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Climate control 4

Desk-top cases 5

Subracks/ 19" chassis ... 6

Front panels, plug-in units .. 7

Systems 8

Power supply units 9

Backplanes .. 10

Connectors, front panel component system 11

Appendix 12

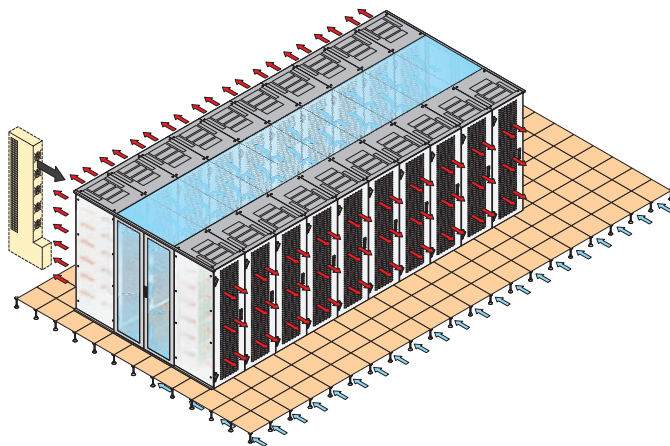
Cabinets - VARISTAR containment



01012006

The Schroff containment system lets you create containment installations without problems. Increase efficiency and cut energy costs

- Consistent separation of cold and hot air
- Overpressure in the containment: Blow-in temperature of air conditioner is almost the same as the temperature in front of the servers
- No temperature layering in front of the 19" plane inside the containment
- No subcooling: possibilities to optimize temperature in data centres
- Higher packing density per cabinet is possible with the same climate control elements
- Low investment with short ROI - no maintenance costs



01008093

Cold aisle containment



Downloads and further important information can be found on the Internet under www.schroff.co.uk/datacom

Containment of VARISTAR cabinets

- Modular standard components enable flexible adaptation to the requirements of your IT
- Base system simple to combine and modify
- Minimal investment risk thanks to completely matched climate control system
- Short implementation time with minimum outlay

VARISTAR
Platform 1.4
Dimensions 1.8

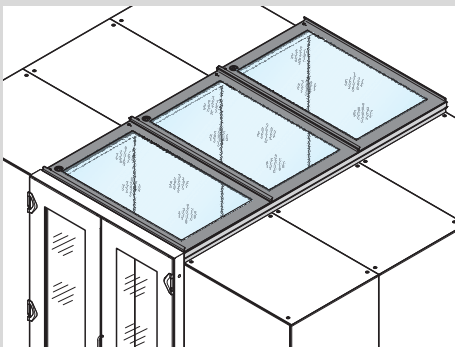


01012073

Doors

- Standard solutions for 2000 mm and 2200 mm high cabinets
- Swing doors
- Sliding doors
 - Mechanical
 - Mechanical with easy closure (Touch variant)
 - Electronic

Doors
Swing doors ... 1.204
Sliding doors, mechanical ... 1.205
Sliding doors, mechanical, Touch variant ... 1.206
Sliding door, electronic 1.207

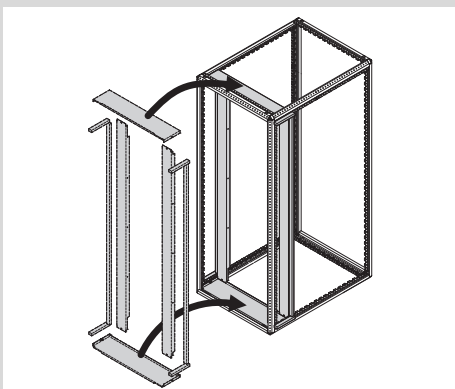


01012074

Top covers

- Standard solutions for aisle width 1200 mm
- For 600 mm and 800 mm wide cabinets
- Integration of cabinets with other dimensions (heights)
- Free aisle height can be raised by 84 mm

Top covers
Top cover elements 1.208



01012055

Air partitioning

- For server and network cabinets
- For cabinets with different widths and recessed 19" planes
- Solid covers with cable ducting or cable routing (cable fingers, cable channels)
- Halogen-free gaskets UL 94 HF-1

Air partitioning 1.210

ServicePLUS .. 1.212

ServicePLUS from page 1.212

- e.g. set-up service and commissioning
- e.g. custom modifications and developments
- e.g. free combination of components

www.schroff.biz/ServicePLUS

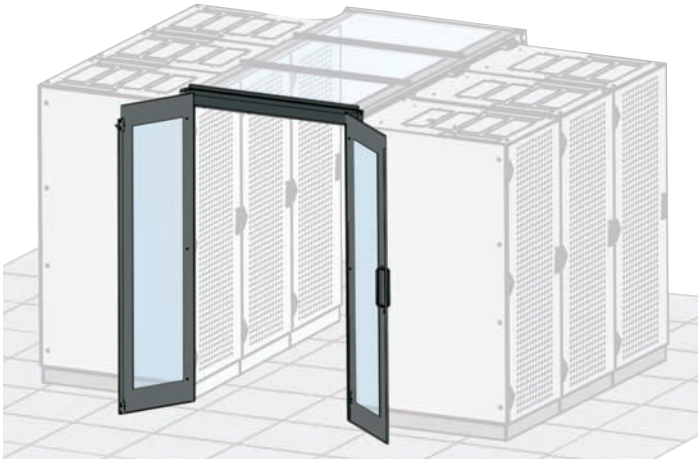
VARISTAR
Electronics 1.10
VARISTAR
EMC 1.54
VARISTAR
Seismic 1.84
VARISTAR
Datacom and Networking
Technology 1.124
VARISTAR
Air/water heat exchangers 1.224



30407004

Cabinets - VARISTAR containment

Swing doors



01012070

- Suitable for 2000 and 2200 mm high cabinets
- Double doors suitable for an aisle width of 1200 mm
- 2 colours
 - Black grey (RAL 7021)
 - Light grey (RAL 7035)

Delivery comprises

Item	Qty	Description
1	2	Frame St, 1.5 mm; with single pane safety glass 6 mm and 180° hinge, 2-point magnetic locking on main door, bolt on side door to lock into the floor
2	1	Fixing material kit (for cabinet side)

Order Information

Description	Colour	Part no.
Swing doors	RAL 7021	21130-583
Swing doors	RAL 7035	22130-583

Accessories

Door locking PU 1 pieces	23130-437
Door cover mask for unequal aisle heights	Page 1.214

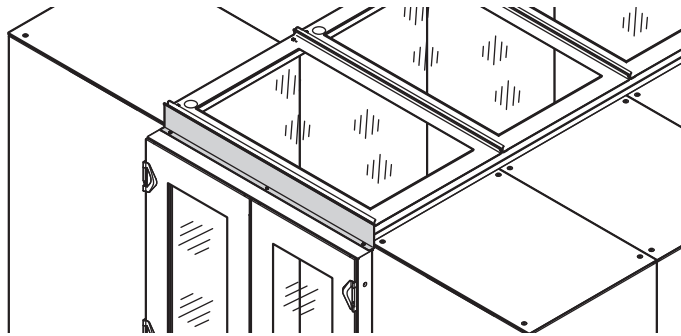
Note

- Please order suitable door cover masks (above the door) separately
- Optional lever handle with lock on request



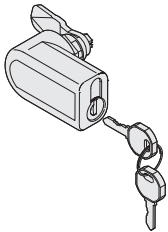
For further information www.schroff.biz/oneclick
oneClick search code = Part no.

Accessories



01012068

Door cover mask

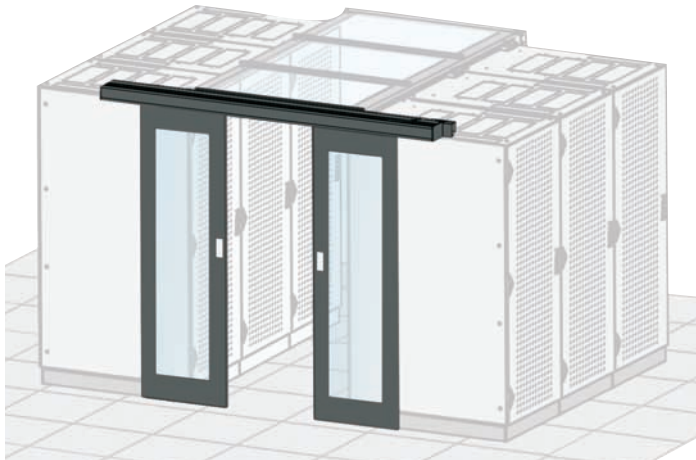


01012060

Lock

Cabinets - VARISTAR containment

Sliding doors, mechanical



01012071

- Suitable for 2000 and 2200 mm high cabinets
- Double doors suitable for an aisle width of 1200 mm; emergency opening from inside is always possible
- Colour black grey (RAL 7021)

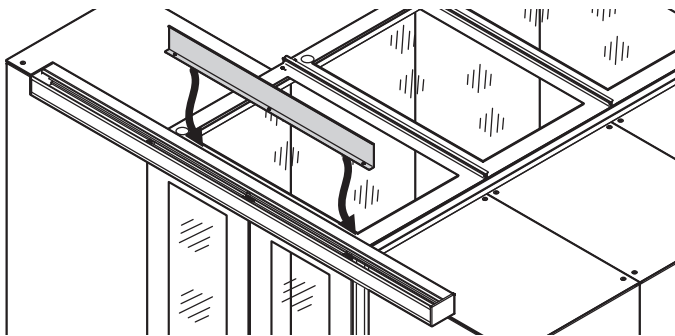
Delivery comprises

Item	Qty	Description
1	2	Sliding door, frame St, 1.5 mm; single pane safety glass 6 mm, sliding door gear
1	1	Slide rail with front trim
2	1	Fixing material kit (on cabinet top cover)

Order Information

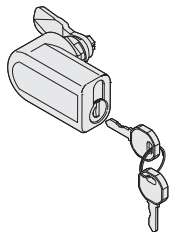
Description	Part no.
Sliding door, mechanical	
for cabinet height 2000 mm with adjustable foot	21130-614
for cabinet height 2000 mm with base/plinth	21130-615
for cabinet height 2200 mm with adjustable foot	21130-616
for cabinet height 2200 mm with base/plinth	21130-617
Accessories	
Lock for sliding door Lock with T-bar handle and profile cylinder with 2 keys (333) 1 PU 1 kit	23130-473
Top cover elements for cabinet width 600 mm, width 500 mm, 1 piece - page 1.208	21130-590
Top cover elements for cabinet width 800 mm, width 700 mm, 1 piece - page 1.208	21130-591
Door cover mask for unequal aisle heights	Page 1.215

Accessories



01012066

Door cover mask



01012060

Lock

Note

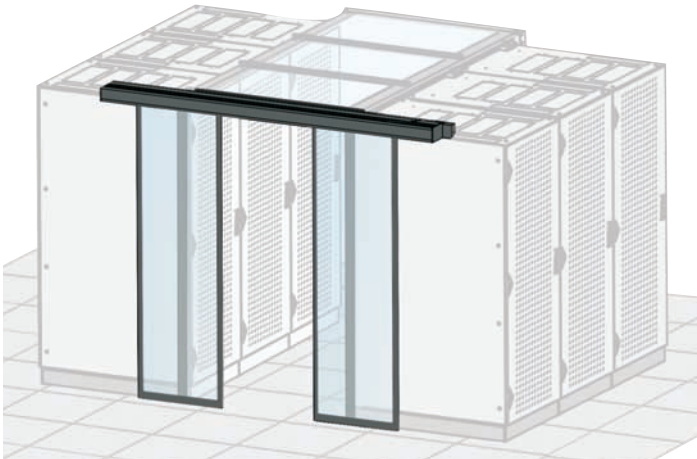
- Please order suitable door cover masks (above the door) separately
- When fitting the top covers please note that the first cover adjacent to the door must be shortened by 100 mm (i.e. for a 600 mm wide cabinet the cover must be 500 mm and for a 800 mm wide cabinet the cover must be 700 mm)
- Optionally lockable; lock with T-bar handle and profile cylinder (key 333)



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

Cabinets - VARISTAR containment

Sliding door, mechanical,
Touch variant



- Suitable for 2000 and 2200 mm high cabinets
- Doors open symmetrically (both wings open at same time); door catch with magnet (door stays open); closes automatically when lightly tapped
- Double doors suitable for an aisle width of 1200 mm
- Colour black grey (RAL 7021)

Delivery comprises

Item	Qty	Description
1	2	Sliding door, frame Al extrusion; laminated safety glass 10 mm, sliding gear
1	1	Slide rail with front trim
2	1	Fixing material kit (for cabinet side)

Order Information

Description	Part no.
Sliding door, mechanical, Touch variant	21130-585
Accessories	
Assembly kit for cabinet height 2200 mm with base/plinth, PU 2 pieces	23130-453
Door cover mask for unequal aisle heights	Page 1.216

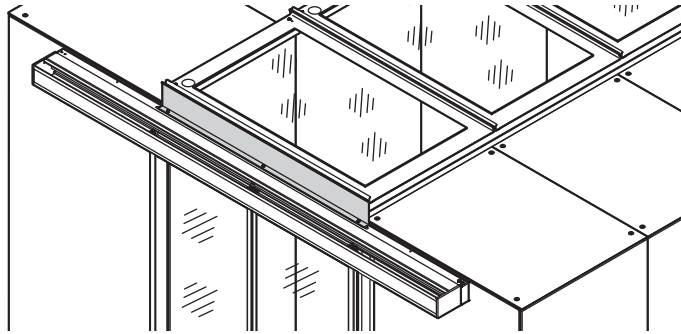
Note

- Please order suitable door cover maskSs (above the door) separately

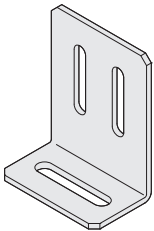


For further information www.schroff.biz/oneclick
oneClick search code = Part no.

Accessories



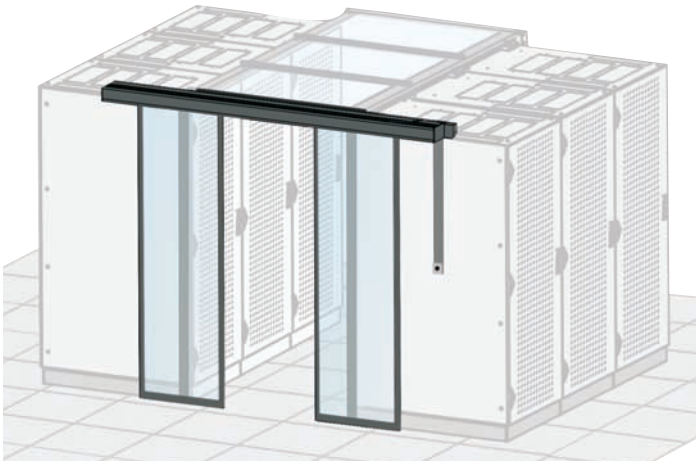
Door cover mask



Assembly kit

Cabinets - VARISTAR containment

Sliding door, electronic



01012072

- Suitable for 2000 and 2200 mm high cabinets
- Door is opened/closed using a button (outside and inside); manually in case of power failure
- Double doors suitable for an aisle width of 1200 mm
- Colour black grey (RAL 7021)
- Optional door activation with motion sensor or operator unit with access control

Delivery comprises

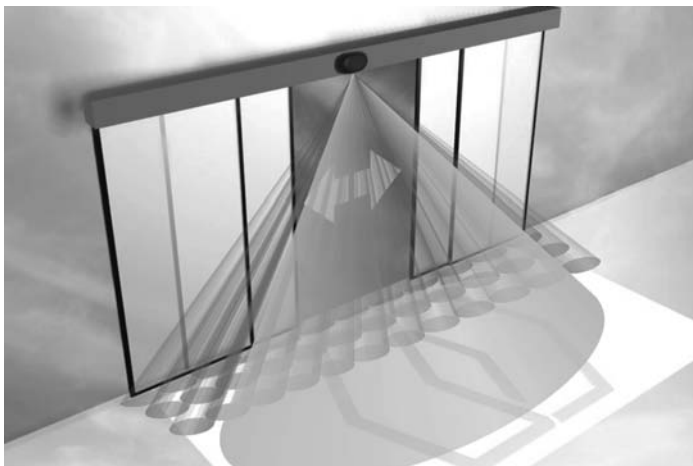
Item	Qty	Description
1	2	Sliding door, frame Al extrusion; laminated safety glass 10 mm, door sliding gear, connector cable and button to operate door
1	1	Slide rail with front trim
2	1	Fixing material kit (for cabinet side)

Order Information

Description	Part no.
Sliding door, electronic	21130-610
Accessories	
Assembly kit for cabinet height 2200 mm with base/plinth, PU 2 pieces	23130-453
Door cover mask for unequal aisle heights	Page 1.217

Note

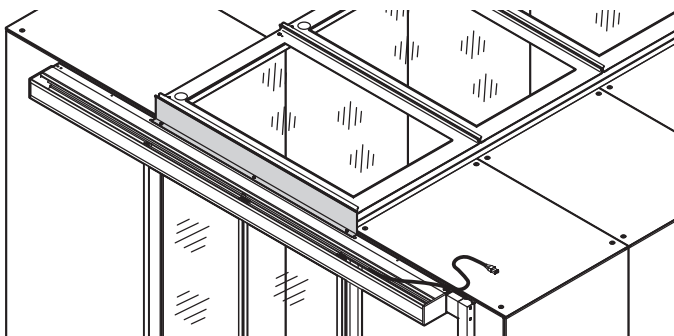
- Please order suitable door cover masks (above the door) separately
- An assembly kit is required for cabinet height 2200 mm with base/plinth, please order separately
- The door system must be maintained and inspected regularly



01010066

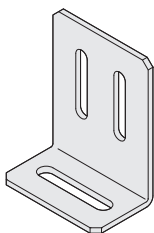
Optional door opening with motion sensor

Accessories



01012069

Door cover mask



01012059

Assembly kit



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

Cabinets - VARISTAR containment

Top cover elements



01009024

- Suitable for an aisle width of 1200 mm
- Top cover with safety glass (VSG)
- For cabinet widths 600 and 800 mm
- A top cover profile can raise the aisle height by 84 mm; please order separately
- Top cover can be removed from inside (allows access to lighting and facilitates maintenance works)

Delivery comprises

Item	Qty	Description
1	1	Frame St, 2 mm, RAL 7021; safety glass (VSG) 7 mm, length 1200 mm
2	1	Fixing material kit

Order Information

Description	For cabinet width mm	Part no.
Top cover elements	600	21130-588
Top cover elements	800	21130-589

Accessories

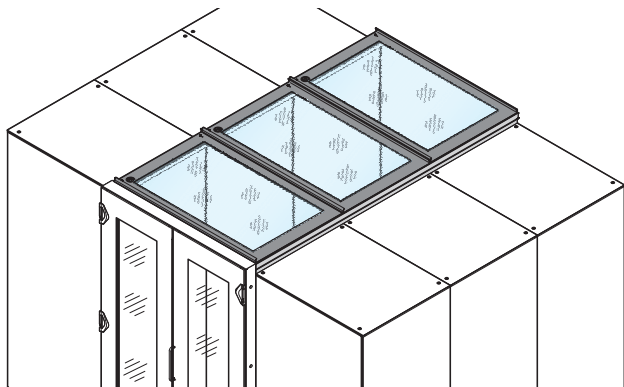
Top cover profile Length 2400 mm, PU 2 pieces	21130-594
Assembly kit bracket for top cover raising profile, PU 6 pieces	23130-433

Note

- Where a mechanical sliding door is used, the top cover directly beside the door must be 100 mm narrower, see page 1.205



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



01012074

Universal profile to raise top cover

- The top cover elements can be raised by 84 mm using a profile
- Integration of cabinets with other dimensions
- The profile has a T-groove on the inside that allows lamps, sensors, etc. to be mounted easily

Delivery comprises

Item	Qty	Description
1	2	Al extrusion, RAL 7021, length 2400 mm

Order Information

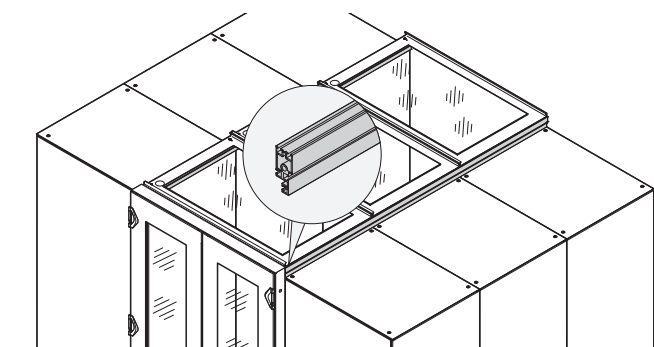
Description	Part no.
Universal top cover profile, height 84 mm	21130-594
Accessories	
Assembly kit Bracket for universal top cover profile, PU 6 pieces	23130-433

Note

- To mount a profile, an assembly kit (2 pieces) is required; please order separately

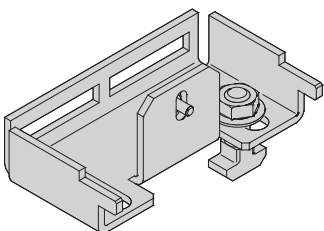


For further information www.schroff.biz/oneclick
oneClick search code = Part no.



01012051

Application with raised top covers

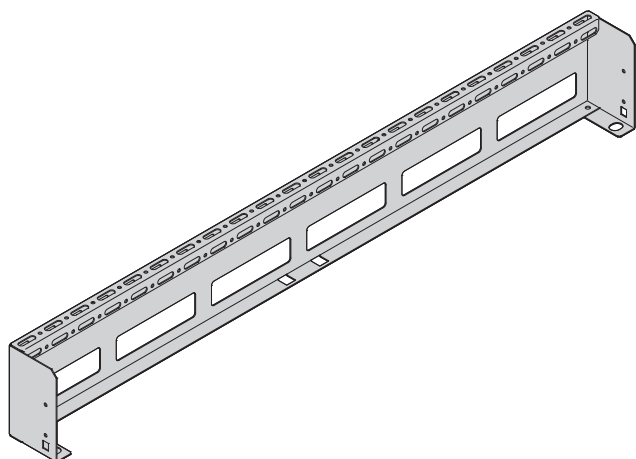


01012052

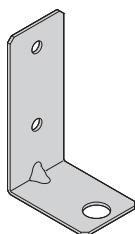
Accessory: Assembly kit to mount universal top cover profile

Cabinets - VARISTAR containment

Adaptors for cable routing



01012075



01012076

Mounting bracket for cable route adaptor

- Suitable for VARISTAR cabinets and all common cable panel systems

Delivery comprises

Item	Qty	Description
1	2	St profile, RAL 7021

Order Information

Description	For cabinet depth mm	Part no.
Cable route adaptor	1000	21130-596
Cable route adaptor	1200	21130-597

Accessories

Mounting bracket for cable route adaptor		
Bracket, St, PU 2 pieces		21130-598

Note

- Mounting bracket for cable route adaptor is required for containment without universal top cover profile



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

Cabinets - VARISTAR containment

Covers

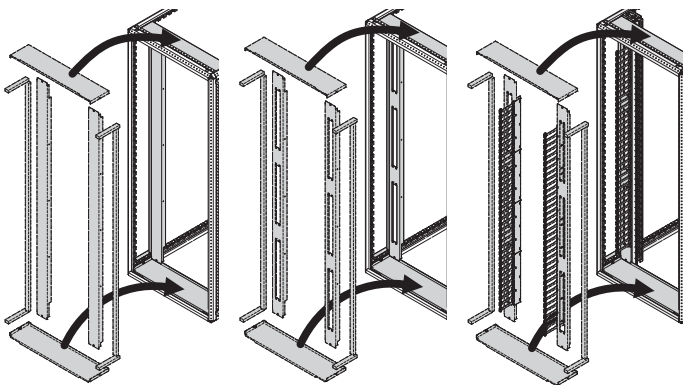


01013006

- All around the front, covers prevent unwanted air short-circuits, i.e. the mixture of warm exhaust air with cold inbound air
- For cabinet width 600 or 800 mm, for cabinet height 42 or 47 U
- Versions
 - Solid covers
 - Covers for 800 mm wide cabinets with cut-outs for cable routing
 - Covers with vertical cable fingers for 800 mm wide cabinets
 - Cable routing with cable channel (hinged cover at front) for 800 mm wide cabinets
- Suitable divider plates are available for 19" planes mounted with recess (70, 145, 230 mm)
- Network and server cabinets can be arranged side by side
- Gaskets, UL 94 HF-1, -20 °C ... 100° C

Delivery comprises

Item	Qty	Description
1a	2	Cover, St, 1 mm, RAL 7021, left/right (at 600 mm width only gaskets instead of covers)
2	1	Cover, top, St, 1 mm, RAL 7021
3	1	Cover, bottom, St, 1 mm, RAL 7021
4	1	Fixing material kit, gaskets, user manual



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01012054

01012056

Solid covers, width 800 mm

Cover with lateral cut-outs

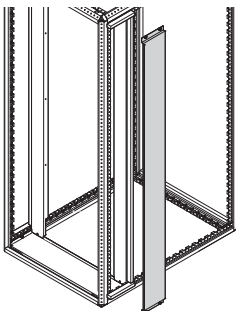
Cover with cable fingers

Order Information

Height U	Height mm	Covers	For 600 mm wide cabinets Part no.	For 800 mm wide cabinets			
				Solid cover Part no.	Cover with lateral cut-outs for cables Part no.	Cover with cable fingers Part no.	Cover with cable panels Part no.
42	2000	for 19" plane, recessed by 70 mm	21130-624	21130-627	21130-629	-	-
42	2000	for 19" plane, recessed by 145 mm	21130-618	21130-631	21130-620	-	-
42	2000	for 19" plane, recessed by 220 mm	21130-622	21130-633	21130-623	21130-636	21130-638
47	2200	for 19" plane, recessed by 70 mm	21130-625	21130-628	21130-630	-	-
47	2200	for 19" plane, recessed by 145 mm	21130-619	21130-632	21130-621	-	-
47	2200	for 19" plane, recessed by 220 mm	21130-626	21130-634	21130-635	21130-637	21130-639

Accessories

Lateral panels for 42 U cabinets, for lateral termination in depth of 70 mm, PU 1 piece	21130-640
Lateral panels for 42 U cabinets, for lateral termination in depth of 145 mm, PU 1 piece	21130-642
Lateral panels for 47 U cabinets, for lateral termination in depth of 70 mm, PU 1 piece	21130-641
Lateral panels for 47 U cabinets, for lateral termination in depth of 145 mm, PU 1 piece	21130-643
Brush strip to close the open cable routing cut-outs, 1 U, black, 1 kit	23130-153
Clip-on 19" plastic front panels to close the open cable routing cut-outs, 1 U, black, PU 10 pieces	D19BPT1RU



01012057

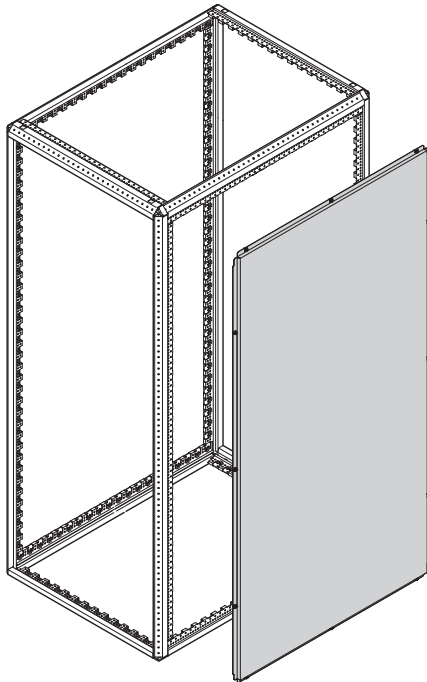
Lateral panels for 19" planes mounted with recess



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

Cabinets - VARISTAR containment

Separating walls



01012058

- Where cabinets are arranged in rows the separating wall replaces the cabinet side wall
- Mounts laterally, prevents unauthorised access
- For cabinet height 42 or 47 U and cabinet depth 1000 mm or 1200 mm

Delivery comprises

Item	Qty	Description
1	1	Separating wall, St, 1 mm, finish AlZn
2	1	Fixing material kit, user manual

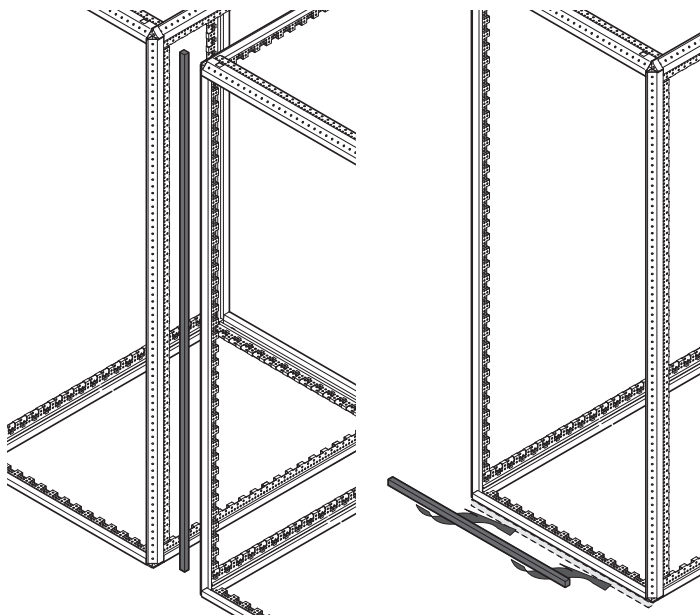
Order Information

For cabinet height U	For cabinet depth mm	Part no.
42	1000	23130-480
42	1200	23130-481
47	1000	23130-484
47	1200	23130-485



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

Gasketing



Vertical gasket

01012081

Horizontal gasket

01012082

- Gasketing kits to seal front against air short-circuits

Delivery comprises

Item	Qty	Description
1	1	Gasket, halogen-free
2	1	User manual

Order Information

Description	Length mm	Part no.
Vertical gasket for vertical sealing between 10 cabinets	5000	23130-475
Horizontal gasket for two 600 mm wide cabinets with adjustable feet	1200	23130-477
Horizontal gasket for two 800 mm wide cabinets with adjustable feet	1600	23130-478



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

Cabinets – VARISTAR containment



configuration

Simple. Fast. To the ideal product.

Components can be varied and combined freely

- Configuration tables from page 1.214



solution

Simple. Fast. From one source.

Integration and custom developments

- Special sizes, customised solutions
- Integration of different cabinet series
- Thermal simulation



academy

Knowledge. Sharing. Partnerships.

Knowledge transfer and partnership

- Seminars, white papers, CAD drawings, test reports, user reports



lifecycle

We are with you. For the entire product life.

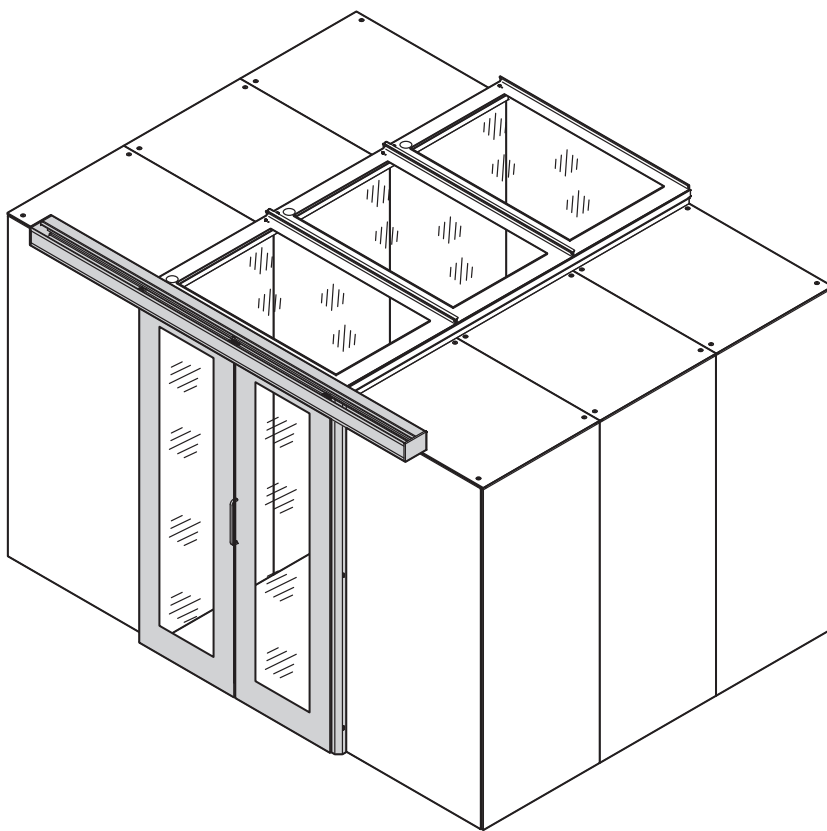
Flexible support throughout the product lifecycle

- Delivery to point of use, installation service, exchange service, replacement parts

Cabinets - VARISTAR containment

Configuration aid for aisle containment

- For cabinet rows
 - Cabinet height 2000 and 2200 mm
 - Aisle width 1200 mm
 - Cabinet width 600 mm and 800 mm
- Colour RAL 7021, swing door also in RAL 7035
- Configure your containment system from individual components
- Once you have selected the desired cabinet containment height, the row number (first column of the configuration tables) guides you through all subsequent configurations pages that apply to these dimensions (see example below)
- Assembly on request



01012065

Example 6 cabinet containment cells (here: row 6)

Qty	Description	Order no.
6	Side-to-side cabinet, 47 U, 2200 mm high, 800 mm wide, 1200 mm deep, with front and rear door, RAL 7021, 1 piece (see chapter VARISTAR data/network systems)	10130-153
2	Side panel screw fixed, height 47 U - 2200 mm, for cabinet depth 1200 mm, RAL 7021, PU 2 pieces (see chapter VARISTAR data/network systems)	22130-537
1	Sliding door, mechanical, for cabinet height 2200 mm, aisle height 2102 mm, with adjustable foot + top cover raising element, 1 piece	21130-585
1	Door cover mask to equalize aisle height, 1 piece	21130-612
3	Top cover, for cabinet width 800 mm, aisle width 1200 mm, 1 piece	21130-589
1	Universal top cover profile, length 2400 mm, height 84 mm, PU 2 pieces	21130-594
1	Assembly kit for universal top cover profile, PU 6 pieces	23130-433
5	Cover, for lateral termination, 70 mm recessed, PU 1 kit	21130-638
5	Cover with lateral cutouts, by 145 mm recessed 19" plane, PU 1 kit	21130-632
2	Cover for lateral termination, depth-offset 70 mm, 1 piece	21130-643
..

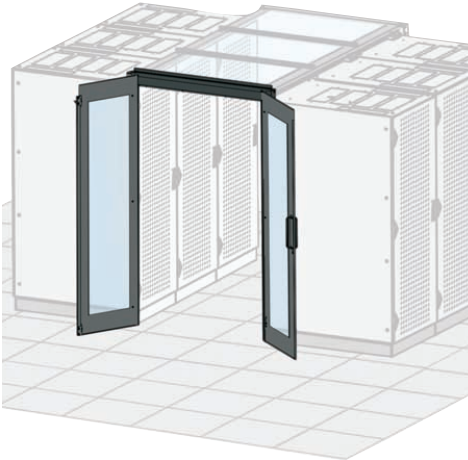
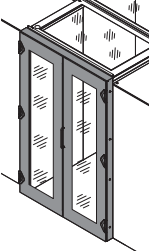
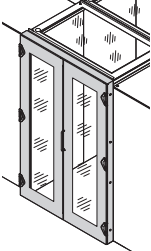
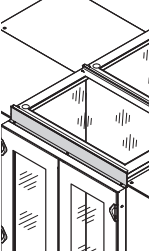
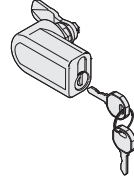
Page

Swing doors	1.214
Sliding doors, mechanical	1.215
Sliding doors (touch), mechanical	1.216
Automatic sliding doors	1.217
Top covers	1.218
Adaptors for cable routing	1.219
Solid covers, beside 19" plane	1.220
19" covers with cable routing, cable fingers, cable panels	1.221
19" plastic front panels, lateral panels	1.222
Separating walls, gasketing kits	1.223

Cabinets - VARISTAR containment

Swing doors

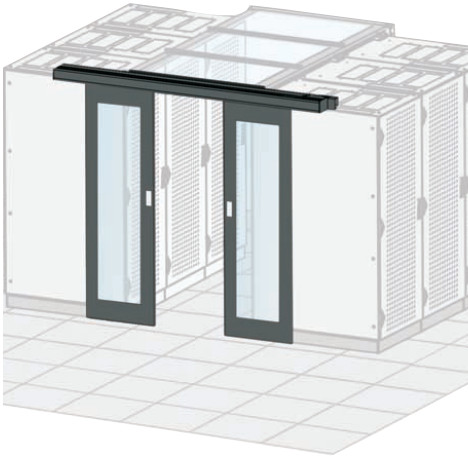
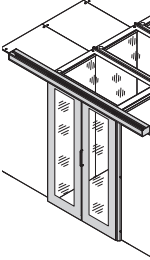
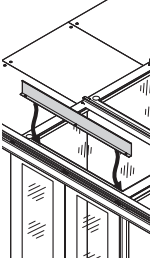
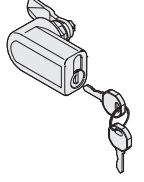
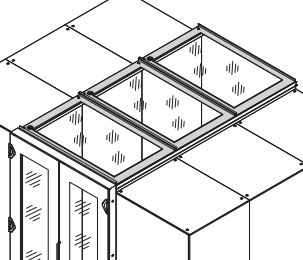
Order Information

				Swing door			
				RAL 7021	RAL 7035	Cover	Door locking
 <p style="text-align: right;">01012070</p>				 <p style="text-align: center;">01012064</p>	 <p style="text-align: center;">01012063</p>	 <p style="text-align: center;">01012068</p>	 <p style="text-align: center;">01012060</p>
				<p>Frame, St, with single pane safety glass 6 mm and 180° hinge, 3-point locking and lever handle (please order lock separately), door cover mask to equalise aisle height, 1 piece</p>	<p>St, 1.5 mm, RAL 7021; cover to equalise aisle height</p>	<p>Door locking mechanism</p>	
No.	For cabinet height H	Aisle height (lower edge)	Raising elements	PU 2 pieces	1 piece	1 piece	1 piece
	U mm	mm					
1	42	2000	2018	21130-583	22130-583	-	23130-437
2			Adjustable feet				
3			Adjustable feet + raised top cover				
4			Base/plinth				
5	47	2200	2192	21130-583	22130-583	21130-611	23130-437
6			Base/plinth + raised top cover				
7			Adjustable feet				
8			Adjustable feet + raised top cover				
			2308			21130-612	
			2392			21130-613	
			Base/plinth				
			Base/plinth + raised top cover				

Cabinets - VARISTAR containment

Sliding doors, mechanical

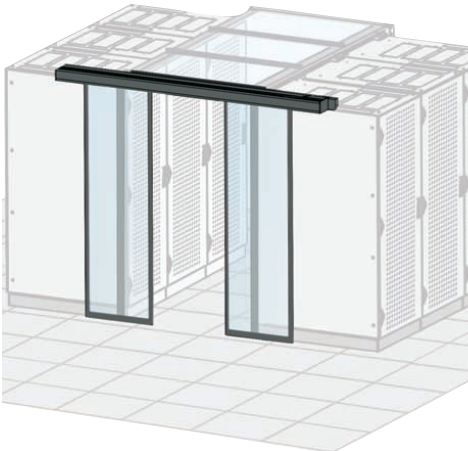
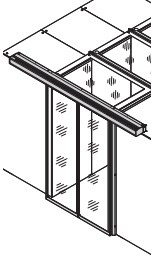
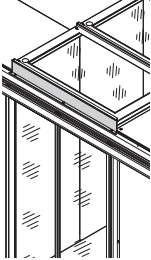
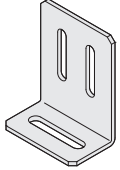
Order Information

				Sliding door, mechanical				
				RAL 7021	Cover	Lock for sliding door	Top cover Width 500 mm for 600 mm cabinet width	Top cover Width 700 mm for 800 mm cabinet width
 <p style="text-align: right; font-size: small;">01012071</p>				 <p style="text-align: center; font-size: x-small;">01012065</p>	 <p style="text-align: center; font-size: x-small;">01012066</p>	 <p style="text-align: center; font-size: x-small;">01012060</p>	 <p style="text-align: center; font-size: x-small;">01012050</p>	
				<p style="font-size: x-small;">Frame, St, RAL 7021, with single pane safety glass 6 mm</p>	<p style="font-size: x-small;">St, 1.5 mm, RAL 7021; cover to equalise aisle height</p>	<p style="font-size: x-small;">Lock with T-bar handle and profile cylinder with 2 keys (333)</p>	<p style="font-size: x-small;">Frame, St; with single pane safety glass, 6 mm, width 1200 mm; reduced-width version for mounting directly beside the mechanical sliding door</p>	
No.	For cabinet height H U mm	Aisle height (lower edge) mm	Raising elements	PU 2 pieces	1 piece	PU 1 kit	PU 1 kit	PU 1 kit
1	42 2000	2018	Adjustable feet	21130-614	-	23130-473	21130-590	21130-591
2		2102	Adjustable feet + raised top cover		21130-611			
3		2108	Base/plinth	-				
4		2192	Base/plinth + raised top cover	21130-611				
5	47 2200	2218	Adjustable feet	21130-616	-	23130-473	21130-590	21130-591
6		2302	Adjustable feet + raised top cover		21130-611			
7		2308	Base/plinth	-				
8		2392	Base/plinth + raised top cover	21130-611				

Cabinets - VARISTAR containment

Sliding doors (touch), mechanical

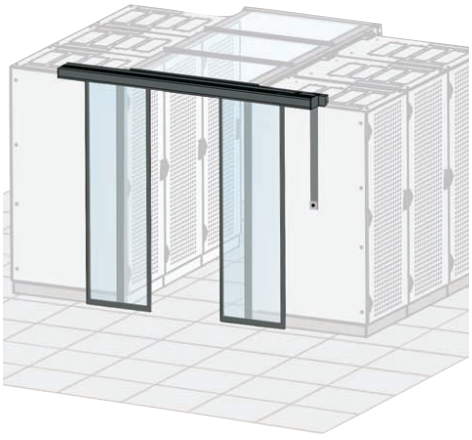
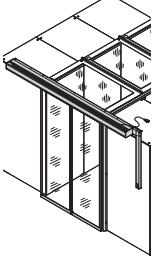
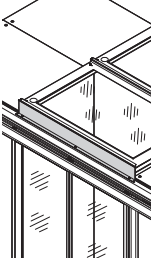
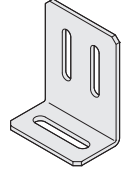
Order Information

				Hand operated sliding door, touch		
				RAL 7021	Cover	Bracket
 <p style="text-align: right;">01012062</p>				 <p style="text-align: center;">01012062</p> <p>Sliding door, frame St, with single pane safety glass 6 mm, closes automatically</p>	 <p style="text-align: center;">01012067</p> <p>Door cover mask to equalise aisle height, 1 piece</p>	 <p style="text-align: center;">01012059</p> <p>Assembly kit for cabinet height 2200 mm with base/plinth, PU 2 pieces</p>
No.	For cabinet height H U mm	Aisle height (lower edge) mm	Raising elements	PU 2 pieces	1 piece	PU 2 pieces
1	42	2000	2018	21130-585	-	-
2			2102			
3			2108			
4			2192			
5	47	2200	2218	21130-585	21130-611	23130-453
6			2302		21130-612	
7			2308		21130-612	
8			2392		21130-613	

Cabinets - VARISTAR containment

Automatic sliding doors

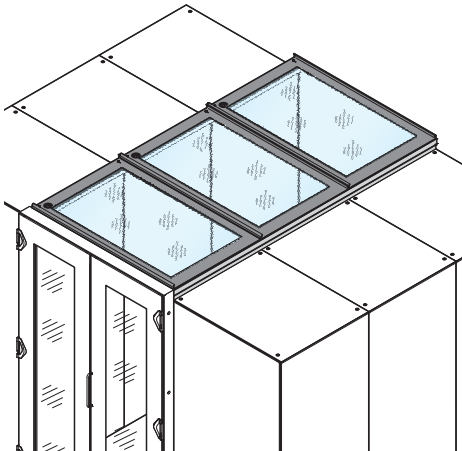
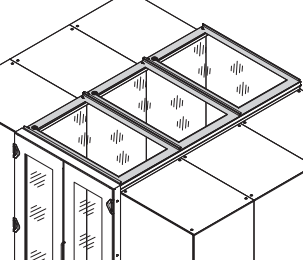
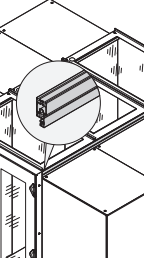
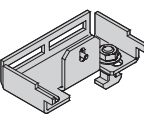
Order Information

				Automatic sliding door		
				RAL 7021	Cover	Bracket
 <p style="text-align: right; font-size: small;">01012073</p>				 <p style="text-align: center; font-size: x-small;">01012061</p>	 <p style="text-align: center; font-size: x-small;">01012069</p>	 <p style="text-align: center; font-size: x-small;">01012059</p>
				Sliding door, frame, St, with single pane safety glass 6 mm, closes electrically by pushbutton	Door cover mask to equalise aisle height, 1 piece	Assembly kit for cabinet height 2200 mm with base/plinth, PU 2 pieces
No.	For cabinet height H U mm	Aisle height (lower edge) mm	Raising elements	PU 2 pieces	1 piece	PU 2 pieces
1	42 2000	2018	Adjustable feet	21130-610	-	-
2		2102	Adjustable feet + raised top cover			
3		2108	Base/plinth			
4		2192	Base/plinth + raised top cover			
5	47 2200	2218	Adjustable feet	21130-610	21130-611	-
6		2302	Adjustable feet + raised top cover		21130-612	
7		2308	Base/plinth		21130-612	23130-453
8		2392	Base/plinth + raised top cover		21130-613	

Cabinets - VARISTAR containment

Top covers

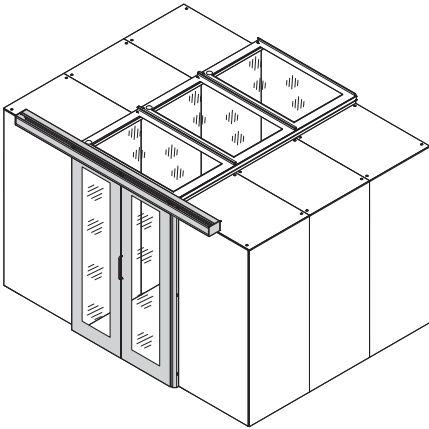
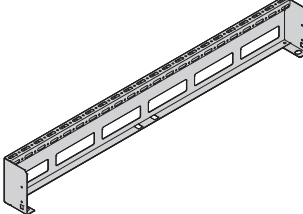
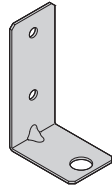
Order Information

				Top cover		Universal profile to raise top cover	Assembly kit	
				600 mm width	800 mm width			
 <p>01012074</p>				 <p>01012050</p>		 <p>01012051</p>	 <p>01012052</p>	
<p>Frame, St; with single pane safety glass 7 mm, aisle width 1200 mm</p>				<p>Al extrusion, RAL 7021, length 2400 mm, height 84 mm</p>		<p>Bracket to mount the universal top cover profile</p>		
No.	For cabinet height H U mm	Aisle height (lower edge) mm	Raising elements	1 piece	1 piece	PU 2 pieces	PU 6 pieces	
1	42	2000	2018	Adjustable feet	21130-588	21130-589	-	-
2			2102	Adjustable feet + raised top cover			21130-594	23130-433
3			2108	Base/plinth			-	-
4			2192	Base/plinth + raised top cover			21130-594	23130-433
5	47	2200	2218	Adjustable feet	21130-588	21130-589	-	-
6			2302	Adjustable feet + raised top cover			21130-594	23130-433
7			2308	Base/plinth			-	-
8			2392	Base/plinth + raised top cover			21130-594	23130-433

Cabinets - VARISTAR containment

Adaptors for cable routing

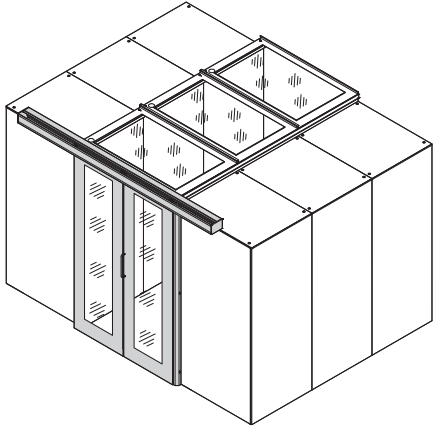
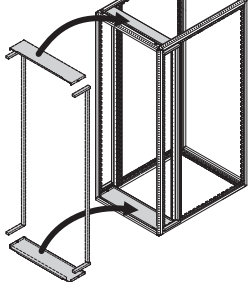
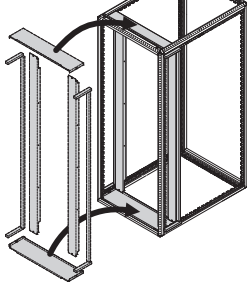
Order Information

				Adaptors for cable routing			
				for 1000 mm cabinet depth	for 1200 mm cabinet depth	Mounting bracket for cable route adaptor	
 <p>01012065</p>				 <p>01012075</p> <p>St profile, RAL 7021; fits to cabinet with a mounting bracket and has drilled holes to bolt on cable panel</p>		 <p>01012076</p> <p>Bracket, St, 1.5 mm</p>	
No.	U	For cabinet height H mm	Aisle height (lower edge) mm	Raising elements	PU 2 pieces	PU 2 pieces	PU 2 pieces
1	42	2000	2018	Adjustable feet	21130-596	21130-597	21130-598
2			2102	Adjustable feet + raised top cover			
3			2108	Base/plinth			
4			2192	Base/plinth + raised top cover			
5	47	2200	2218	Adjustable feet	21130-596	21130-597	21130-598
6			2302	Adjustable feet + raised top cover			
7			2308	Base/plinth			
8			2392	Base/plinth + raised top cover			

Cabinets - VARISTAR containment

Solid covers, beside 19" plane

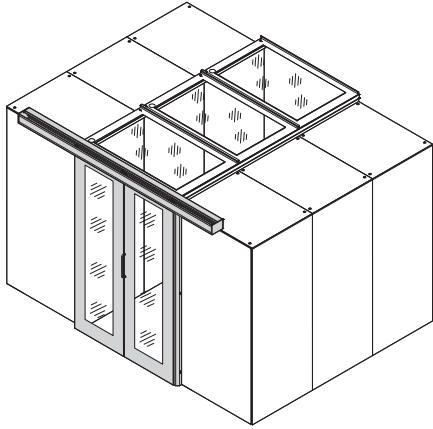
Order Information

				Cover, beside 19" plane, 600 mm cabinet width			Cover, beside 19" plane, 800 mm cabinet width			
				for 70 mm recessed 19" plane	for 145 mm recessed 19" plane	for 220 mm recessed 19" plane	for 70 mm recessed 19" plane	for 145 mm recessed 19" plane	for 220 mm recessed 19" plane	
 <p>01012065</p>				 <p>01012053</p> <p>Gasket left and right; cover at top and bottom</p>			 <p>01012055</p> <p>Cover left, right, at top and bottom</p>			
No.	For cabinet height H U	mm	Aisle height (lower edge) mm	Raising elements	PU 1 kit	PU 1 kit	PU 1 kit	PU 1 kit	PU 1 kit	PU 1 kit
1	42	2000	2018	Adjustable feet	21130-624	21130-618	21130-622	21130-627	21130-631	21130-633
2			2102	Adjustable feet + raised top cover						
3			2108	Base/plinth						
4			2192	Base/plinth + raised top cover						
5	47	2200	2218	Adjustable feet	21130-625	21130-619	21130-626	21130-628	21130-632	21130-634
6			2302	Adjustable feet + raised top cover						
7			2308	Base/plinth						
8			2392	Base/plinth + raised top cover						

Cabinets - VARISTAR containment

Trims with cable ducting, cable finger, cable channel

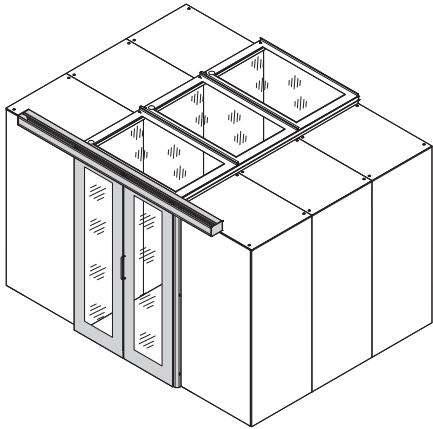
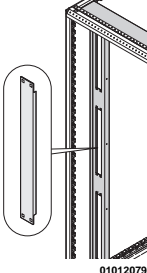
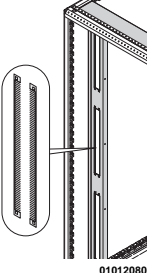
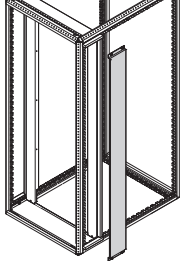
Order Information

 <small>01012065</small>				Cover with lateral cut-outs			Cover with cable fingers for 220 mm recessed 19" plane	Cover with cable channels	Cable panel Lateral cable ducting	
				for 70 mm recessed 19" plane	for 145 mm recessed 19" plane	for 220 mm recessed 19" plane	<small>01012054</small>	<small>01012056</small>	<small>01012077</small>	<small>01012078</small>
No.	For cabinet height H U mm	Aisle height (lower edge) mm	Raising elements	Cover with cable routes left and right; cover closed top and bottom	Support with cable fingers and front covers	St, with cable channel and hinged front cover	St, 1 mm, width 150 mm; with perforations for cable ties or Velcro-type tape			
				PU 1 kit	PU 1 kit	PU 1 kit	PU 2 pieces			
1	42	2000	2018	Adjustable feet	21130-629	21130-620	21130-623	21130-636	21130-638	23130-421
2			2102	Adjustable feet + raised top cover						
3			2108	Base/plinth						
4			2192	Base/plinth + raised top cover						
5	47	2200	2218	Adjustable feet	21130-630	21130-621	21130-635	21130-637	21130-639	23130-422
6			2302	Adjustable feet + raised top cover						
7			2308	Base/plinth						
8			2392	Base/plinth + raised top cover						

Cabinets - VARISTAR containment

19" plastic front panels, lateral panels

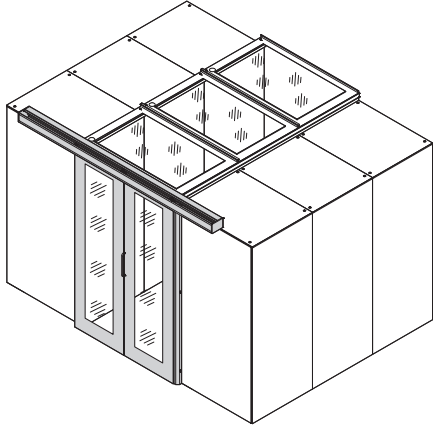
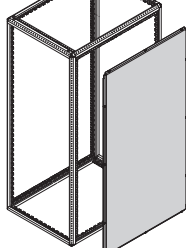
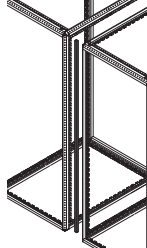
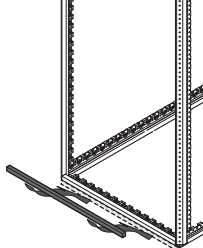
Order Information

				Closure for cut-outs in covers		Lateral panel		
				19" plastic panels	19" brush strip	Depth offset 70 mm	Depth offset 145 mm	
 <p style="text-align: right;">01012065</p>				 <p style="text-align: center;">01012079</p>	 <p style="text-align: center;">01012080</p>	 <p style="text-align: right;">01012057</p>		
				<p>ABS, UL 94 V-0, clips in</p> <p>To close the open cable routes in lateral panels</p>	<p>Plastic</p> <p>To close the open cable routes in lateral panels</p>	<p>Al, 2 mm</p> <p>Lateral panel for unequal 19" mounting depths</p>		
No.	For cabinet height H U mm	Aisle height (lower edge) mm	Raising elements	PU 10 pieces	1 piece	1 piece	1 piece	
1	42	2000	2018	Adjustable feet	D19BPT1RU	23130-153	21130-640	21130-642
2			2102	Adjustable feet + raised top cover				
3			2108	Base/plinth				
4			2192	Base/plinth + raised top cover				
5	47	2200	2218	Adjustable feet	D19BPT1RU	23130-153	21130-641	21130-643
6			2302	Adjustable feet + raised top cover				
7			2308	Base/plinth				
8			2392	Base/plinth + raised top cover				

Cabinets - VARISTAR containment

Separating walls, gasketing kits


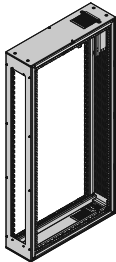


Order Information

				Separating wall		Vertical gasket	Horizontal gasket		
				Cabinet depth 1000 mm	Cabinet depth 1200 mm		For 600 mm wide cabinets	For 800 mm wide cabinets	
 <p style="text-align: right; font-size: small;">01012065</p>				 <p style="text-align: right; font-size: x-small;">01012058</p> <p style="text-align: center; font-size: x-small;">Al, 2 mm; lateral cabinet mounting, prevents unauthorised access</p>		 <p style="text-align: right; font-size: x-small;">01012081</p> <p style="text-align: center; font-size: x-small;">PUR flexible foam, colour similar to RAL 7021, UL 94-HF1; for vertical sealing between 10 cabinets, also suitable for base/plinth and to raise top cover</p>	 <p style="text-align: right; font-size: x-small;">01012082</p> <p style="text-align: center; font-size: x-small;">2 x bracket, St, RAL 7021; PUR flexible foam seal, colour similar to RAL 7021, UL 94-HF1; suitable for horizontal sealing of 2 cabinets to bottom, when adjustable feet are used</p>		
No.	U	mm	Aisle height (lower edge) mm	Raising elements	1 piece	1 piece	PU 1 kit	PU 1 kit	PU 1 kit
1	42	2000	2018	Adjustable feet	23130-480	23130-481	23130-475	23130-477	23130-478
2			2102	Adjustable feet + raised top cover					
3			2108	Base/plinth					
4			2192	Base/plinth + raised top cover					
5	47	2200	2218	Adjustable feet	23130-484	23130-485	23130-475	23130-477	23130-478
6			2302	Adjustable feet + raised top cover					
7			2308	Base/plinth					
8			2392	Base/plinth + raised top cover					

Cabinets - Varistar ServicePLUS containment

Configuration of SHX 30 air/water heat exchanger

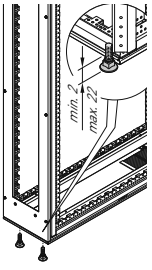
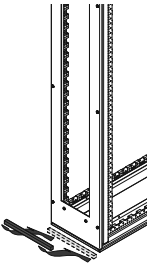
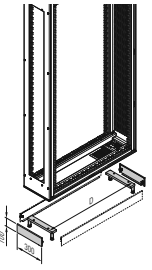
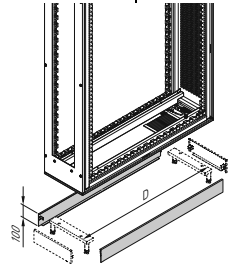
Order Information

				Frame		SHX 30 air/water heat exchanger, 30 kW				
				1000 mm deep	1200 mm deep	Water connection at bottom		Water connection at top and bottom (with condensate pump)		
 <p style="text-align: right;">13005</p>				 <p style="text-align: right;">01013068</p>		 <p style="text-align: right;">01013076</p>		 <p style="text-align: right;">01013077</p>		
										Rack (VARISTAR Slim-Line), St, RAL 7021; top cover and base plate, front and rear panel; prepared to accommodate SHX 30 air/water heat exchanger
No.	U	For cabinet height H mm	Aisle height (lower edge) mm	Raising elements	1 piece	1 piece	1 piece	1 piece	1 piece	1 piece
1	42	2000	2018	Adjustable feet	10130-226	10130-227	60714-067	60714-068	60714-077	60714-078
2			2102	Adjustable feet + raised top cover						
3			2108	Base/plinth						
4			2192	Base/plinth + raised top cover						
5	47	2200	2218	Adjustable feet	10130-228	10130-229	60714-067	60714-068	60714-077	60714-078
6			2302	Adjustable feet + raised top cover						
7			2308	Base/plinth						
8			2392	Base/plinth + raised top cover						

Cabinets - Varistar ServicePLUS containment

Configuration of SHX 30 air/water heat exchanger

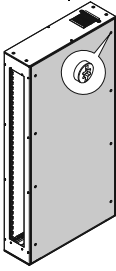
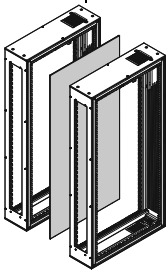
Order Information

				Adjustable feet	Gasketing for adjustable feet	Base/plinth	Side trim for base/plinth		
							Depth 1000 mm	Depth 1200 mm	
 <p style="text-align: right; font-size: small;">01013005</p>				 <p style="text-align: center; font-size: x-small;">01013069</p>	 <p style="text-align: center; font-size: x-small;">01013070</p>	 <p style="text-align: center; font-size: x-small;">01013071</p>	 <p style="text-align: right; font-size: x-small;">01013072</p>		
				St, black, for the rack, static load-carrying capacity 1000 kg. Please order gasketing separately	Polyurethane gasketing, suitable for front and rear, RAL 7021; for closing the air gap at the front	Base plinth, St, cover, St, 1.5 mm, height 100 mm, width 300 mm, RAL 7021; please order cover separately	St, 1.5 mm, height 100 mm, RAL 7021		
No.	For cabinet height H U	Aisle height (lower edge) mm	Raising elements mm	PU 4 pieces	PU 2 pieces	PU 1 kit	PU 2 pieces	PU 2 pieces	
1	42	2000	2018	Adjustable feet	23130-511	23130-538	23130-507	23130-172	23130-363
2			2102	Adjustable feet + raised top cover					
3			2108	Base/plinth					
4			2192	Base/plinth + raised top cover					
5	47	2200	2218	Adjustable feet	23130-511	23130-538	23130-507	23130-172	23130-363
6			2302	Adjustable feet + raised top cover					
7			2308	Base/plinth					
8			2392	Base/plinth + raised top cover					

Cabinets - Varistar ServicePLUS containment

Configuration of SHX 30 air/water heat exchanger

Order Information

				Screw-fixed side panel		Separating wall		
				Depth 1000 mm	Depth 1200 mm	Cabinet depth 1000 mm	Cabinet depth 1200 mm	
				 01013073 St, 1 mm, incl. GND/earthing		 01013074 St, 1 mm, AlZn; lateral cabinet mounting prevents unauthorized access		
No.	For cabinet height H U mm	Aisle height (lower edge) mm	Raising elements	PU 2 pieces	PU 2 pieces	1 piece	1 piece	
1	42	2000	2018	Adjustable feet	21130-013	21130-535	23130-480	23130-481
2			2102	Adjustable feet + raised top cover				
3			2108	Base/plinth				
4			2192	Base/plinth + raised top cover				
5	47	2200	2218	Adjustable feet	21130-018	21130-537	23130-484	23130-485
6			2302	Adjustable feet + raised top cover				
7			2308	Base/plinth				
8			2392	Base/plinth + raised top cover				


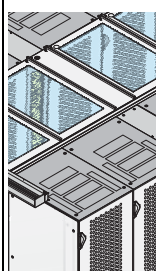
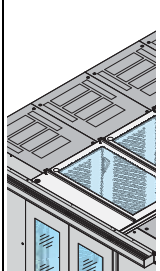
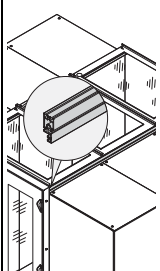
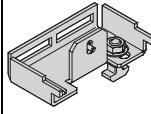


13005

Cabinets - Varistar ServicePLUS containment

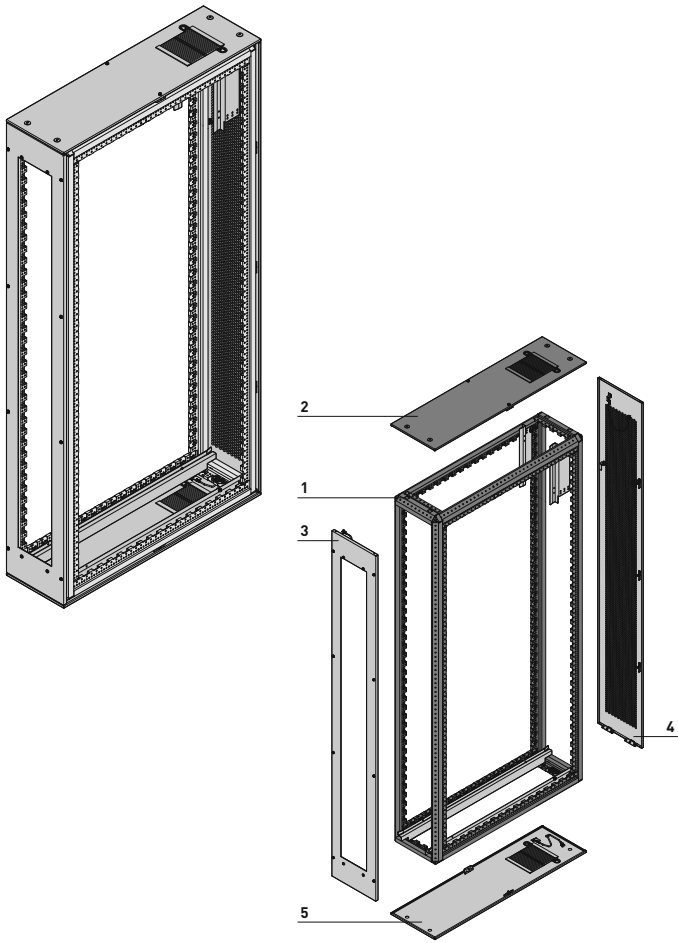
Configuration of SHX 30 air/water heat exchanger

Order Information

				Top cover		Raised top cover	Assembly kit	
				300 mm width	200 mm width			
 <p style="text-align: right; margin-right: 50px;">13005</p>				 <p style="text-align: center; font-size: small;">01013079</p>	 <p style="text-align: center; font-size: small;">01013078</p>	 <p style="text-align: center; font-size: small;">01012051</p>	 <p style="text-align: center; font-size: small;">01012052</p>	
				St; 2 mm, RAL 7021, aisle width 1200 mm	St; 2 mm, RAL 7021, aisle width 1200 mm; for installation directly beside mechanical sliding door only	Al extrusion, RAL 7021, length 2400 mm, height 84 mm	Mounting of top cover raising profile	
No.	For cabinet height H U mm	Aisle height (lower edge) mm	Raising elements	1 piece	1 piece	PU 2 pieces	PU 6 pieces	
1	42	2000	2018	Adjustable feet	21130-648	21130-649	-	-
2			2102	Adjustable feet + raised top cover			21130-594	23130-433
3			2108	Base/plinth			-	-
4			2192	Base/plinth + raised top cover			21130-594	23130-433
5	47	2200	2218	Adjustable feet	21130-648	21130-649	-	-
6			2302	Adjustable feet + raised top cover			21130-594	23130-433
7			2308	Base/plinth			-	-
8			2392	Base/plinth + raised top cover			21130-594	23130-433

Cabinets - Varistar ServicePLUS containment

Rack for SHX 30 air/water heat exchanger



- Rack (VARISTAR Slim-Line) to accommodate a SHX 30 air/water heat exchanger
- Height 2000 or 2200 mm
- Depth 1000 or 1200 mm
- Width 300 mm
- Covers top, bottom, front and rear

NEW

Delivery includes

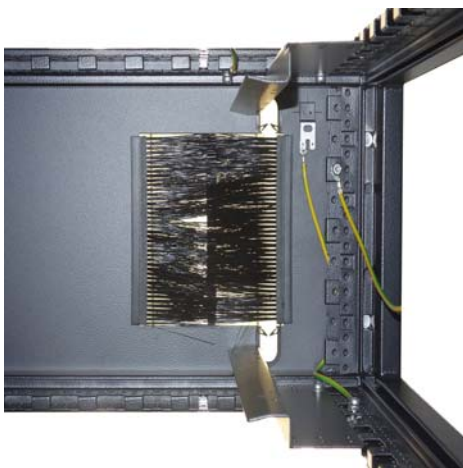
Item	Qty	Description
1	1	Welded basic rack (Slim-Line) from steel profiles, RAL 7021; earthing stud
2	1	Flat top cover, St, RAL 7021; with brush strip cut-out (for water) and on the side for cable ducting
3	1	Front frame, St, RAL 7021
4	1	Rear cover, perforated, lockable
5	1	Base plate, St, RAL 7021; with brush strip cut-out (for water) and on the side for cable ducting

Order Information

Height mm	Width mm	Depth mm	Part no.
2000	300	1000	10130-226
2000	300	1200	10130-227
2200	300	1000	10130-228
2200	300	1200	10130-229

Accessories

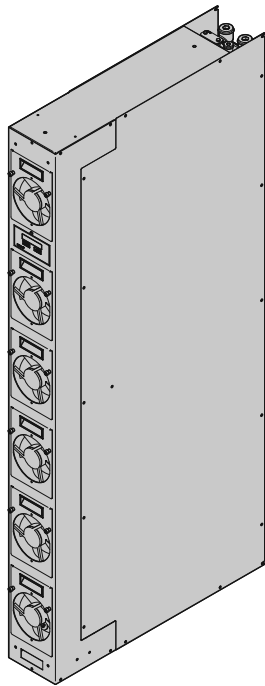
Adjustable feet for the frame, RAL 7021, static load-carrying capacity 1000 kg, PU 4 pieces	23130-511
Gasketing for adjustable feet Polyurethane foam gasketing, color similar to RAL 7021, length 300 mm, for sealing front and rear, PU 2 pieces	23130-538
Base/plinth Base plinth, St, width 300 mm, height 100 mm; bolted to rack, PU 2 pieces	23130-507
Side trim St, 1.5 mm, height 100 mm, depth 1000 mm, PU 2 pieces	23130-172
Side trim St, 1.5 mm, height 100 mm, depth 1200 mm, PU 2 pieces	23130-363
Side panel, screw-fixed for IP 55 St, 1 mm, height 2000 mm, depth 1000 mm, 2 pieces	21130-013
Side panel, screw-fixed for IP 55 St, 1 mm, height 2000 mm, depth 1200 mm, 2 pieces	21130-535
Side panel, screw-fixed for IP 55 St, 1 mm, height 2200 mm, depth 1200 mm, 2 pieces	21130-018
Side panel, screw-fixed for IP 55 St, 1 mm, height 2200 mm, depth 1200 mm, 2 pieces	21130-537
Separating wall St, 1 mm, AlZn, height 2000 mm, for depth 1000 mm, 1 piece	23130-480
Separating wall St, 1 mm, AlZn, height 2000 mm, for depth 1200 mm, 1 piece	23130-481
Separating wall St, 1 mm, AlZn, height 2200 mm, for depth 1000 mm, 1 piece	23130-484
Separating wall St, 1 mm, AlZn, height 2200 mm, for depth 1200 mm, 1 piece	23130-485



Water enters via brush strips; lateral cable ducting for power/data cables

Cabinets - Varistar ServicePLUS containment

SHX 30 air/water heat exchanger



- Air/water heat exchanger with 30 kW cooling capacity
- Water connection at bottom or bottom/top (with condensate pump)
- 1 PSU or 2 PSUs (redundant)
- Fans may be exchanged individually during operation
- Drop collector and condensate management

NEW

Delivery includes

Item	Qty	Description
1	1	SHX 30 air/water heat exchanger, RAL 7021, 100 ... 240 V _{AC}
2	1	Mains cable, 1.5 m
3	1	Connecting cable for management unit
4		User manual (for online download)

Order Information

SHX 30 air/water heat exchanger, 30 kW		Part no.
Water connection at bottom	1 PSU	60714-067
	2 PSUs, redundant power supply	60714-068
Water connection at top and bottom (with condensate pump)	1 PSU	60714-077
	2 PSUs, redundant power supply	60714-078

Accessories

Cabinet management basic units Height 44 mm, width 251 mm, depth 53 mm, for monitoring one air/water heat exchanger, max. 16 sensor values, 1 piece	EMX111
Cabinet management basic units Height 44 mm, width 440 mm, depth 134 mm, for monitoring up to max. 8 air/water heat exchangers, max 128 sensor values, 1 piece	EMX888
Temperature sensor connects direct to SHX 30, cable length 2 m, 1 piece	60130-724

Note

Please order optional management unit separately

- Cabinet management base unit connects via RJ 45 interface
- Web interface
 - Automatic detection of the connected Varistar SHX 30 air/water heat exchangers
 - Inlet temperature of servers (parameter can be set via web interface)
 - Activation/deactivation of air conditioner
 - Set temperature and fan speed settings
 - Monitoring of front air temperature, rear fan speed and water inlet temperature
 - Monitoring of an external temperature sensor (please order separately)



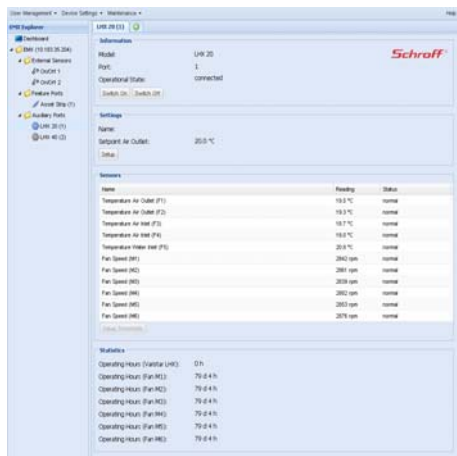
Rear connections at bottom

01013020



Rear connections at top

01013021



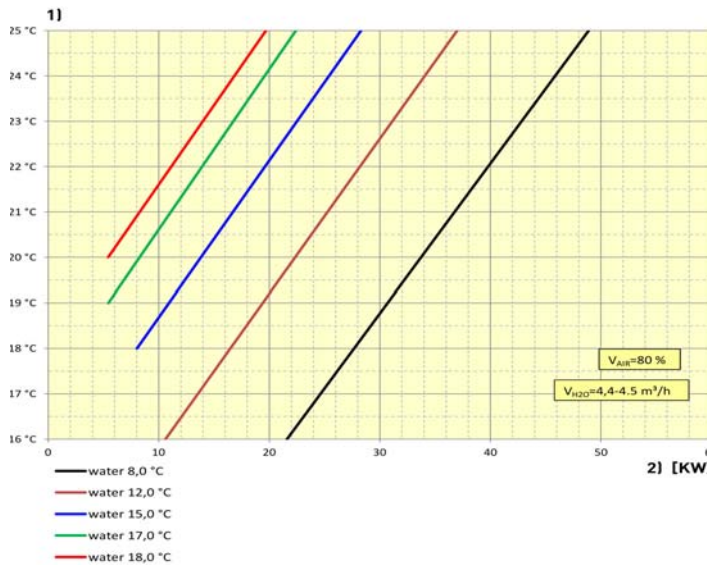
Management browser representation

00711017

Cabinets - Varistar ServicePLUS containment

SHX 30 air/water heat exchanger

Graph: cold air temperature against cooling capacity



Technical data

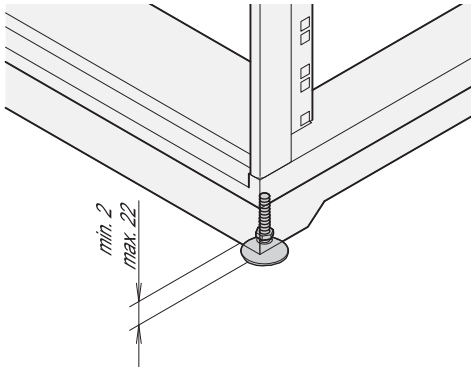
Cooling capacity	
Useful cooling capacity	30 kW
Controlled temperature	18 ... 50 °C (adjustable in 0.1°C steps)
Max. offset emergency cooling of 0-8 K from set value adjustable	4 (factory-preset)
Water circuit	
Cooling medium ^{*)}	Water, water-glycol mix (max. 33%)
Water inlet temperature ^{**)}	6 ... 18 °C
Water flow volume	up to 4,5 m ³ /h
Pressure loss in device at	3.0 m ³ /h, max. 1.3 bar; 4.5 m ³ /h, max. 3.1 bar
Water conduit	Copper
Water connection inlet/outlet	Rp 1"
Condensate drain connection	Rp 1/2"
Air circuit	
Max. airflow volume, temperature-dependent control	5000 m ³ /h
Electrical data AC	
Supply voltage (single phase)	100 ... 240 V _{AC} (50/60 Hz)
Max. current consumption	6 A / 12 A (230 V / 115 V)
Max. power consumption (fan speed 100%) / Normal operation (fan speed 80 %)	1100 W / 750 W
Pre-fuse (fitted by customer)	D 10 A / D 16 A (230 V/115 V)
Interface	
RS 485 Modbus interface	Connection option for external monitoring system
RS 232 (sub-D 9-pin)	Serial access
Input	External temperature sensor connection point
General data	
Ambient temperature: Transport, storage when fully emptied / when containing 35% glycol / in operation outside cabinet	-25 ... 70 °C / 5 ... 70 °C
Relative humidity for transport and storage (non-condensing)	5 ... 95 %
Heat exchanger dimensions	Height 1849 mm, width 189.5 mm, depth 850 mm
Heat exchanger weight	110 kg
Weight of cabinet with cooling module approx.	370 kg

*) To problem-free operation of the air/water heat exchanger the quality requirements of the water must be maintained; the appropriate anti-corrosion and frost protection agents are dependent on the environment in which the unit is used and on the external chiller (VDI 3803, see also user manual).

**) At water inlet temperatures of <6 °C and >15 °C the control accuracy can no longer be guaranteed. There is also a risk of condensation if the water temperature falls short of the given limits.

Cabinets - Varistar ServicePLUS containment

Adjustable feet



- Adjustable feet for direct mounting onto frame
- Static load-carrying capacity 1000 kg

NEW

Delivery includes

Item	Qty	Description
1	4	Adjustable feet, St, polyamide, black
2	1	Fixing materials kit

Order Information

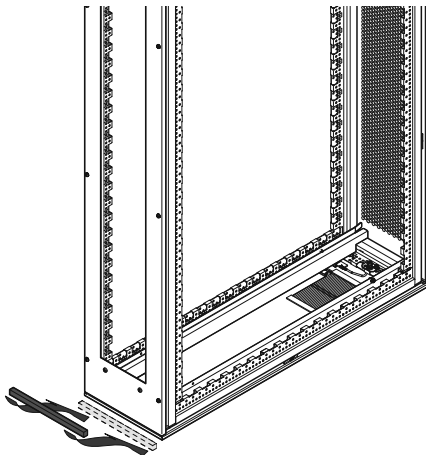
Description	Part no.
Adjustable feet	23130-511

Accessories

Gasketing for adjustable feet Polyurethane foam gasketing, color similar to RAL 7021, length 300 mm, for sealing front and rear, PU 2 pieces	23130-538
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MRA44483

Gasketing for adjustable feet



- For horizontal sealing at bottom in containments (front and rear) where adjustable feet are used

NEW

Delivery includes

Item	Qty	Description
1	2	Gasketing, flexible polyurethane, length 300 mm, color similar to RAL 7021, conforms to UL 94-HF1

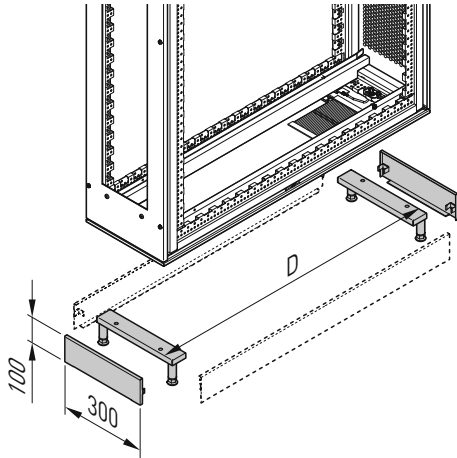
Order Information

Description	Part no.
Gasketing for adjustable feet	23130-538

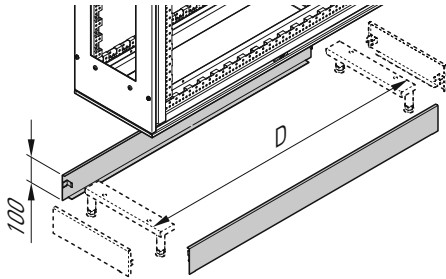
01013070

Cabinets - Varistar ServicePLUS containment

Base/plinth



Base/plinth



Accessories: Side covers

- Base for 300 mm wide frame (air/water heat exchanger)
- Base is bolted to the frame at front and rear; please order side trims separately

NEW

Delivery includes

Item	Qty	Description
1	2	Base, St, 1.5 mm; with integrated adjustable feet, width 300 mm, color RAL 7021
2	1	Fixing materials kit

Order Information

Height mm	Width mm	Part no.
100	300	23130-507

01013071

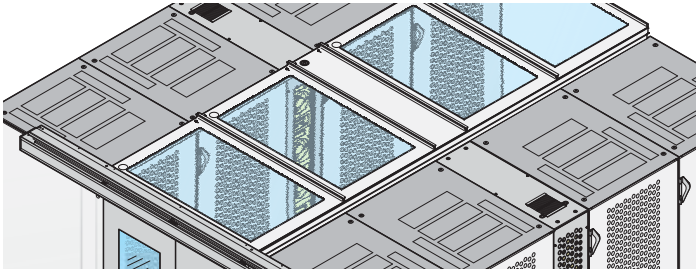
Accessories

Side trim RAL 7021, St, 1.5 mm, height 100 mm, depth 1000 mm, PU 2 pieces	23130-172
Side trim RAL 7021, St, 1.5 mm, height 100 mm, depth 1200 mm, PU 2 pieces	23130-363

01013072

Cabinets - Varistar ServicePLUS containment

Top cover element for aisle containment (SHX 30 air/water heat exchanger)



Width 300 mm

01013079

- Suitable for an aisle width of 1200 mm
- Width 300 mm (when fitting directly beside the "Sliding door, mechanical" a 200 mm width must be used)
- Top cover can be removed from inside (allows access to lighting and facilitates maintenance works)
- The universal top cover profile enables the aisle height to be raised by 84 mm and cabinets with other heights can also be integrated. Please order separately

NEW

Delivery includes

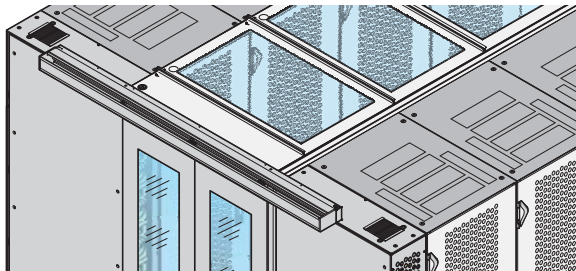
Item	Qty	Description
1	1	Top cover, St, 2 mm, RAL 7021, plate length 1200 mm
2	1	Fixing materials kit

Order Information

Width mm	Description	Part no.
300	For cabinet width 300 mm (aisle width 1200 mm)	21130-648
200	For fitting directly beside "sliding door, mechanical" (cabinet width 300 mm, aisle width 1200 mm)	21130-649

Accessories

Raised top cover Al extrusion, RAL 7021, length 2400 mm, height 84 mm, PU 2 pieces; Raises top cover elements by 84 mm and allows integration of cabinets with other heights	21130-594
Assembly kit Mounting of top cover raising profile, PU 6 pieces	23130-433



Width 200 mm, for fitting beside the "sliding door, mechanical" only

01013078