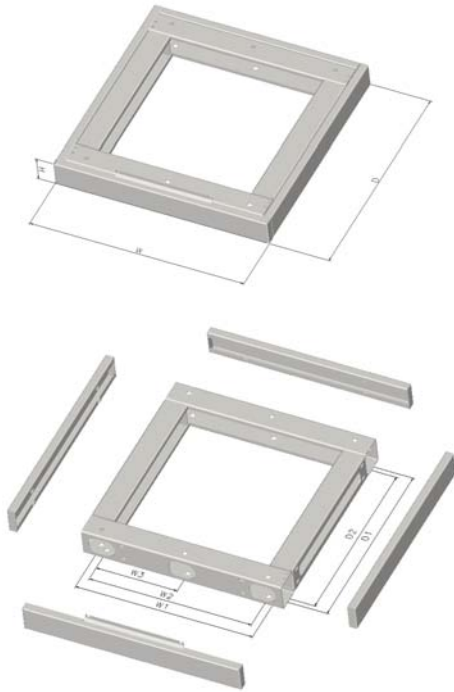q_W = specific thermal output

Note
- Base/plinth please order separately
- q_W are middle values for the frame with heat exchanger
- Detailed information for base/plinth see page 18

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

H mm	H U	B mm	T mm	h mm	b_1 mm	t_1 mm	h_1 mm	B_1 mm	T_1 mm
1330	25	1300	600	1233	1136	408,5	1136	1330	630
1510	29	700	700	1408	536	508,5	1311	730	730
1510	29	1300	600	1408	1136	408,5	1311	1330	630

Outdoor – Modular Accessories

Base/plinth for Modular

■ With removable cover for cable entry at all sides

■ Opening front and rear, also for transport device

Delivery comprises

Item	Qty	Description
1	1	Base/plinth frame welded, St zinc-plated, RAL 7035
2	4	Cover frame, Al, RAL 7035

41603061

Order Information

Height H mm	For cabinet width mm	For cabinet depth mm	Order no.
100	700	600	**21149-157**
100	700	700	**21149-158**
100	1300	600	**21149-159**
200	700	600	**21149-160**
200	700	700	**21149-161**
200	1300	600	**21149-162**

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

41603062

Base/plinth for Modular: Width 700 mm x Depth 700 mm

H mm	W mm	W1 mm	W2 mm	W3 mm	D mm	D1 mm	D2 mm
100	662	540	494	247	662	553	525
200	662	540	494	247	662	553	525

Base/plinth for Modular: Width 700 mm x Depth 600 mm

H mm	W mm	W1 mm	W2 mm	W3 mm	D mm	D1 mm	D2 mm
100	662	540	494	247	562	453	425
200	662	540	494	247	562	453	425

Base/plinth for Modular: Width 1300 mm x Depth 600 mm

H mm	W mm	W1 mm	W2 mm	W3 mm	D mm	D1 mm	D2 mm
100	1262	1140	1094	547	562	453	425
200	1262	1140	1094	547	562	453	425

Standard part
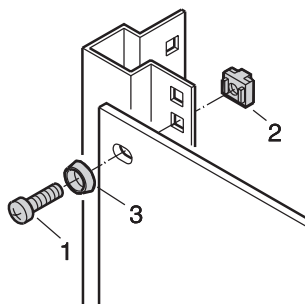
Delivery comprises

Item	Qty	Description
1	32	Screw pozidrive M6 x 16
2	32	Cage nut M6
3	32	Plastic washer black

Order Information

Description	Description	Order no.
Assembly kit	32 x screws, washers, cage nuts (M6) each	**21190-435**

SC128XXX

For further information ... www.schroff.biz

Outdoor – Accessories

Metric panel/slide mount
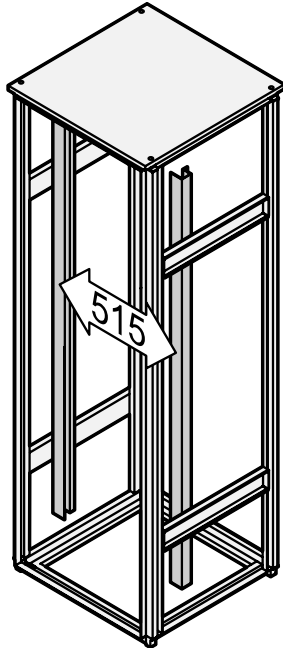
■ For metrical components as per IEC 60917-2-1

Delivery comprises

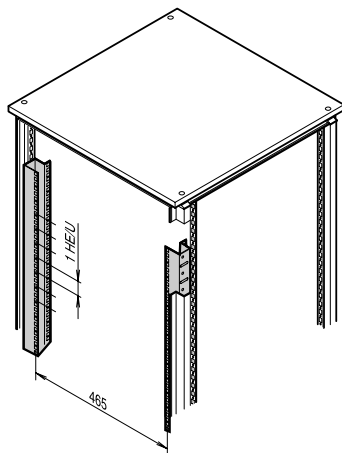| Item	Qty	Description
1	2	Metric panel/slide mount, bolt-on dimension 515 mm, St 2 mm, AlZn
2	1	Assembly kit, incl. GND/earthing

Order Information

For cabinet height mm	Usable height SU	Length mm	AlZn Order no.
Partial-height mounting	16	400	**24127-547**
Partial-height mounting	21	525	**24127-682**
930	28	700	**24127-686**
1100	35	875	**24127-689**
1330	44	1100	**24127-694**
1510	51	1275	**24127-697**

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

41001548

19" panel/slide mounts

■ For mounting chassis, subracks, distribution and blank panels

■ Mounting, on Modular directly to the frame or to depth member and Unibody to depth member only

■ As per IEC 60297-1 (DIN 41 494, Part 1)

Delivery comprises

Item	Qty	Description
1	2	19"-panel/slide mount, bolt-on dimension 465 mm, St 2 mm, finish AlZn
2	1	Assembly kit, incl. GND/earthing

PLA45434

Order Information

For Cabinet height mm	Usable height U	Length mm	Order no.
Partial-height mounting	9	400	**24127-370**
Partial-height mounting	12	533	**24127-484**
930	16	711	**24127-485**
1100	20	889	**24127-487**
1330	25	1111	**24127-489**
1510	29	1289	**24127-491**

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

Case – CONCEPTLINE wall case

Wall case with mounting plate
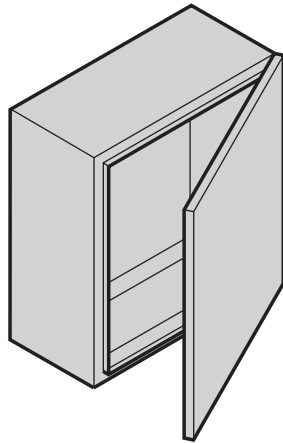
■ Door opening angle 130°

■ Type of protection IP 66

Delivery comprises (assembled)

Item	Qty	Description
1	1	Basic case, St 1,5 mm, RAL 7032
2	1	Door 2 mm steel, RAL 7032, with seal (right side hinged)
3	1	Gland plate, 1.5 mm steel, bottom mounted
4	1/ 2	Lock 3 mm double bit, case height up to 600 mm: 1 lock, case height 800 mm: 2 locks
5	1	Mounting plate, zinc-plated
6	1	Assembly kit

CONST001
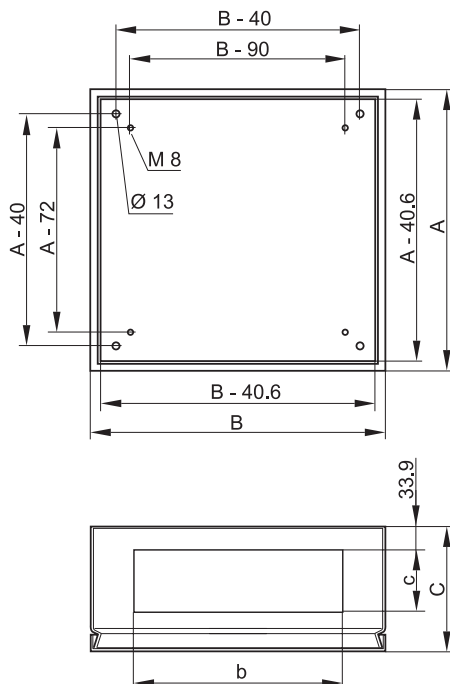
Order Information

Case			Gland plate aperture		Weight	Order no.
A	B	C	b	c		
mm	mm	mm	mm	mm	kg	
300	250	150	187	62	6.4	**12406-160**
300	300	220	220	100	8.7	**12406-162**
400	300	150	187	62	9.5	**12406-161**
400	300	220	220	100	10.9	**12406-163**
400	400	220	220	100	13.1	**12406-164**
400	600	220	420	100	20.5	**12406-168**
500	400	220	220	100	16.4	**12406-165**
500	500	220	420	100	18.6	**12406-167**
600	400	220	220	100	18.9	**12406-166**
600	600	220	420	100	33.2	**12406-169**
600	600	320	420	100	36.7	**12406-171**
800	600	220	420	100	41	**12406-170**
800	600	320	420	100	45	**12406-172**
800	600	420	420	100	46.7	**12406-173**
Wall assembly bracket St, 2,5 mm, zinc-plated, 4 pieces						**12406-403**
Earthing kit Cu-wire, green/yellow, 2 pieces						**12406-400**

A= case height, B= case width, C= case depth
b= width gland plate aperture, c= depth gland plate aperture

CONST002

Note
■ Other sizes available on request
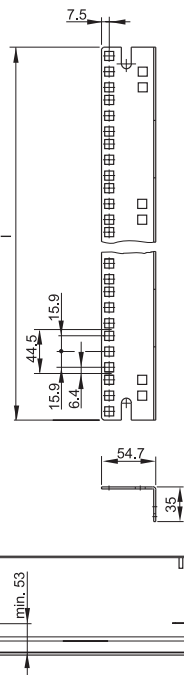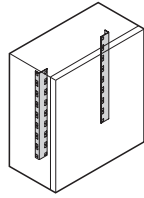■ For depth-adjustable assembly of the mounting plate depth members and mounting brackets are required, see page 21

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

Case – CONCEPTLINE wall case

19" panel mount

- For mounting 19" components complying with IEC 297
- Only suitable for case with a width of 600 mm
- If depth members are used, recessed installation is possible

Delivery comprises (kit)

Item	Qty	Description
1	2	19" panel mount, 2 mm steel, zinc-plated
2	1	Assembly kit

Order Information

Height U	l mm	A mm	Order no.
8	362	400	**12406-450**
10	454	500	**12406-451**
12	550	600	**12406-452**
17	762	800	**12406-454**
Cage nut M6 for material thicknesses 1.8 - 2.6 mm, 100 pieces			**21100-004**
Panhead screw M6, zinc-plated , 100 pieces			**21100-022**
Plastic washer M6, 100 pieces			**21100-016**
Cage nut M6 for GND/earthing, 10 pieces			**21100-101**
Cage nut M6 for GND/earthing, 100 pieces			**21100-102**

A = case height, l = length panel mount
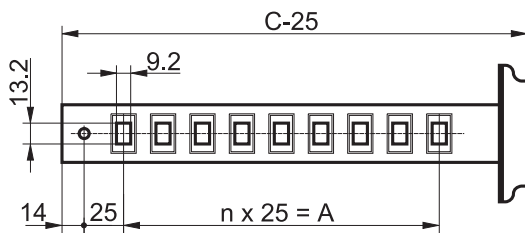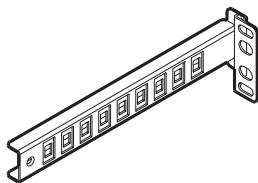
Depth member

- The depth member enables recessed installation of 19" panel mounts or the mounting plate

Delivery comprises

Item	Qty	Description
1	4	Depth member, 2 mm steel, zinc-plated
2	1	Assembly kit

Order Information

C mm	Order no.
220	**12406-419**
320	**12406-418**
420	**12406-411**
Mounting bracket for depth-adjustable assembly of mounting plate, 4 pieces	**12406-730**

C = case depth

Subracks – *europacPRO*

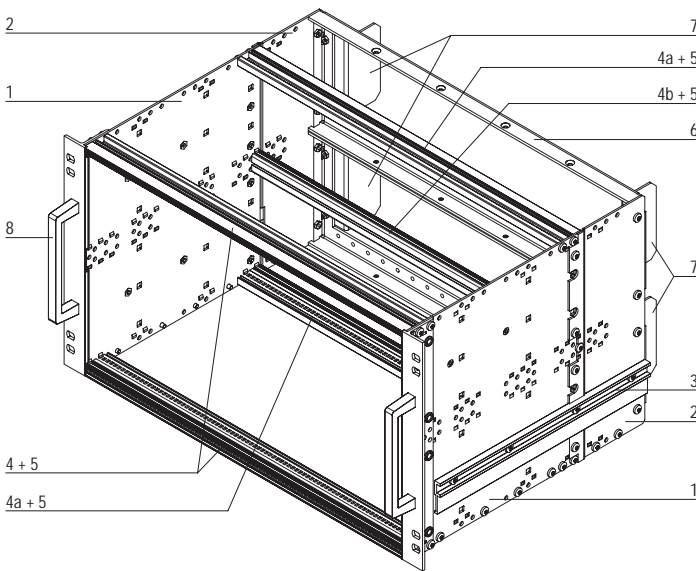## Subrack SNCF, unshielded

- SNCF listed, europacPRO subrack
- Tested according to NF F 61-005 and NF F 60-002
- 3 U and 6 U, 21 T, 320 mm deep, for board depth 220 mm
- 1 T = 4 HP
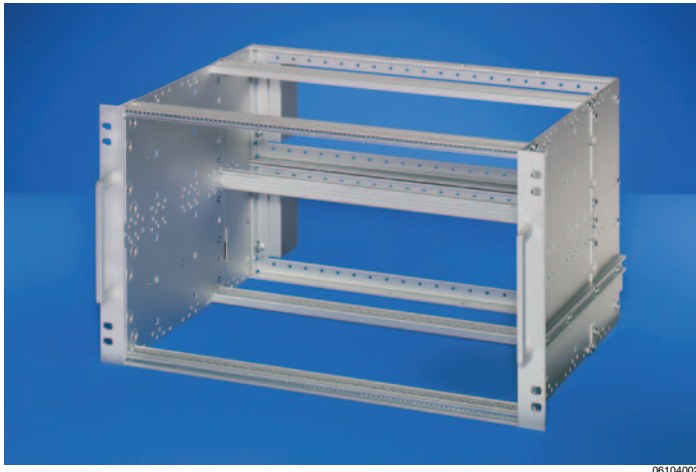
06104002

3 U
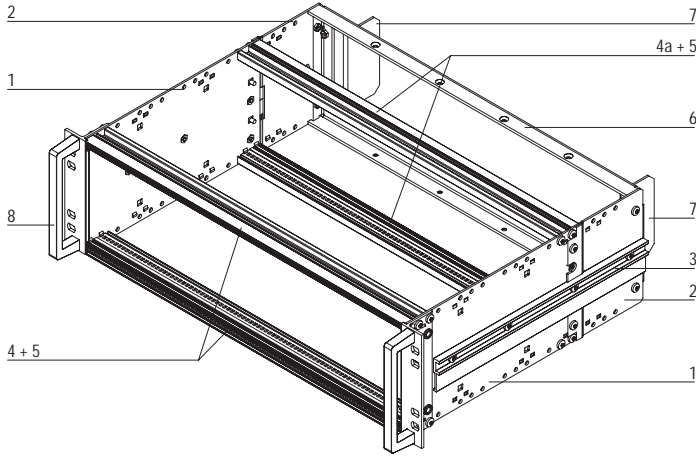
06104050

1 T = 4 HP

6 U

061004051

Delivery comprises (kit)

Item	Qty		Description
	3 U	6 U	
1	2	2	Side panel type H incl. 19"-support bracket
2	2	2	Side panel extension
3	2	2	Guide rail exterior
4	2	2	Horizontal rail front (H-SL)
4a	2	2	Horizontal rail rear (H-RC)
4b	-	1	Horizontal rail rear centre (RC)
5	4	6	Threaded insert
6	1	2	Rear frame 3 U, 21 T
7	2	4	Protection bracket SNCF
8	2	2	Handle
9	1	1	Assembly parts with self-locking screws

Order Information

Height U	Width	Depth mm	Order no.
3	84 HP (21 T)	320	**21500-029**
6	84 HP (21 T)	320	**21500-027**
Guide rail 10 units			**24560-353**
ESD clip guide rail, 50 pieces			**24560-255**
Assembly parts guide rail M2.5 x 9.3, 100 pieces			**21500-039**
Coding stud steel, white zinc-plated			**60895-018**
EMC gasketing 1 set			**21500-036**
EMC-cover plate 235 T, 1 set			**21500-037**
EMC-cover plate rear 1 set			**21500-038**
EMC-shielding material backplane 1 set			**21500-035**
Assembly kit For assembly of two subracks in a 19" case or cabinet (8 × screws, 8 × plastic washers, 8 × cage nuts)			**21100-435**

Note
- Version 9 T on request
- Test reports on the internet
- Front panel see page 34

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

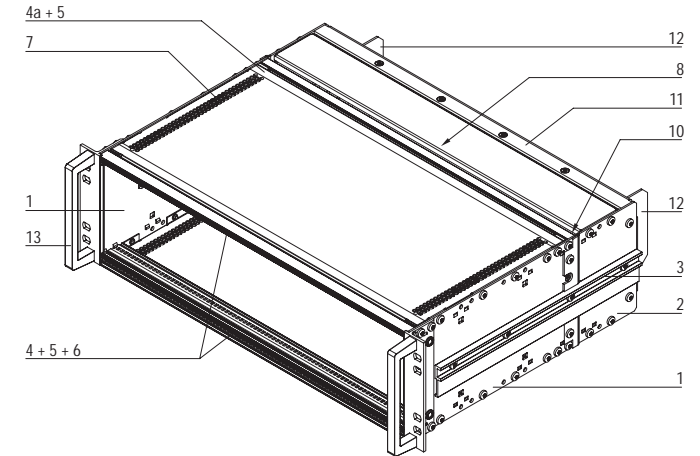# Subracks – *europac* **PRO**

Subrack in kit form, shielded

- SNCF listed, europacPRO subrack
- Tested according to NF F 61-005 and NF F 60-002
- 3 U and 6 U, 21 T, 320 mm deep, for board depth 220 mm
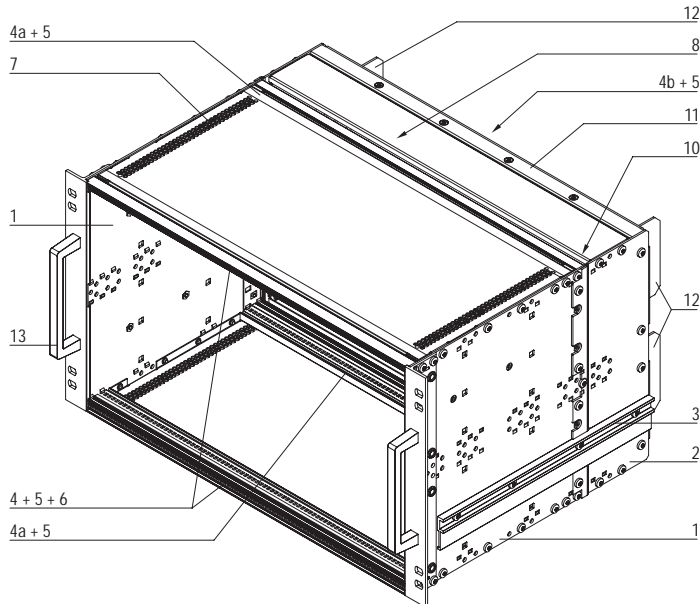- 1 T = 4 HP

Delivery comprises (kit)

Item	Qty 3 U	Qty 6 U	Description
1	2	2	Side panel type H incl. 19"-support bracket
2	2	2	Side panel extension
3	2	2	Guide rail exterior
4	2	2	Horizontal rail front (H-SL)
4a	2	2	Horizontal rail rear (H-RC)
4b	-	1	Horizontal rail rear centre (RC)
5	4	6	Threaded strip
6	2	2	Perforated strips
7	2	2	EMC cover plate 235 T
8	2	2	EMC cover plate rear 55 T
9	1	1	Kit EMC sealing material
10	1	2	Kit backplane shielding material 3 U
11	1	2	Rear frame 3 U, 21 T
12	2	4	Protection bracket SNCF
13	2	2	Handles
14	1	1	Assembly parts with self-locking screws

Order Information

Height U	Width	Depth mm	Order no.
3	84 HP (21 T)	320	**21500-030**
6	84 HP (21 T)	320	**21500-028**
Guide rail 10 units			**24560-353**
ESD clip guide rail, 50 pieces			**24560-255**
Assembly parts guide rail M2.5 x 9.3, 100 pieces			**21500-039**
Coding stud steel, white zinc-plated			**60895-018**
Assembly kit For assembly of two subracks in a 19" case or cabinet (8 × screws, 8 × plastic washers, 8 × cage nuts)			**21100-435**

Note
- Version 9 T on request
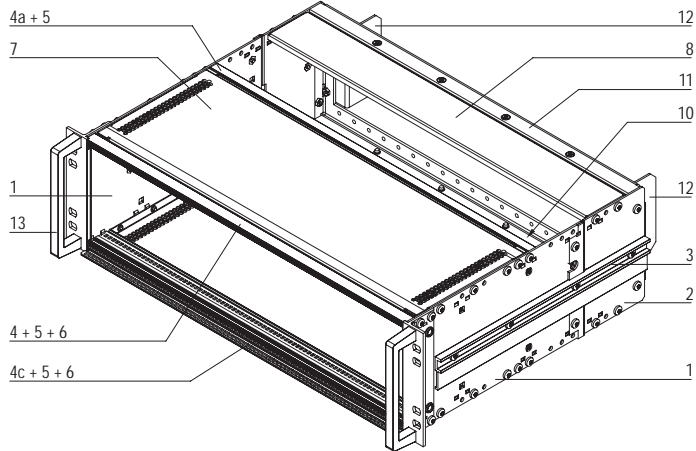- Test reports on the internet
- Front panel see page 35

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

3 U

06104003

061004052

1 T = 4 HP

6 U

061004053

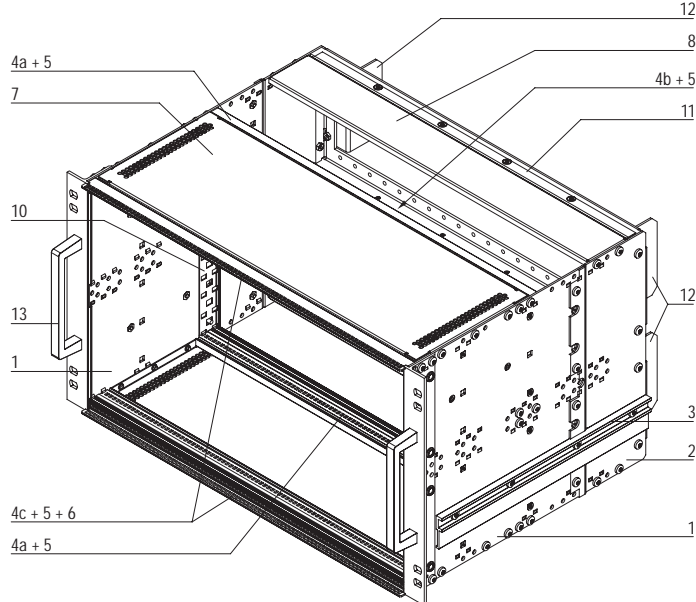# Subracks – *europacPRO*

061004004

3 U

061004054

1 T = 4 HP

6 U

061004055

Subrack SNCF, shielded, IEEE

■ SNCF listed, europacPRO subrack

■ Tested according to NF F 61-005 and NF F 60-002

■ 3 U and 6 U, 21 T, 320 mm deep, for board depth 160 mm

■ Subrack according to IEEE 1101.10

■ 1 T = 4 HP

Delivery comprises (kit)

Item	Qty		Description
	3 U	**6 U**	
1	2	2	Side panel type H incl. 19"-support bracket
2	2	2	Side panel extension
3	2	2	Guide rail exterior
4	1	-	Horizontal rail front (H-SL)
4a	2	2	Horizontal rail rear (H-RC)
4b	-	1	Horizontal rail rear centre (RC)
4c	1	2	Horizontal rail front (H-LL)
5	4	6	Threaded insert
6	2	2	Perforated strips
7	2	2	EMC cover plate 175 T
8	2	2	EMC cover plate rear 55 T
9	1	1	Kit EMC sealing material
10	1	2	Kit backplane shielding material 3 U
11	1	2	Rear frame 3 U, 21 T
12	2	4	Protection bracket SNCF
13	2	2	Handles
14	1	1	Assembly parts with self-locking screws

Order Information

Height U	Width	Depth mm	Order no.
3	84 HP (21 T)	320	**21500-047**
6	84 HP (21 T)	320	**21500-046**
Horizontal rail, IEEE red 160 mm deep, 10 pieces			**24560-356**
Horizontal rail, IEEE green 160 mm deep, 10 pieces			**24560-358**
Horizontal rail, IEEE green 160 mm deep, 10 pieces			**24560-359**
ESD clip guide rail, 50 pieces			**24560-255**
ESD clip for alignment pin of IEEE handles 50 pieces			**24560-256**
Assembly parts guide rail M2.5 x 9.3, 100 pieces			**21500-039**
Coding stud steel, white zinc-plated			**60895-018**
Assembly kit For assembly of two subracks in a 19" case or cabinet (8 × screws, 8 × plastic washers, 8 × cage nuts)			**21100-435**

Note

■ Colour of the guide rails according to IEEE 1101.10
  – red = space for CPU-boards
  – grey = space for periphery boards
  – green = space for CompactPCI 19"-power supplies 0.1" offset

■ Front panel see page 35

For further information ... www.schroff.biz

Subracks – *europac* **PRO**

Subrack EN 50155, unshielded

■ Tested according to EN 50155
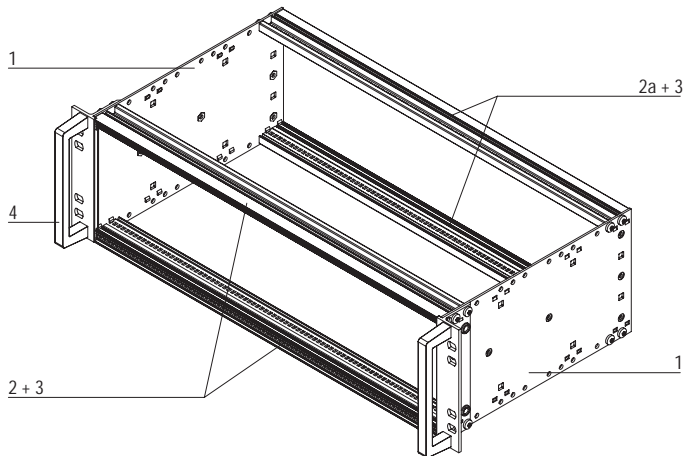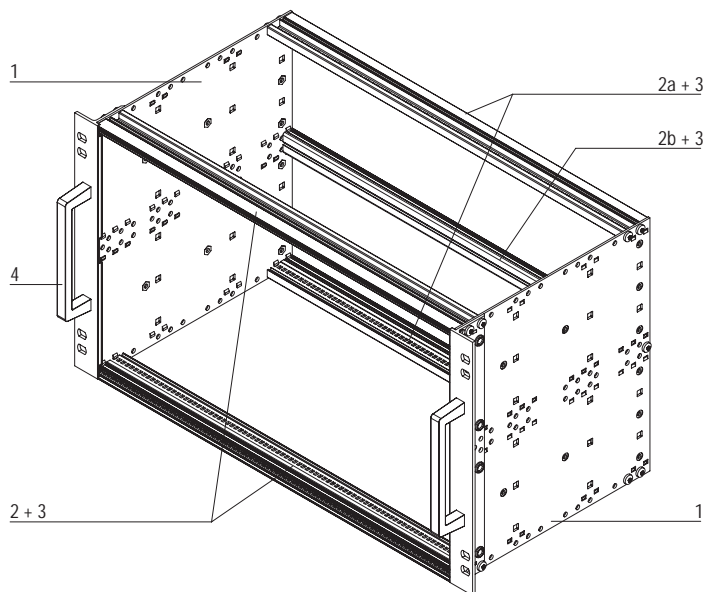
■ 3 U and 6 U, 84 HP, 235 mm deep, for board depth 220 mm

Delivery comprises (kit)

Item	Qty		Description
	3 U	6 U	
1	2	2	Side panel type H incl. 19"-support bracket
2	2	2	Horizontal rail front (H-SL)
2 a	2	2	Horizontal rail rear (H-RC)1
2 b	-		Horizontal rail rear centre (RC)
3	4	6	Threaded insert
4	2	2	Handles
5	1	1	Assembly parts with self-locking screws

Order Information

Height	Width	Depth	Order no.
U	HP	mm	
3	84	235	**21500-077**
6	84	235	**21500-078**
Guide rail 10 units			**24560-353**
ESD clip guide rail, 50 pieces			**24560-255**
Assembly parts guide rail M2.5 x 9.3, 100 pieces			**21500-039**
Coding stud steel, white zinc-plated			**60895-018**
EMC gasketing 1 set			**21500-036**
EMC-cover plate 235 D, 1 set			**21500-037**
EMC-shielding material backplane 1 set			**21500-035**
Assembly kit For assembly of two subracks in a 19" case or cabinet (8 × screws, 8 × plastic washers, 8 × cage nuts)			**21100-435**

Note

■ Test reports on the internet

■ Front panel see page 33

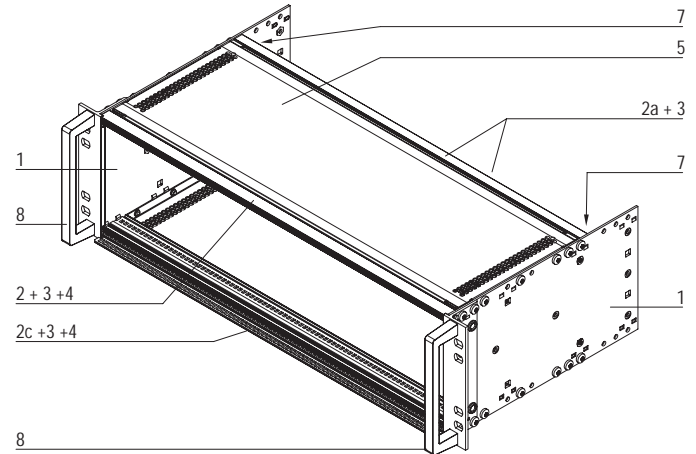**For further information www.schroff.biz/oneclick**
oneClick code = Order no.

3 U

1 T = 4 HP

6 U

Subracks – *europac* **PRO**

Subrack EN 50155, shielded

■ Tested according to EN 50155

■ 3 U and 6 U, 84 HP, 235 mm deep, for board depth 220 mm

Delivery comprises (kit)

Item	Qty 3 U	6 U	Description
1	2	2	Side panel type H incl. 19"-support bracket
2	2	2	Horizontal rail front (H-SL)
2a	2	2	Horizontal rail rear (H-RC)
b2	-	1	Horizontal rail rear centre (RC)
3	4	6	Threaded insert
4	2	2	Perforated strips
5	2	2	EMC cover plate 235 T
6	1	1	Kit EMC sealing material
7	1	2	Kit backplane shielding material 3 U
8	2	2	Handles
9	1	1	Assembly parts with self-locking screws

06104006

3 U

061004058

1 T = 4 HP

6 U
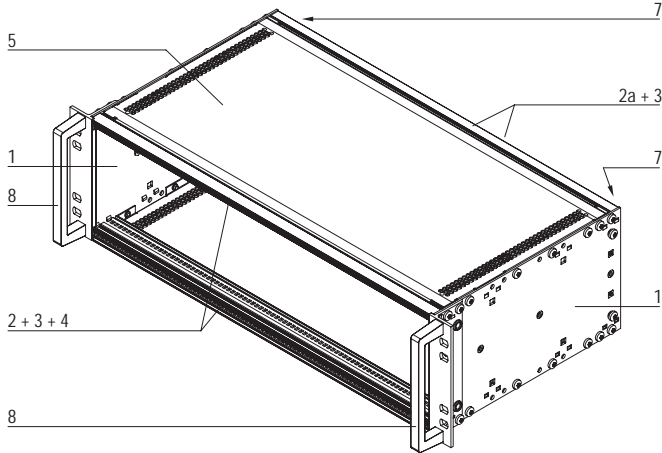
061004059

Order Information

Height U	Width HP	Depth mm	Order no.
3	84	235	**21500-079**
6	84	235	**21500-080**
Guide rail 10 units			**24560-353**
ESD clip guide rail, 50 pieces			**24560-255**
Assembly parts guide rail M2.5 x 9.3, 100 pieces			**21500-039**
Coding stud steel, white zinc-plated			**60895-018**
Assembly kit For assembly of two subracks in a 19" case or cabinet (8 × screws, 8 × plastic washers, 8 × cage nuts)			**21100-435**

Note
■ Test reports on the internet
■ Front panel see page 33

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

Subrack EN 50155, shielded, IEEE
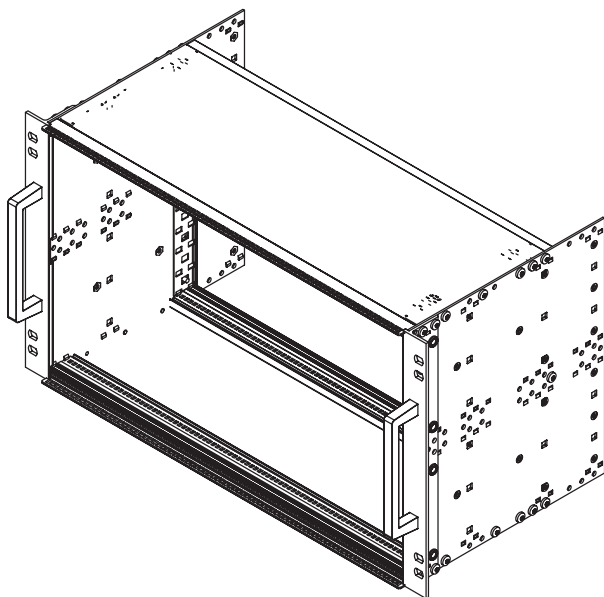

3 U

1 T = 4 HP

6 U

■ Tested according to EN 50155

■ 3 U and 6 U, 84 HP, 235 mm deep, for board depth 160 mm

■ Subrack according to IEEE 1101.10

Delivery comprises (kit)

Item	Qty		Description
	3 U	**6 U**	
1	2	2	Side panel type H incl. 19"-support bracket
2	1	-	Horizontal rail front (H-SL)
2a	2	2	Horizontal rail rear (H-RC)
b2	-	1	Horizontal rail rear centre (RC)
2c	1	2	Horizontal rail front (H-LL)
3	4	6	Threaded insert
4	2	2	Perforated strips
5	2	2	EMC cover plate 175 T
6	1	1	Kit EMC sealing material
7	1	2	Kit backplane shielding material 3 U
8	2	2	Handles
9	1	1	Assembly parts with self-locking screws

Order Information

Height U	Width HP	Depth mm	Order no.
3	84	235	**21500-081**
6	84	235	**21500-082**
Horizontal rail, IEEE red 160 mm deep, 10 pieces			**24560-356**
Horizontal rail, IEEE green 160 mm deep, 10 pieces			**24560-358**
Horizontal rail, IEEE green 160 mm deep, 10 pieces			**24560-359**
ESD clip guide rail, 50 pieces			**24560-255**
ESD clip for alignment pin of IEEE handles 50 pieces			**24560-256**
Assembly parts guide rail M2.5 x 9.3, 100 pieces			**21500-039**
Coding stud steel, white zinc-plated			**60895-018**
Assembly kit For assembly of two subracks in a 19" case or cabinet (8 × screws, 8 × plastic washers, 8 × cage nuts)			**21100-435**

Note

■ Colour of the guide rails according to IEEE 1101.10
  – red = space for CPU-boards
  – grey = space for periphery boards
  – green = space for CompactPCI 19"-power supplies 0.1" offset
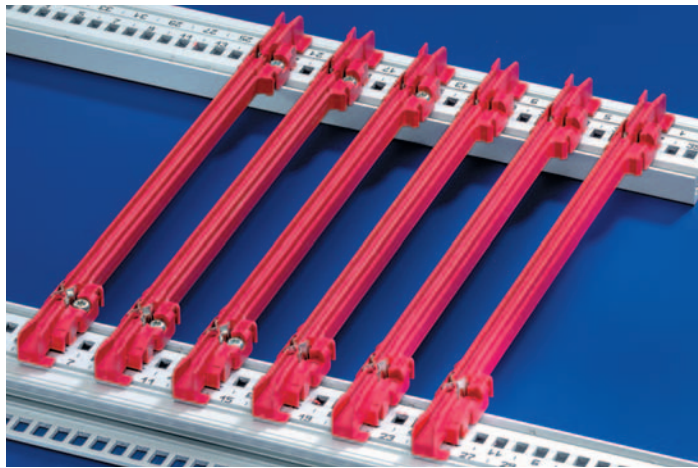
■ Front panel see page 33

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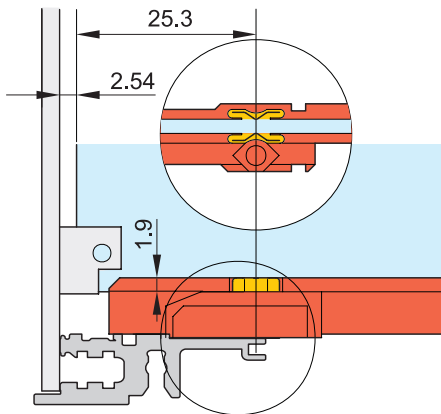oneClick code = Order no.

Subracks – *europac* **PRO**

Guide rails

ESD clip

06102001

■ The euroboard depth 160 or 220 mm is the reference measurement for the subrack depth. Assembly is achieved by engage claws

■ Material: PBT UL 94 V0

■ Colour red

■ Groove width 2 mm, for printed board thickness 1.6 mm

Order Information

Description	Depth mm	Qty	Order no.
Guide rail	160	10	**24560-351**
Guide rail	220	10	**24560-353**
ESD clip guide rail, 50 pieces			**24560-255**
Assembly parts guide rail M2.5 x 9.3, 100 pieces			**21500-039**

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

25.3

2.54

1.9

04503050

Assembly parts for guide rails
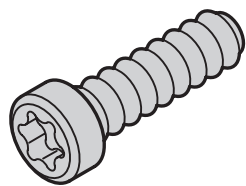
Order Information

Description	Qty	Order no.
Screw, Torx, 2,5 × 9,3, St, zinc-plated	100	**24560-141**

AZA45922

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

For further information ... www.schroff.biz

Subracks – *europac PRO*

Guide rail IEEE

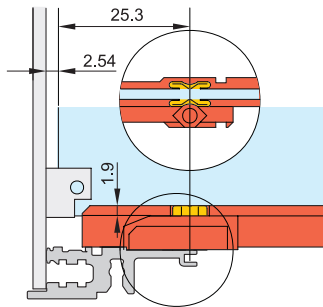06102003

04503050

ESD Clip for Alignment Pin

06103052

- The euroboard depth 160 mm is the reference measurement for the depth of the subrack

- The IEEE-guide rails are 4 HP wide and can be provided with code-pegs (code-pegs, please order separately, see U-front panel with IEEE-/Extractor handle)

- Material: PBT UL 94 V-0

- Colour: red (CPU-boards) / grey (periphery board) / green (CompactPCI-Power supply)

- Groove width 2 mm, for printed board thickness 1.6 mm

Order Information

Description	Depth mm	Qty	Order no.
Horizontal rail, IEEE red	160	10	**24560-356**
Horizontal rail, IEEE green	160	10	**24560-358**
Horizontal rail, IEEE green	160	10	**24560-359**
ESD clip guide rail, 50 pieces			**24560-255**
ESD clip for alignment pin of IEEE handles 50 pieces			**24560-256**
Assembly parts guide rail M2.5 x 9.3, 100 pieces			**21500-039**

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

Guide rail IEEE
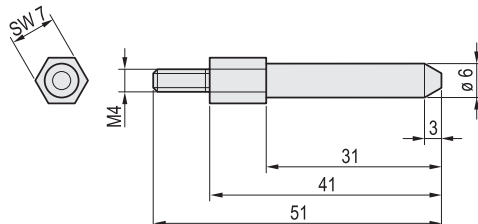
Order Information

Description	Qty	Order no.
Coding bolt, St, 1.5 mm, RAL 7035 , white zinc-plated	1	**60895-018**

06104062

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

Subracks – *europac*PRO

Cover EMC – direct bolt-on to side panel
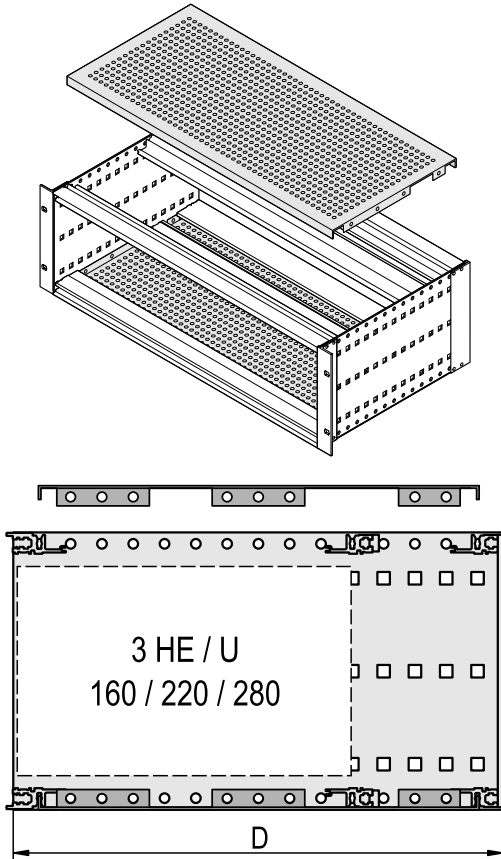
- EMC cover for installation on 160 mm, 220 mm or 280 mm subracks

- Notched for assembly of horizontal rails in 160 mm, 220 mm or 280 mm depths

- Mechanical cover and EMC shielding for components

- Useable with on all horizontal rails

Delivery comprises

Item	Qty	Description
1	2	Cover plate, 1,0 mm aluminium, hole diameter 4,0 mm, clear chromated
2	16 / 32	Screw Torx 4 × 6, St, zinc-plated

06102084

Order Information

Width HP	Depth D mm	Application	Order no.
84	55	–	**21500-038**
84	175	160	**21500-048**
84	235	160, 220	**21500-037**

Note

- Additionally required per subrack: contact strips between cover and horizontal rail. Contact spring between front panel and horizontal rail, see EMC shielding, see below

06102082

3 HE / U
160 / 220 / 280

D

Contact spring cover plate - horizontal rail
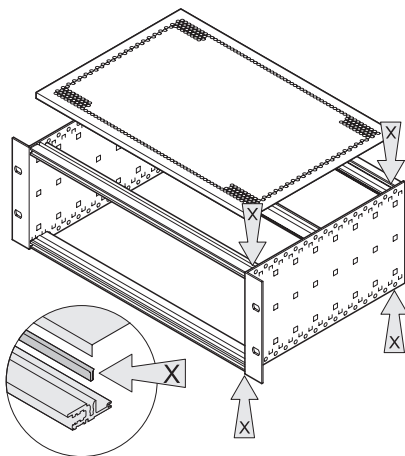
- The contact spring is clipped into the horizontal rail and sets up the contact to the cover

- Suitable for all horizontal rails

Delivery comprises

Item	Qty	Description
1	10 / 100	Stainless steel contact spring

Order Information

Width HP	Length mm	Qty	Order no.
84	395.7	10	**24560-245**
84	395.7	100	**24560-246**
Assembly tool			**24560-271**

06102052

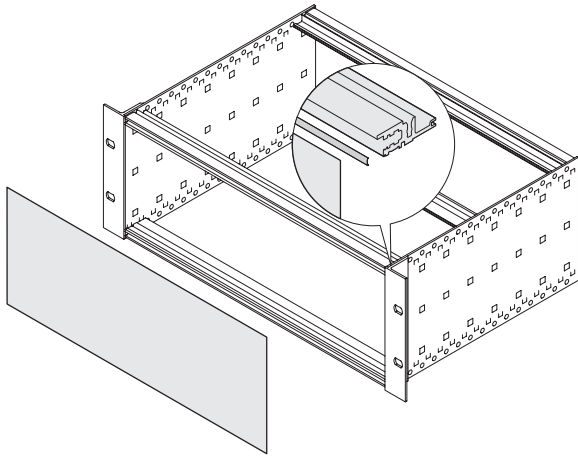### Note

- If a rear hood is used, the contact strip forms a conductive connection between the horizontal rail and the hood

For further information ... www.schroff.biz

Subracks – *europac* **PRO**

EMC contact strips front panel / rear panel - horizontal rail

06102053

- The contact strip is clipped onto horizontal rail and sets up the contact to front panels or rear panel

- Can be used for rear horizontal rail (H-RC, L-RC) and all front horizontal rails

Delivery comprises

Item	Qty	Description
1	10 / 100	EMC gasketing, steel, corrosion-free

Order Information

Width HP	Length mm	Qty	Order no.
84	395.7	10	**24560-235**
84	395.7	100	**24560-236**

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

Shielding backplane / side panel

06102057

BPA45916
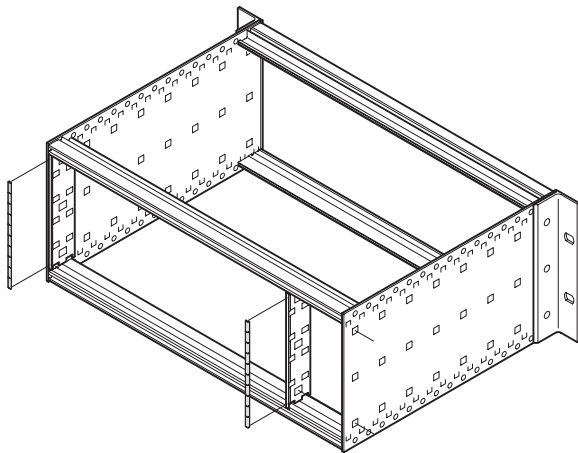
- Backplane can be used as a shielding rear panel of the subrack. To do so, a rear horizontal rail (type G_1 or G_2) with recessed installation must be used to ensure the horizontal contact

- For the vertical contact, the contact strip can as standard be secured to the europacPRO side panel (depth grid 30 mm)

Delivery comprises

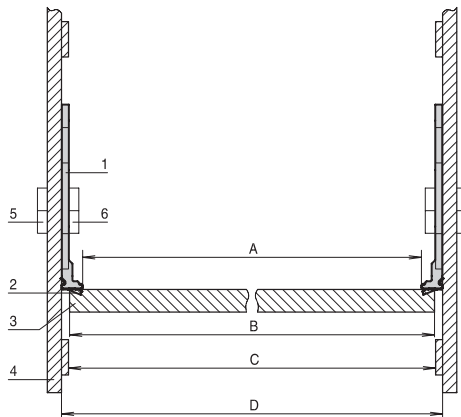| Item	Qty	Description
1	2	EMC contact strip, Al profile
2	1	Set stainless steel contact spring, corrosion-free

Order Information

Height U	Order no.
3	**21500-035**

Note
- For 6 U subrack please order 2 x 3 U kit

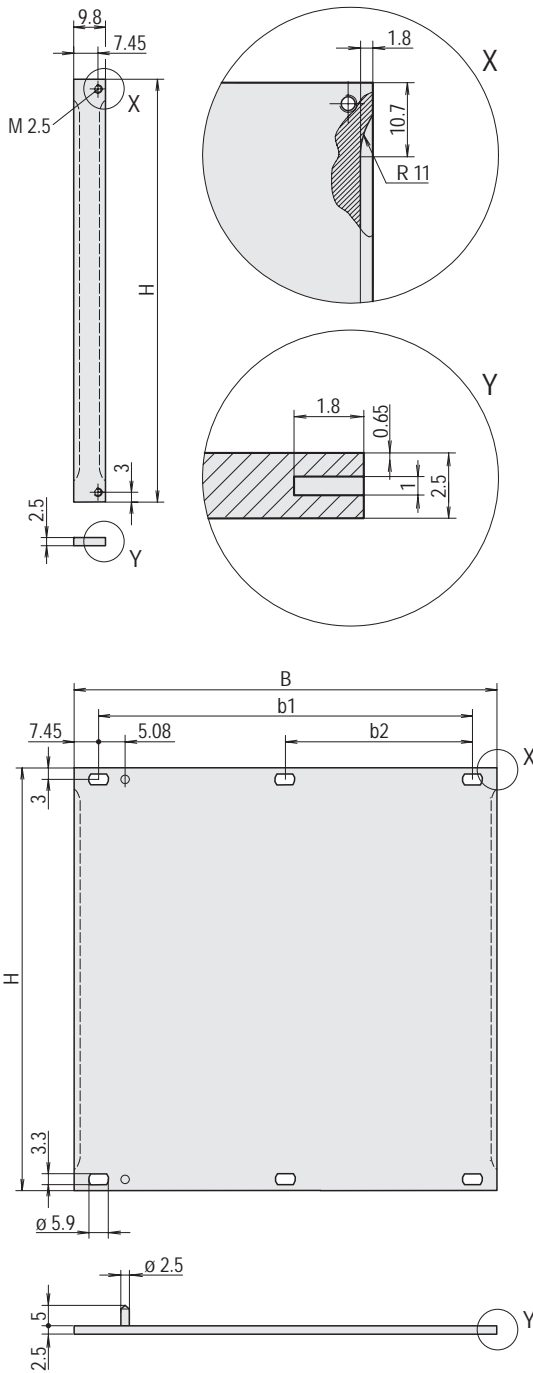**For further information www.schroff.biz/oneclick**
oneClick code = Order no.

Subracks – *europac PRO*

Front panels unshielded / shielded

■ Partial width front panel, Al, 2.5 mm, front anodised, rear side yellow chromated

■ Shielding with EMC-contact strip (please order separately)

Order Information

Height U	Height mm	Width HP	B mm	b1 mm	b2 mm	Order no.
3	128.4	2	9.8	–	–	**30846-864**
3	128.4	3	14.9	–	–	**20846-425**
3	128.4	4	20	–	–	**20846-426**
3	128.4	5	25	–	–	**20846-427**
3	128.4	6	30.1	–	–	**20846-428**
3	128.4	7	35.2	–	–	**20846-429**
3	128.4	8	40.3	25.4	–	**20846-430**
3	128.4	10	50.5	35.6	–	**20846-431**
3	128.4	12	60.6	45.7	–	**20846-432**
3	128.4	14	70.8	55.9	–	**20846-433**
3	128.4	21	106.3	91.4	–	**20846-434**
3	128.4	28	141.9	127	–	**20846-436**
3	128.4	42	213	198.1	101.6	**20846-437**
3	128.4	63	319.7	304.8	157.5	**20846-438**
3	128.4	84	426.4	411.5	203.2	**30846-676**
6	261.8	2	9.8	–	–	**30846-865**
6	261.8	4	20	–	–	**20846-443**
6	261.8	5	25	–	–	**20846-444**
6	261.8	6	30.1	–	–	**20846-445**
6	261.8	7	35.2	–	–	**20846-446**
6	261.8	8	40.3	25.4	–	**20846-447**
6	261.8	10	50.5	35.6	–	**20846-448**
6	261.8	12	60.6	45.7	–	**20846-449**
6	261.8	14	70.8	55.9	–	**20846-450**
6	261.8	16	80.9	66	–	**20846-456**
6	261.8	21	106.3	91.4	–	**20846-451**
6	261.8	28	141.9	127	–	**20846-452**
6	261.8	42	213	198.1	101.6	**20846-453**
6	261.8	63	319.7	304.8	157.5	**20846-454**
6	261.8	84	426.4	411.5	203.2	**30846-771**
EMC contact strips height 3 U, 97 mm, 10 pieces						**21101-705**
EMC contact strips height 3 U, 97 mm, 100 pieces						**21101-706**
EMC contact strips height 6 U, 232 mm, 10 pieces						**21101-707**
EMC contact strips height 6 U, 232 mm, 100 pieces						**21101-708**
Assembly tool for contact strips, 1 piece						**24560-270**

Note

■ Standard pack quantity:
   2 to 28 HP: 5 pieces,
   42 to 84 HP: 1 piece,
   Delivery is in standard pack multiples. Pricing is per individual item

■ Shielding with EMC-contact strip please order separately

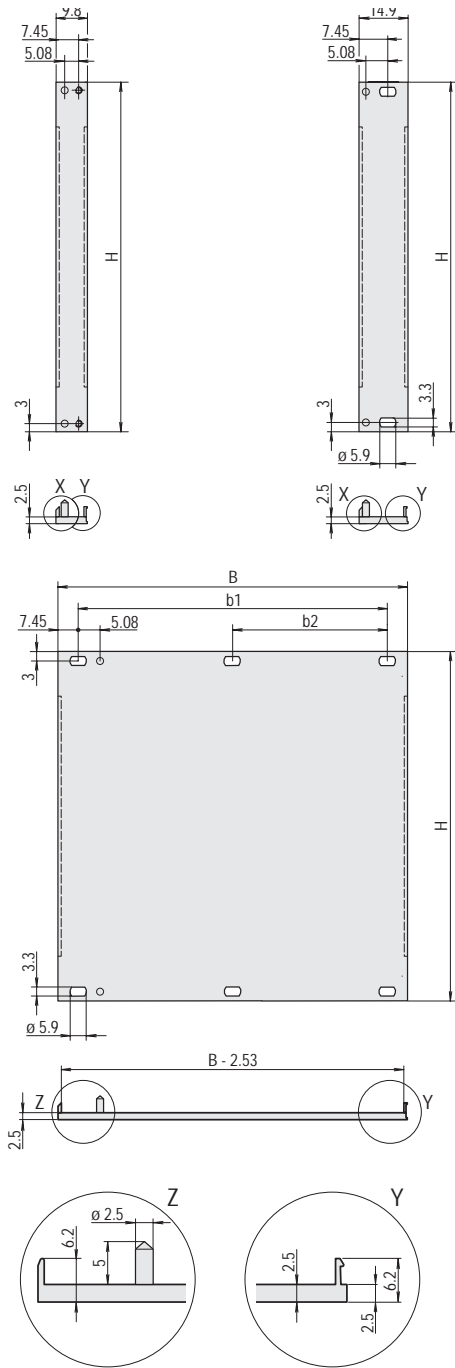■ Please order assembly parts separately, see on the internet

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

04602052

For further information ... www.schroff.biz

Subracks – *europac PRO*

Front panels, shielded, U profile

■ High Stability (U-profile)

■ Front panel U-profile, Al, front anodised, rear conductive, 2 alignment pins pressed in, stainless steel

Order Information

Height U	Height mm	Width HP	B mm	b1 mm	b2 mm	Order no.
3	128.4	2	9.8	–	–	**30849-001**
3	128.4	3	14.9	–	–	**30849-004**
3	128.4	4	20	–	–	**30848-354**
3	128.4	5	25	–	–	**30848-378**
3	128.4	6	30.1	–	–	**30848-380**
3	128.4	7	35.2	–	–	**30848-382**
3	128.4	8	40.3	25.4	–	**30848-356**
3	128.4	10	50.5	35.6	–	**30848-386**
3	128.4	12	60.6	45.7	–	**30848-358**
3	128.4	14	70.8	55.9	–	**20848-013**
3	128.4	21	106.3	91.4	–	**20848-020**
3	128.4	28	141.9	127	–	**20848-027**
3	128.4	42	213	198.1	101.6	**20848-047**
3	128.4	63	319.7	304.8	157.5	**20848-068**
3	128.4	84	426.4	411.5	203.2	**20848-097**
6	261.8	2	9.8	–	–	**30849-002**
6	261.8	4	20	–	–	**30848-355**
6	261.8	5	25	–	–	**30848-379**
6	261.8	6	30.1	–	–	**30848-381**
6	261.8	7	35.2	–	–	**30848-383**
6	261.8	8	40.3	25.4	–	**30848-357**
6	261.8	10	50.5	35.6	–	**30848-387**
6	261.8	12	60.6	45.7	–	**30848-359**
6	261.8	14	70.8	55.9	–	**20848-106**
6	261.8	16	80.9	66	–	**20848-108**
6	261.8	21	106.3	91.4	–	**20848-113**
6	261.8	28	141.9	127	–	**20848-120**
6	261.8	42	213	198.1	101.6	**20848-139**
6	261.8	63	319.7	304.8	157.5	**20848-160**
6	261.8	84	426.4	411.5	208.3	**20848-189**
EMC profile seal , Height 3 U, 97 mm, 10 pieces						**21101-853**
EMC profile seal , Height 3 U, 97 mm, 100 pieces						**21101-854**
EMC profile seal , Height 6 U, 232 mm, 10 pieces						**21101-855**
EMC profile seal , Height 6 U, 232 mm, 100 pieces						**21101-856**

Note

■ Standard pack quantity:
2 to 28 HP: 5 pieces, 42 to 84 HP: 1 piece,
Delivery is in standard pack multiples. Pricing is per individual item

■ Shielding with EMC-profile seal please order separately

■ Please order assembly parts separately, see on the internet

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

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Subracks – *europac PRO*

3 U

04604060

Front panel SNCF, unshielded
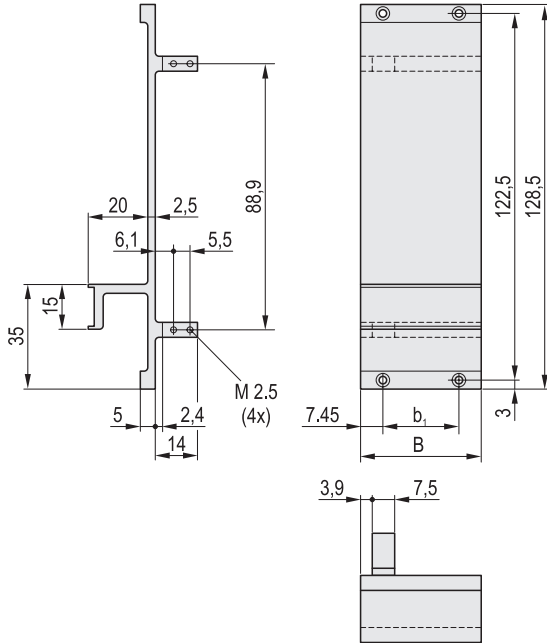
Delivery comprises

Item	Qty	Description
1	1	Front panel, Al, 2,5 mm, anodised
2	1	Assembly parts

Order Information

Height U	Height mm	Width HP	B mm	b1 mm	Order no.
3	128.5	4	20	–	**20848-700**
3	128.5	8	40.3	25.4	**20848-701**
3	128.5	12	60.6	45.7	**20848-702**
3	128.5	16	80.9	66	**20848-703**
6	262	4	20	–	**20848-704**
6	262	8	40.3	25.4	**20848-705**
6	262	12	60.6	45.7	**20848-706**
6	262	16	80.9	66	**20848-707**

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

6 U
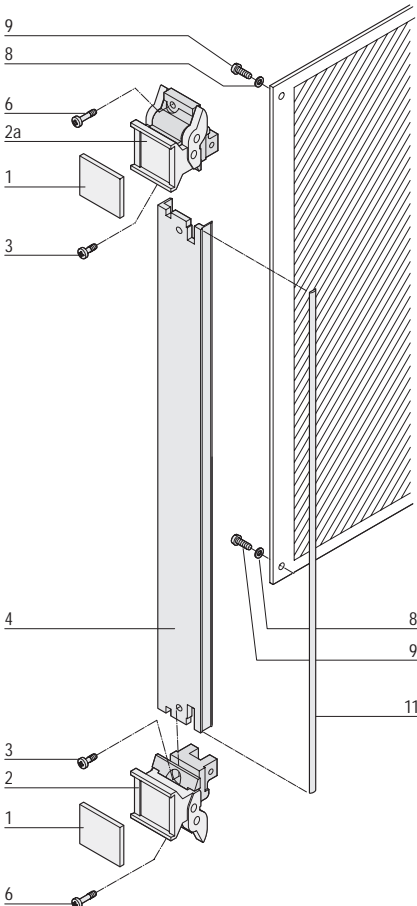

04604061

For further information ... www.schroff.biz
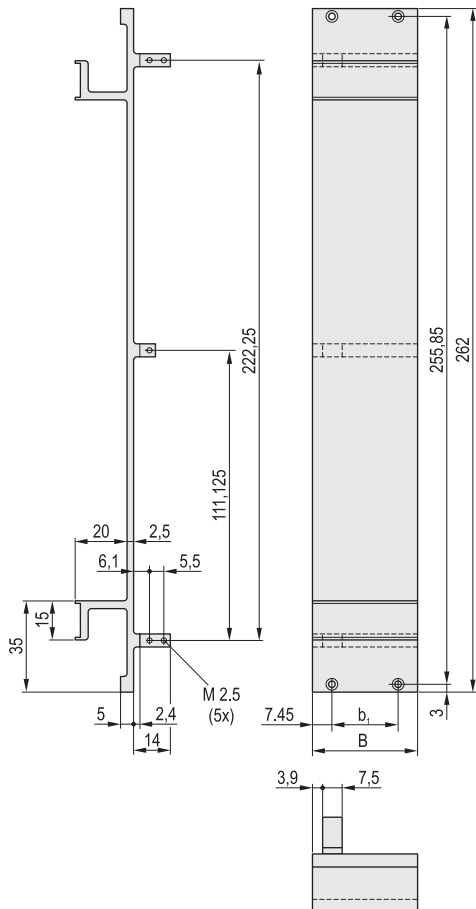
Subracks – *europac* **PRO**
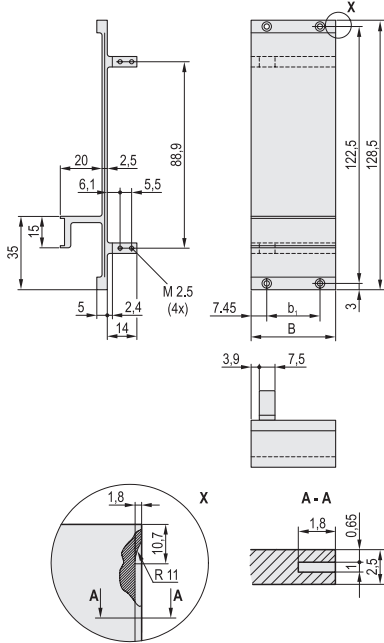
Front panel SNCF, shielded

3 U

04604062

Delivery comprises

Item	Qty	Description
1	1	Front panel, Al, 2,5 mm, anodised, contact surfaces conductive
2	1	Assembly parts

Order Information

Height U	Height mm	Width HP	B mm	b1 mm	Order no.
3	128.5	4	20	–	**20848-708**
3	128.5	8	40	25.4	**20848-709**
6	262	4	20	–	**20848-710**
6	262	8	40	25.4	**20848-711**
EMC contact strips height 3 U, 97 mm, 10 pieces					**21101-705**
EMC contact strips height 3 U, 97 mm, 100 pieces					**21101-706**
EMC contact strips height 6 U, 232 mm, 10 pieces					**21101-707**
EMC contact strips height 6 U, 232 mm, 100 pieces					**21101-708**
Assembly tool for contact strips, 1 piece					**24560-270**

Note

■ EMC contact strips, stainless steel, please order separately

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

6 U

04604063

Subracks – *europac* **PRO**

3 U

04604050

6 U

04604051

Plug-in unit with extractor handle, type 2

■ Shielded

Delivery comprises (kit)

Item	Qty				Description
	3 U		6 U		
	< 8 HP	8 HP	< 8 HP	8 HP	
1	1	1	2	2	Identification plate, Al 1.5 mm, anodised, cut edges clean
2	1	1	2	2	Extractor handle, type 2, lever: PPE, light grey, RAL 7035 light grey, joint: diecast zinc, zinc-plated
3	1	1	2	2	Flathead screw M2.5 x 6, nickel-plated
4	1	1	1	1	U-Front panel, Al, Front: anodised, rear side: oxidised
5	1	1			pan head screw with -cross recess M2.5 x 8, St, -nickel-plated
6a	2	4	2	4	Collar screw pozidrive M2.5 x 12.3, St, nickel-plated
6b	2	4	2	4	Collar screw pozidrive M2.5 x 11, St, nickel-plated
7	1	3		2	Sleeve, PA, grey
8	2	2	2	2	Washer A 2,7, DIN 125
9	2	2	2	2	Pan head screw with torx, M2.5 x 6, St, nickel-plated
10	1	1			Printed board bracket, diecast zinc
11	1	1	1	1	EMC-seal, core: foam sleeve: Textile boundary surface, Cu-Ni--coated

Order Information

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

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

Subracks – *europac* PRO

3 U

04604052

6 U

04604053

Plug-in unit with extractor handle, type 2

■ Unshielded

Delivery comprises (kit)

Item	Qty				Description
	3 U		6 U		
	< 8 HP	8 HP	< 8 HP	8 HP	
1	1	1	2	2	Identification plate, 1.5 mm aluminium, anodised, cut edges clean
2	1	1	2	2	Extractor handle, type 2, lever: PPE, light grey, RAL 7035 light grey, joint: diecast zinc, zinc-plated
3	1	1	2	2	Flathead screw M2.5 x 6, nickel-plated
4	1	1	1	1	Front panel, Al, 2.5 mm front: anodised, rear side: yellow chromated
5	1	1			pan head screw with -cross recess M2.5 x 8, St, -nickel-plated
6a	2	4	2	4	Collar screw pozidrive M2.5 x 12.3, St, nickel-plated
6b	2	4	2	4	Collar screw pozidrive M2.5 x 11, St, nickel-plated
7	1	3		2	Sleeve, PA, grey
8	2	2	2	2	Washer A 2,7, DIN 125
9	2	2	2	2	Pan head screw with torx, M2.5 x 6, St, nickel-plated
10	1	1			Printed board bracket, diecast zinc

Order Information

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

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

Subracks – *europac* **PRO**

3 U

04602073

6 U

04602074

Plug-in units type 2 with IEEE handles, in kit form
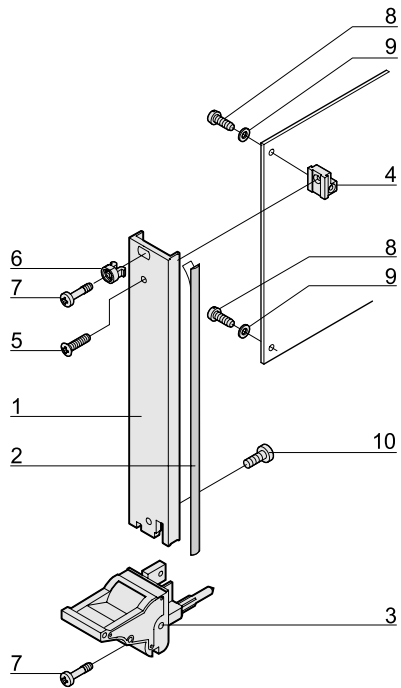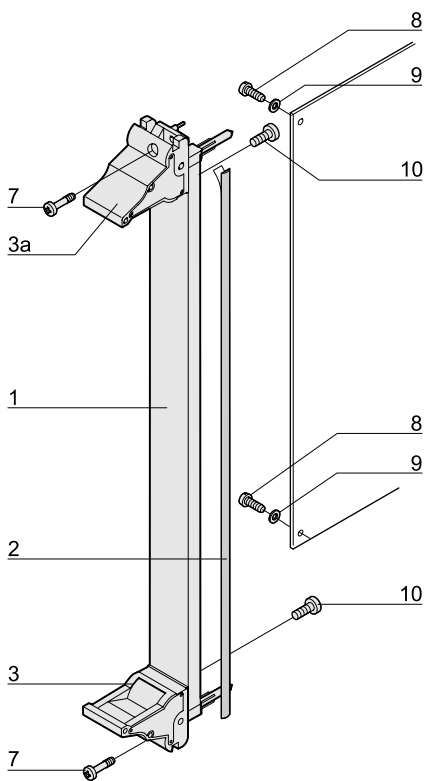
- With IEL handle
- Shielded

Delivery comprises (kit)

Item	3 U		6 U		Description
	< 8 HP	8 HP	< 8 HP	8 HP	
1	1	1	1	1	U-front panel, AI, front: anodised; rear side: etched
2	1	1	1	1	EMC-seal, core: foam, sleeve: textile cladding with CuNi coating
3	1	1	2	2	IEL-handle with integrated alignment pin and GND/ESD pin. Lever: plastic PC, black, RAL 9005 key: plastic PC, light grey, RAL 7035
4	1	1	-	-	Printed board bracket, diecast zinc
5	1	1	-	-	Raised countersunk M 2.5 × 8, nickel-plated steel
6	1	3	-	2	Sleeve, PA, grey
7	2	4	2	4	Pozidrive collar screw M 2.5 × 12.3, nickel-plated steel
8	2	2	2	2	Pan head screw with Torx M 2.5 × 6, zinc-plated steel, self-locking
9	2	2	2	2	Washer A2.7, nickel-plated steel
10	1	1	2	2	Pan head screw with Torx head, M2.5 × 6, nickel-plated steel

Order Information

Height U	Width HP	Order no.
3	4	**20848-585**
3	6	**20848-587**
3	8	**20848-589**
3	10	**20848-590**
3	12	**20848-591**
6	4	**20848-592**
6	6	**20848-594**
6	8	**20848-596**
6	10	**20848-597**
6	12	**20848-598**

- Dimension of front profile on the Internet

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

Subracks – *europac***PRO**

Microswitch for IEL and IET handle
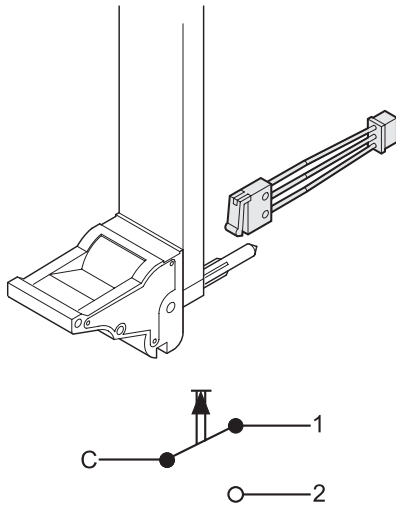
Order Information

Description	Qty	Order no.
Microswitch with cable	10	**20817-606**

Technical data

Max. switched current	$\geq$ 50 mA
Operating temperature	$-$ 25 °C to $+$ 70 °C
Mechanical life	$\geq$ 50000 switching cycles
Electrical life	$\geq$ 20000 switching cycles
Molex connector housing	51021-0300
Molex crimp contact	50058-8000

BGA46314

Note

■ Mating connector are not in delivery comprises

BGA46315

Keying/coding for IEL and IET handle
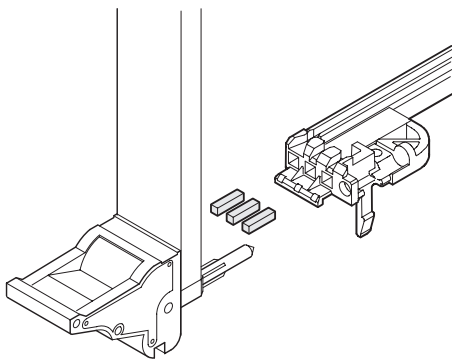
■ The keying/coding pegs (3 pieces each) are inserted in the keying/coding block or IEL/IET handle, as required

Order Information

Description	Material	Colour	Qty	Order no.
Keying/coding peg	PC, UL 94 V-0	grey, RAL 7035	100	**20817-501**

■ Guide rails for keying/coding, see on the Internet

BGA46316

Label strips for IEL and IET handle
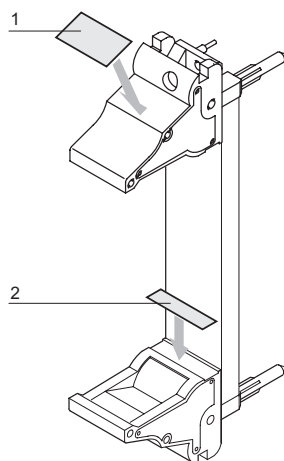
Order Information

Item	Description	Material	Colour	Order no.
1	1 sheet (210 pieces, 19 x 9.5 mm)	Polyester film, self-adhesive	white	**60817-340**
2	1 sheet (320 pieces, 19 x 4.8 mm)	Polyester film, self-adhesive	white	**60817-341**

BGA46317