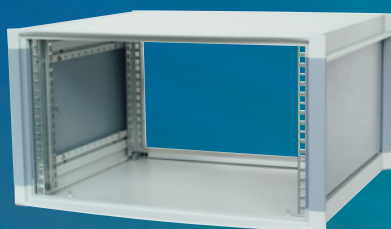


# 19" enclosure systems





# 19" enclosure systems



**ZENITH** 2.0

page 27

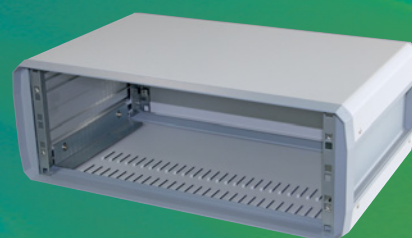
- striking design
- invisible ventilation
- integrated handle section
- 1/2 19" version available
- IP 42/20



**Vitaro**

page 31

- universal enclosure system
  - 19" enclosure
  - universal enclosure
  - wall-mounting enclosure
- extremely short assembly time
- special fixing system; no screws required for assembly
- IP 20



**apra line**

page 37

- removable cover parts
- integrated handle
- also available as desktop enclosure
- IP 20/30



**apraTeK**

page 46

- solid welded design for high mechanical requirements
- integrated handle
- IP 20



**apraLITE**

page 48

- quickly dismountable
- light construction
- integrated handle
- 1/2 19" version available
- IP 20/30





exceptional  
functionality

ZENITH<sup>2.0</sup>



Sample configuration:  
enclosure with viewing door and solid rear panel



#### 19" enclosure system ZENITH<sup>2.0</sup>

- future-oriented, functional design
- integrated side handle bar
- integrated "invisible" ventilation
- individual division by depth grids possible
- modular construction
- can be used as a 19" cabinet system up to 18 U
- installation dimensions acc. to IEC 60297-3-100

All individual pieces of the frame construction are designed for easy handling and high flexibility.

When developing these enclosures, apra focused on long lifetime and solid construction and protecting components from external influences. The advanced design with a high recognition rate and functionality distinguishes this enclosure and sets the standard for its competition.

The exceptional processing, which ranges from technical sophistication to quality details, supplements this optimum enclosure design.

Matching 19" plug-in units

see page 65

Matching 19" subracks

see page 79



## 19" enclosure system ZENITH<sup>2.0</sup>

### Technical information

#### Application:

19" plug-in units, shelves and 19" sub-racks can be installed in the enclosure. As available up to 18 U of space it can also be used as a cabinet system.

#### Construction:

solid structure consisting of front and rear aluminium die-cast frames and extruded sections. The side walls and top panels are protected against access from outside and can be demounted from inside! An "invisible" passive ventilation system is integrated in all enclosures.

#### Finish:

frames and top panels:  
RAL 7035 light grey  
vertical extrusions and side panels:  
RAL 7001 silver grey

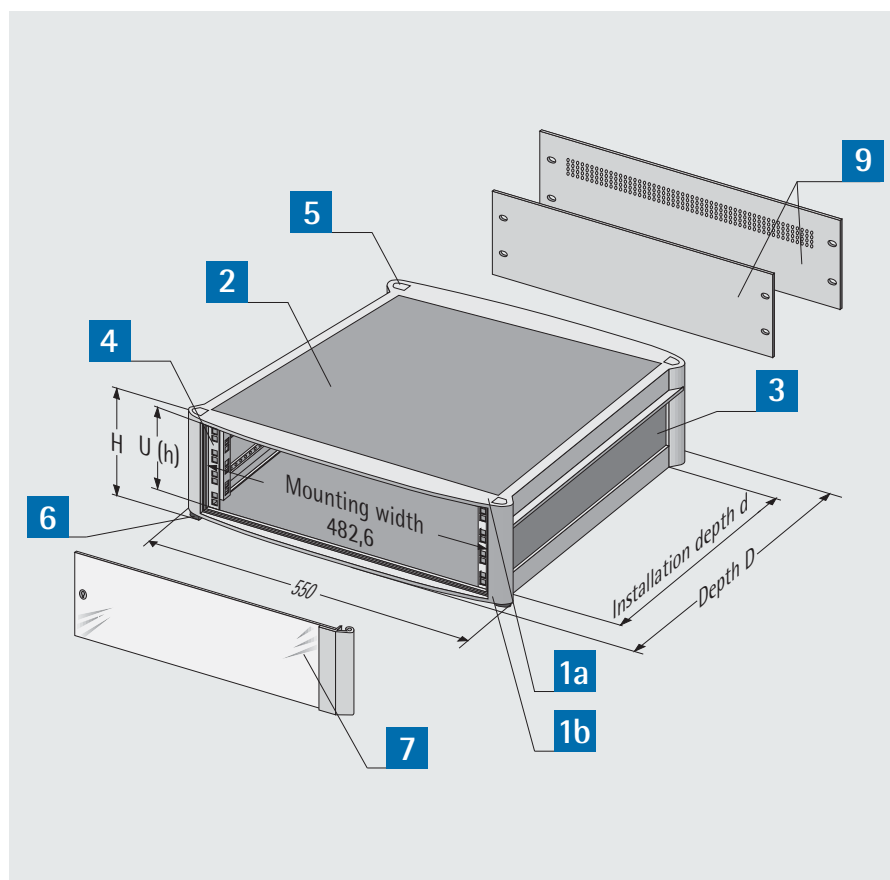
#### Delivery:

assembled

#### Standard

installation dimensions acc. to  
IEC 60297-3-100

**Delivery:** assembled



### Available components

| Item | Description                      |
|------|----------------------------------|
| 1a   | Front frame with side handle bar |
| 1b   | Bottom frame                     |
| 2    | Top/ bottom panel                |
| 3    | Side panel                       |
| 4    | Vertical mounting                |
| 5    | Screw blind                      |
| 6    | Enclosure foot                   |
| 7    | Viewing door with sash fastener  |
| 8    | Blind cover set (without fig.)   |
| 9    | Rear panel (ventilated/closed)   |



## 19" enclosure



### Delivery

| Item | Pc. | Description                      |
|------|-----|----------------------------------|
| 1a   | 1   | Front frame with side handle bar |
| 1b   | 1   | Bottom frame                     |
| 2    | 2   | Top/bottom panel                 |
| 3    | 2   | Side panel                       |
| 4    | 4   | Vertical mounting                |
| 5    | 4   | Screw blind                      |
| 6    | 4   | Enclosure foot                   |

## 19" enclosure with viewing door



### Delivery

| Item | Pc. | Description                      |
|------|-----|----------------------------------|
| 1a   | 1   | Front frame with side handle bar |
| 1b   | 1   | Bottom frame                     |
| 2    | 2   | Top/bottom panel                 |
| 3    | 2   | Side panel                       |
| 4    | 4   | Vertical mounting                |
| 5    | 4   | Screw blind                      |
| 6    | 4   | Enclosure feet                   |
| 7    | 1   | Viewing door with sash fastener  |
| 8    | 1   | Blind cover set                  |

Enclosures with a door have an 50 mm shorter installation depth because the mounting brackets are recessed. Doors in standard version are hinged on the right side, but can also be hinged on the left side upon request.

## Order data and dimensions

| Enclosure depth (D) mm | Installation depth (d) mm | Enclosure height U | Enclosure height (H) mm | Installation height (h) mm | Order no. 19" enclosure | Order no. Sliding rail for 19" enclosure | Order no. 19" enclosure with viewing door | Order no. Sliding rail for 19" enclosure with viewing door |
|------------------------|---------------------------|--------------------|-------------------------|----------------------------|-------------------------|------------------------------------------|-------------------------------------------|------------------------------------------------------------|
| 525                    | 450                       | 3                  | 170,6                   | 132,5                      | 160-503-10              | 160-012-52                               | 160-503-60                                | 160-012-56                                                 |
|                        |                           | 4                  | 215,1                   | 177                        | 160-504-10              |                                          | 160-504-60                                |                                                            |
|                        |                           | 6                  | 304,1                   | 266                        | 160-506-10              |                                          | 160-506-60                                |                                                            |
|                        |                           | 9                  | 437,1                   | 399                        | 160-509-10              |                                          | 160-509-60                                |                                                            |
| 625                    | 550                       | 4                  | 215,1                   | 177                        | 160-604-10              | 160-012-62                               | 160-604-60                                | 160-012-66                                                 |
|                        |                           | 6                  | 304,1                   | 266                        | 160-606-10              |                                          | 160-606-60                                |                                                            |
|                        |                           | 9                  | 437,1                   | 399                        | 160-609-10              |                                          | 160-609-60                                |                                                            |
|                        |                           | 12                 | 570,6                   | 532,5                      | 160-612-10              |                                          | 160-612-60                                |                                                            |
|                        |                           | 15                 | 703,3                   | 667                        | 160-615-10              |                                          | 160-615-60                                |                                                            |
|                        |                           | 18                 | 836,8                   | 800                        | 160-618-10              |                                          | 160-618-60                                |                                                            |



### Rear panel, solid

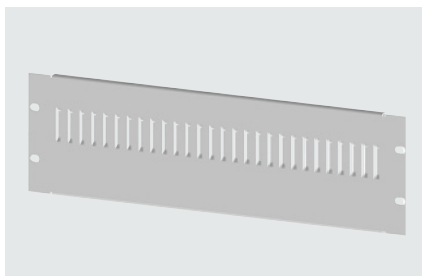


**Material:** aluminium 1.5 mm

**Finish:** RAL 7035 light grey

| Installation height U | Order no. |
|-----------------------|-----------|
| 2                     | 150-702   |
| 3                     | 150-703   |
| 4                     | 150-704   |
| 5                     | 150-705   |
| 6                     | 150-706   |
| 9                     | 150-709   |

### Rear panel, ventilated

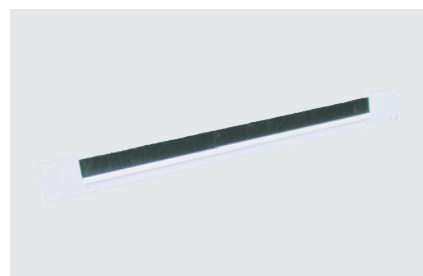


**Material:** aluminium 1.5 mm

**Finish:** RAL 7035 light grey

| Installation height U | Order no. |
|-----------------------|-----------|
| 2                     | 150-712   |
| 3                     | 150-713   |
| 4                     | 150-714   |
| 5                     | 150-715   |
| 6                     | 150-716   |
| 9                     | 150-719   |

### 19" cable duct 1 U



- for cable entry
- mounting to a 19" level

**Material:** sheet steel 1.25 mm

**Finish:** RAL 7035 light grey

**Dimensions (H x W x D):**

44 x 482,6 x 12 mm

| Order no.  |
|------------|
| 213-146-00 |

### Shelf, fixed



**Load capacity:** 30 kg

**Finish:** RAL 7035 light grey

### Shelf, extractable



**Load capacity:** 30 kg

**Finish:** RAL 7035 light grey

### Carrying handle



**Load capacity:** 50 kg / pair

**Finish:** RAL 7035 light grey

**Delivery:** mounted to enclosure

\*For use with 50 mm recessed vertical mountings

| Description  | Order no.   |
|--------------|-------------|
| for D=525 mm | 160-015-40  |
| for D=525 mm | 160-015-80* |
| for D=625 mm | 160-015-30  |
| for D=625 mm | 160-015-70* |

| Description  | Order no.  |
|--------------|------------|
| for D=525 mm | 160-015-20 |
| for D=625 mm | 160-015-10 |

| Description  | Order no. (pair) |
|--------------|------------------|
| for D=525 mm | 160-014-45       |
| for D=625 mm | 160-014-46       |

### Castor set

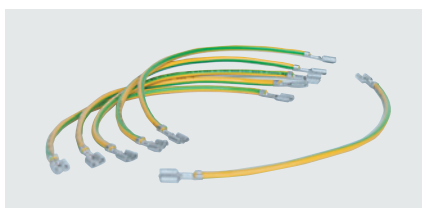


- 4 steering rollers, 2 with parking
- assembly material included
- wheel diameter: 50 mm
- load capacity: 120 kg

**Delivery:** mounted to enclosure

| Order no. (set) |
|-----------------|
| 160-014-80      |

### Earthing kit



- allows an earthing of all cabinet components acc. to VDE

| For installation height | Order no. (set) |
|-------------------------|-----------------|
| 3 - 6 U                 | 160-033-10      |
| 9 - 15 U                | 160-039-10      |
| 18 U                    | 160-048-10      |

### M5 screw set



**Delivery:**

- 50 oval head screws M 5 x 12
- 50 cage nuts M 5 x 12
- 50 decorative washers M 5 with collar

| Order no. (set) |
|-----------------|
| 630-991         |



## Probably the „fastest“ enclosure in the world

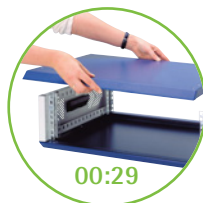
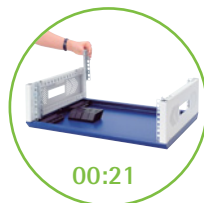
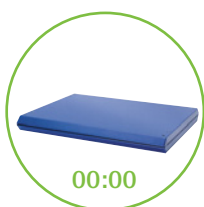
Sample configuration



# Vitaro®



Vitaro can be assembled within less than 60 seconds:



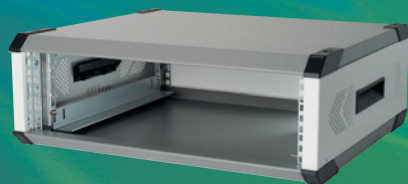
### 19" enclosure system **Vitaro**

- universal enclosure system:
  - 19" enclosure
  - universal enclosure
  - wall-mounting enclosure
- extremely short assembly time
- no screws required for assembly due to special fixing system\*
- attractive design
- light aluminium construction
- stackable
- integrated handles
- assembly kit system requiring minimum storage and transportation space
- various expansion options
- modular accessories
- protection system IP 20
- special models available on request

\* Enclosure can also be assembled using screws additionally.



## One basic enclosure, three options



### Model 1: 19" enclosure 3/4/6 U

The enclosure has vertical mountings that are inserted without tools and is ready for you to install 19" components.

Installation dimensions comply with IEC 60297-3-100



### Model 2: Universal enclosure

We can customise this universal enclosure to your requirements on request, whether you require stamps, embossing or printing.



### Model 3: Wall-mounting enclosure

You can use a wall mounting set (see page 35) to transform enclosure models 1 or 2 into a wall-mounting enclosure.



## Vitaro basic enclosure

### Application:

can be used as a 19" enclosure, wall-mounting enclosure or universal enclosure for customised use; ideal for installing 19" components acc. to IEC 60297-3-100 and 297-3-101.

### Construction:

aluminium shell construction with plug-in tab system; no tools required for assembly. 4 screws can be used for extra security (included in delivery).

### Material:

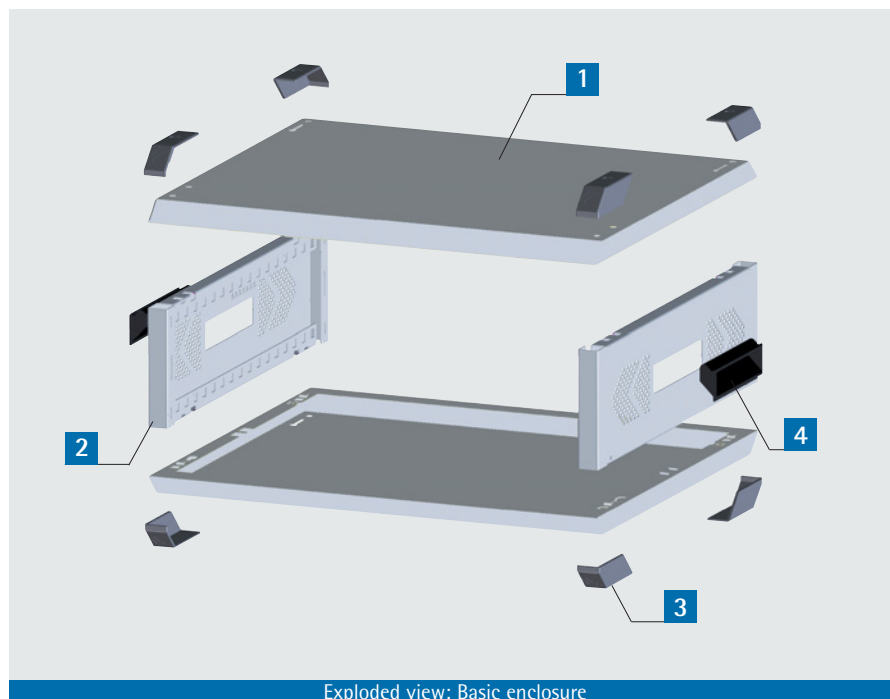
top/ bottom panels: aluminium 1.5 mm  
side panels: aluminium 1.2 mm

### Finish:

top/bottom panels:  
RAL 7037 dust grey  
side panels:  
RAL 7035 light grey

### Degree of protection:

IP 20



Exploded view: Basic enclosure

Installation depth  $d=D-46$  mm, enclosure width  $W = 537$  mm. Additional enclosure sizes (e.g. 84 HP, 63 HP, 42 HP) are available on request.

## Delivery

| Item | Pc. | Description                                                   |
|------|-----|---------------------------------------------------------------|
| 1    | 2   | Top/ bottom panels                                            |
| 2    | 2   | Side panels                                                   |
| 3    | 8   | Decorative corners, stackable                                 |
| 4    | 1   | Assembly set: 4 enclosure feet, 2 handles, 4 retaining screws |

| D mm | Description         | Order no.  |
|------|---------------------|------------|
| 350  | Basic enclosure 3 U | 195-313-00 |
| 450  |                     | 195-413-00 |
| 550  |                     | 195-513-00 |
| 350  | Basic enclosure 4 U | 195-314-00 |
| 450  |                     | 195-414-00 |
| 550  |                     | 195-514-00 |
| 350  | Basic enclosure 6 U | 195-316-00 |
| 450  |                     | 195-416-00 |
| 550  |                     | 195-516-00 |

## Vitaro expansion kit 19" enclosure

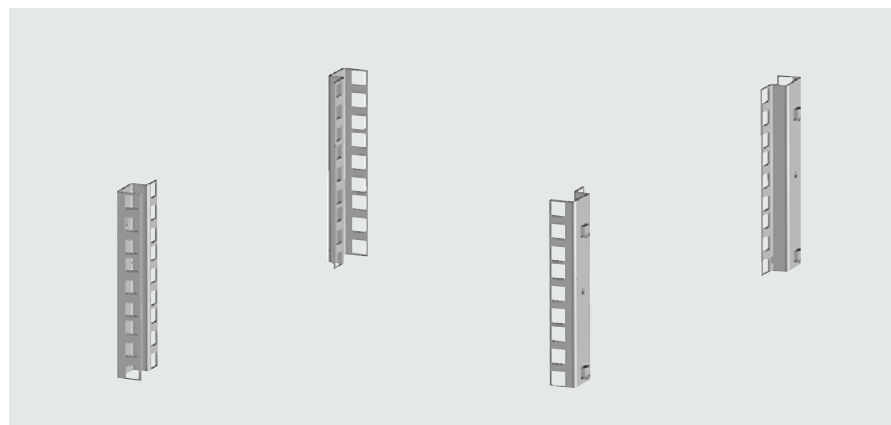
The basic enclosure can be transformed into a full 19" enclosure using plug-in vertical mountings. No tools are required.

### Material:

sheet steel 1.5 mm

### Finish:

galvanised



Please order rear panel separately (see page 34).

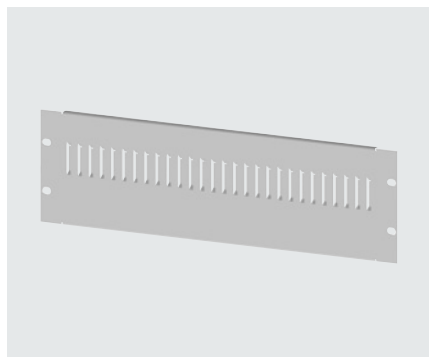
## Delivery

| Item | Pc. | Description       |
|------|-----|-------------------|
| 1    | 4   | Vertical mounting |

| Expansion kit | Order no.  |
|---------------|------------|
| 3 U           | 195-053-00 |
| 4 U           | 195-054-00 |
| 6 U           | 195-056-00 |



### 19" rear panel



- ventilated or closed
- assembly material included

**Material:**

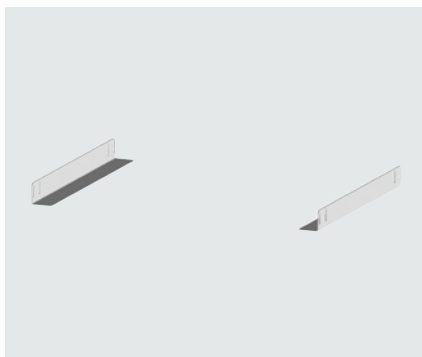
aluminium 1.5 mm

**Finish:**

RAL 7035 light grey

| Height | Feature        | Order no.  |
|--------|----------------|------------|
| 3 U    | not ventilated | 195-023-00 |
|        | ventilated     | 195-023-10 |
| 4 U    | not ventilated | 195-024-00 |
|        | ventilated     | 195-024-10 |
| 6 U    | not ventilated | 195-026-00 |
|        | ventilated     | 195-026-10 |

### Sliding rails, adjustable height



- assembly material included

**Material:**

sheet steel 1.5 mm

**Finish:**

galvanised

**Load capacity:**

15 kg/ pair

| Description  | Order no.  |
|--------------|------------|
| for D=350 mm | 195-382-00 |
| for D=450 mm | 195-482-00 |
| for D=550 mm | 195-582-00 |

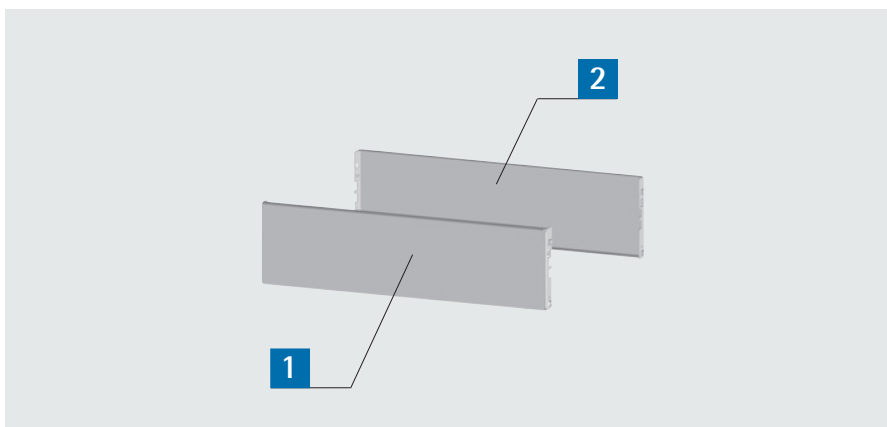
### Vitaro expansion set universal enclosure

You can customise our basic enclosure using **customised front and rear panels** (screens, stamps, embossing).

You can find plug-in installation / mounting plates for horizontal and vertical installation in the accessories section on page 35.

### Delivery

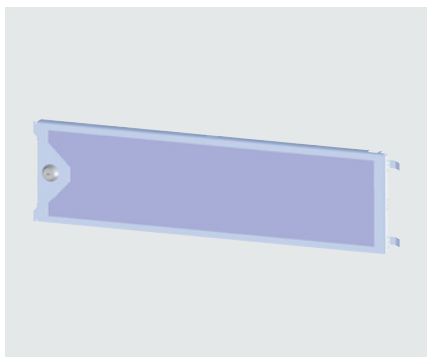
| Item | Pc. | Description          |
|------|-----|----------------------|
| 1    | 1   | Front panel, plug-in |
| 2    | 1   | Rear panel, plug-in  |



| Expansion kit | Order no.  |
|---------------|------------|
| 3 U           | 195-063-00 |
| 4 U           | 195-064-00 |
| 6 U           | 195-066-00 |



### Door with plexiglas pane, plug-in



- with plexiglas pane and cylinder sash fastener
- demountable without tools

#### Material:

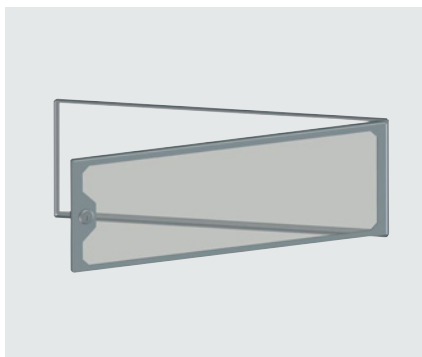
stackable door: aluminium 1.5 mm

door: plexiglas

Finish: RAL 7035 light grey

| Description | Order no.  |
|-------------|------------|
| 3 U         | 195-073-00 |
| 4 U         | 195-074-00 |
| 6 U         | 195-076-00 |

### Swing door with frame



- to be screwed onto the enclosure
- with plexiglas pane and cylinder sash fastener

#### Material:

frame: sheet steel 2 mm

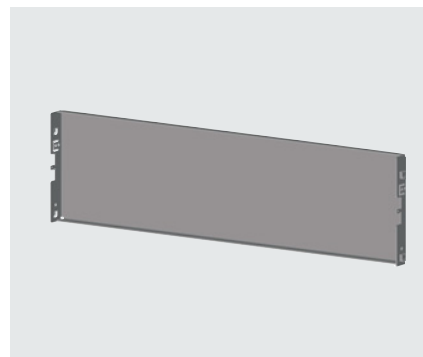
swing door: aluminium 1.5 mm

door: plexiglas 4.0 mm

Finish: RAL 7035 light grey

| Description | Order no.  |
|-------------|------------|
| 3 U         | 195-073-12 |
| 4 U         | 195-074-12 |
| 6 U         | 195-076-12 |

### Mounting plate, plug-in



- for vertical mounting
- can be inserted at different depths

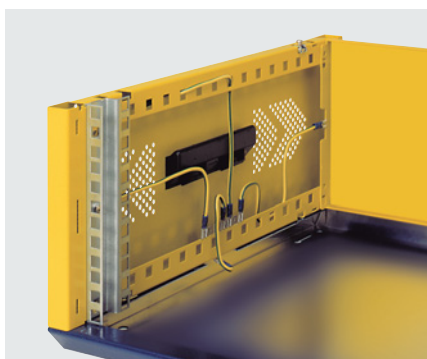
Material: aluminium 1.5 mm

Finish: RAL 7035 light grey

The mounting plate 3 U can also be installed horizontally in all enclosure sizes as a shelf.

| Description | Order no.  |
|-------------|------------|
| 3 U         | 195-063-02 |
| 4 U         | 195-064-02 |
| 6 U         | 195-066-02 |

### Earthing set



- for earth connection of all enclosure parts acc. to VDE

| Description             | Order no.  |
|-------------------------|------------|
| for 19" enclosure       | 195-080-10 |
| for desktop enclosure   | 195-080-12 |
| for universal enclosure | 195-080-12 |

### Blind cover set



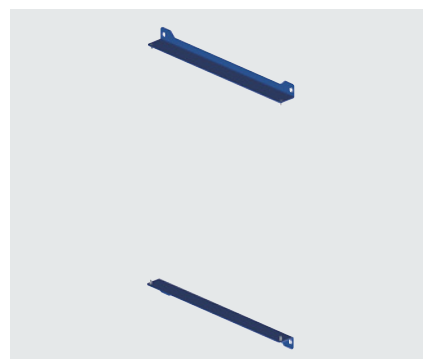
- for extension components installed 50 mm towards the rear
- 2 horizontal and 2 vertical panels included
- self-locking, no assembly material required

Material: aluminium 1.0 mm

Finish: RAL 7035 light grey

| Description | Order no.  |
|-------------|------------|
| 3 U         | 195-083-10 |
| 4 U         | 195-084-10 |
| 6 U         | 195-086-10 |

### Wall mounting set



- fits all Vitaro models
- no tools required for mounting brackets to the enclosure

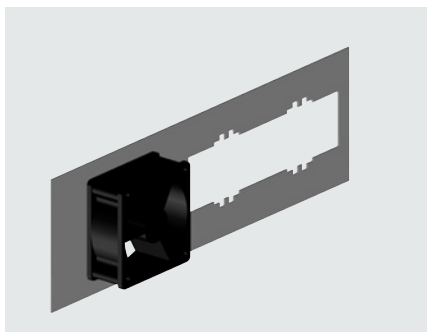
Material: sheet steel 2.0 mm

Finish: RAL 7035 light grey

| Description  | Order no.  |
|--------------|------------|
| for D=350 mm | 195-380-00 |
| for D=450 mm | 195-480-00 |
| for D=550 mm | 195-580-00 |



### Fan support with 12 V fan



- plugs into the side wall
- high-quality PAPST-fan
- flow rate: 40 m<sup>3</sup>/h
- noise level: 40 dB (A)

**Material:** aluminium 1.0 mm

| Description                  | Order no.  |
|------------------------------|------------|
| for D=350 mm                 | 195-380-10 |
| for D=450 mm<br>for D=550 mm | 195-480-10 |

### Prop-up and carrying handle



- handle can be set in 30° steps by pressing a button to snap it into place

#### Finish:

handle: RAL 9011 graphite black

handle extrusion: anodised

button, screw blind: plastics, black

#### Load capacity:

50 kg

| Order no.  |
|------------|
| 195-080-30 |

### Screw set M 5 (50-fold)



- necessary for mounting of 19" components into enclosures
- included in delivery:
  - 50 oval head screws M 5 x 12
  - 50 cage nuts M 5 - 8
  - 50 decorative washers M 5 with collar, flattened

| Order no. |
|-----------|
| 630-991   |

### Front panel fixing (50-fold)



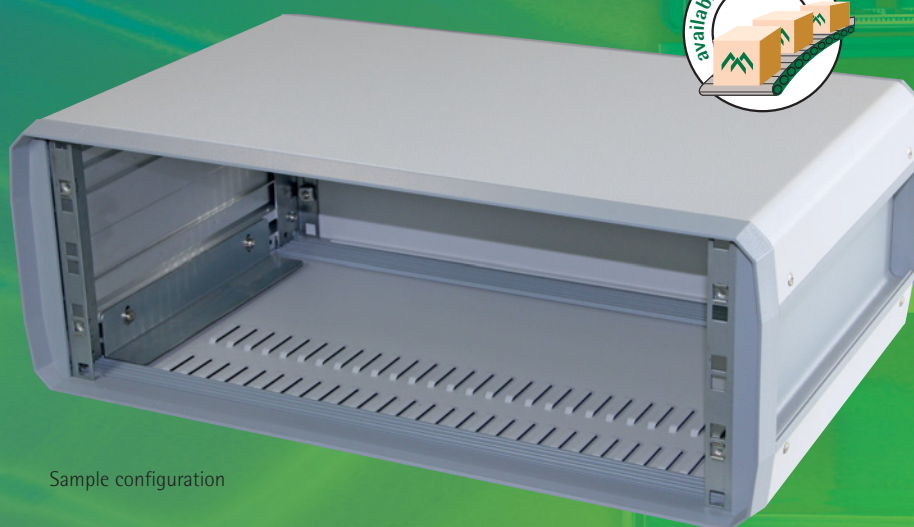
- no cage nuts required
- to mount lightweight 19" components such as dummy or front panels
- clamping range (front panel + grid): 4 - 6 mm
- consisting of:
  - 50 lens head screws M 5 x 12
  - 50 washers for screws M 5, flattened

| Order no.  |
|------------|
| 630-991-10 |



Universal enclosure system for use as  
19" enclosure and as desktop enclosure

**apra line**



Sample configuration

apraLine has a future-oriented design and optimum functionality. Its elegant lines set it apart from the usual rectangular shaped enclosures.

The apraLine product family is completed by a desktop enclosure with the same design (see the section on desktop enclosures on page 149).

#### 19" enclosure system **apra line**

- ergonomic recessed handles
- easy-to-maintain and cost-saving design principle: all facing panels can be easily removed from the assembled enclosure
- optimum heat dissipation due to ventilated bottom and back pieces
- earthing kit for VDE-compliant earth connection acc. to DIN EN 60204 part 1 and DIN 46008
- installation dimensions acc. to IEC 60297-3-100

Matching 19" plug-in units

page 65

Matching 19" subracks

page 79



## 19" enclosure system apra line

### Application:

19" plug-in units, shelves and 19" sub-racks can be installed in the enclosure.

### Construction:

the identical front and rear frames with a variable width consist of two lateral plastic pieces, which are connected with aluminium extrusions.

These frames are connected by solid extrusions and screwed on to the mounting rails. Ergonomic recessed handles and grooves for using mounting nuts are integrated into the extrusions.

### Finish:

cover panels:

RAL 7035 light grey

frame and side sections:

RAL 7001 silver grey

### Protection system:

IP 30: not ventilated

IP 20: ventilated

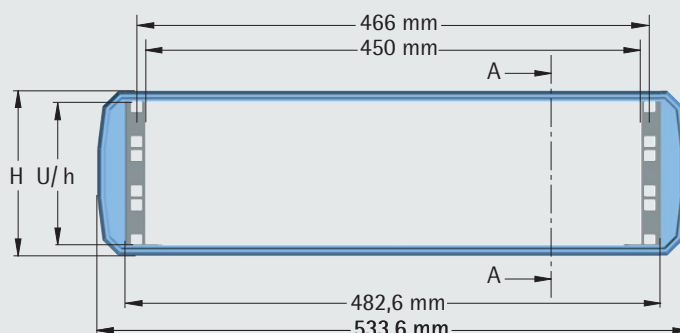
### Delivery:

assembled

### Standard:

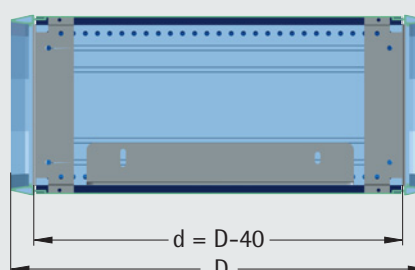
installation dimensions acc. to

IEC 60297-3-100



front view

H = enclosure height  
U / h = installation height

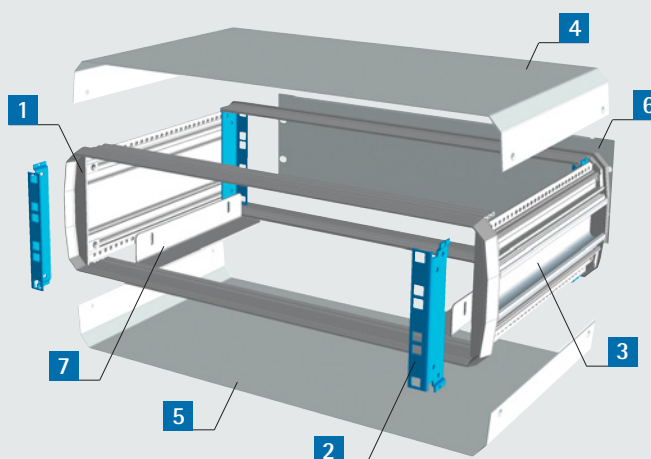


section A-A

D = enclosure depth  
d = installation depth

## Delivery

| Item | Pc. | Description                              |
|------|-----|------------------------------------------|
| 1    | 2   | Frames front and rear                    |
| 2    | 4   | Vertical mountings                       |
| 3    | 2   | Side panels                              |
| 4    | 1   | Top panel                                |
| 5    | 1   | Bottom panel (ventilated/not ventilated) |
| 6    | 1   | Rear panel (ventilated/not ventilated)   |
| 7    | 2   | Sliding rails (beginning at 3 U)         |
| 8    |     | Assembly material                        |

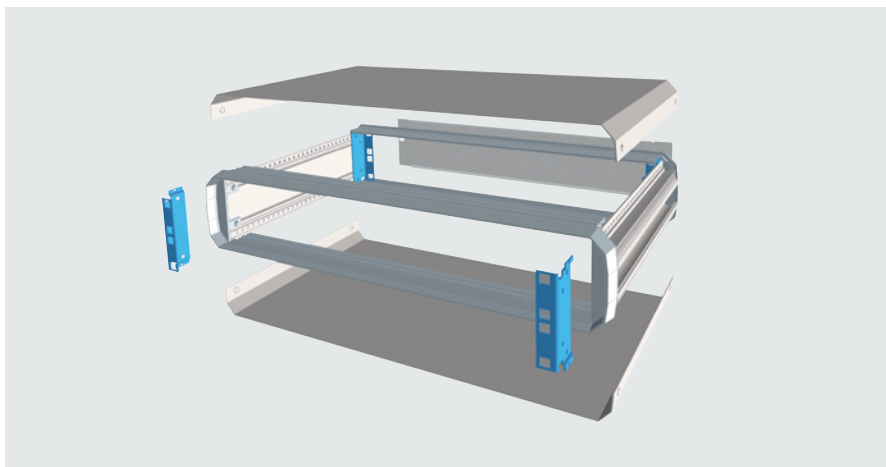




## 19" enclosure 2 U

### Delivery

| Item | Pc. | Description                              |
|------|-----|------------------------------------------|
| 1    | 2   | Frames front and rear                    |
| 2    | 4   | Vertical mountings                       |
| 3    | 2   | Side panels                              |
| 4    | 1   | Top panel                                |
| 5    | 1   | Bottom panel (ventilated/not ventilated) |
| 6    | 1   | Rear panel (ventilated/not ventilated)   |
| 8    |     | Assembly material                        |

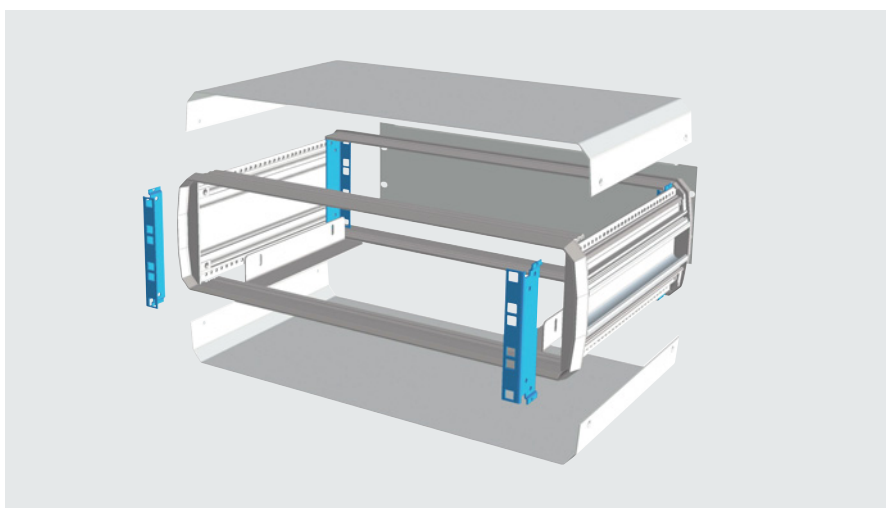


| D mm | d mm | Description                         | Enclosure height H mm | Order no. |
|------|------|-------------------------------------|-----------------------|-----------|
| 262  | 222  | not ventilated                      | 105                   | 140-201   |
| 262  | 222  | ventilated in rear and bottom panel | 105                   | 140-251   |
| 302  | 262  | not ventilated                      | 105                   | 140-211   |
| 302  | 262  | ventilated in rear and bottom panel | 105                   | 140-261   |

## 19" enclosure 3 U

### Delivery

| Item | Pc. | Description                              |
|------|-----|------------------------------------------|
| 1    | 2   | Frames front and rear                    |
| 2    | 4   | Vertical mountings                       |
| 3    | 2   | Side panels                              |
| 4    | 1   | Top panel                                |
| 5    | 1   | Bottom panel (ventilated/not ventilated) |
| 6    | 1   | Rear panel (ventilated/not ventilated)   |
| 7    | 2   | Sliding rails                            |
| 8    |     | Assembly material                        |



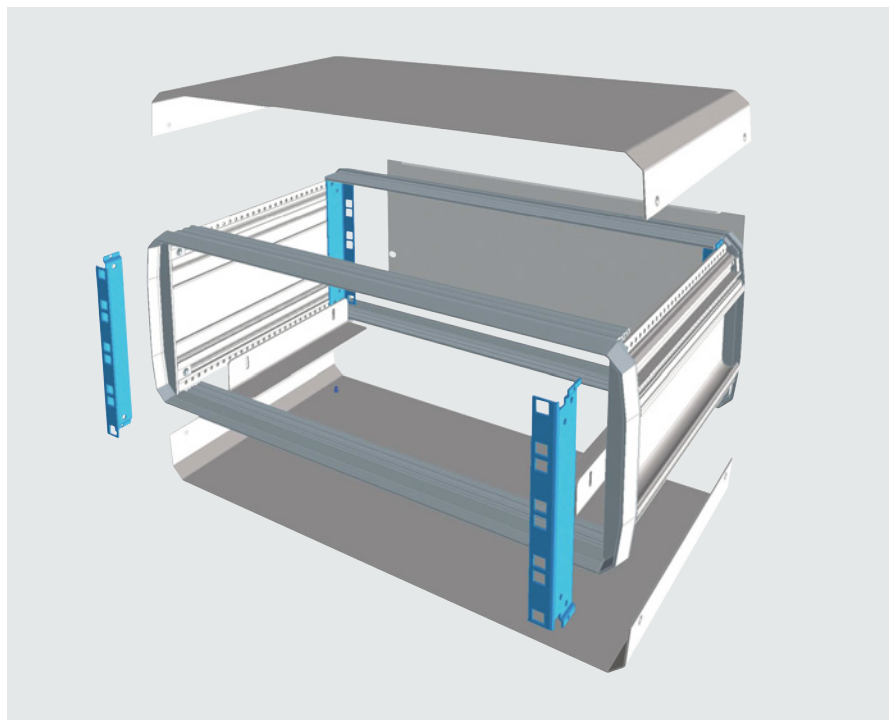
| D mm | d mm | Description                         | Enclosure height H mm | Order no. |
|------|------|-------------------------------------|-----------------------|-----------|
| 262  | 222  | not ventilated                      | 150                   | 140-301   |
| 262  | 222  | ventilated in rear and bottom panel | 150                   | 140-351   |
| 302  | 262  | not ventilated                      | 150                   | 140-311   |
| 302  | 262  | ventilated in rear and bottom panel | 150                   | 140-361   |
| 342  | 302  | not ventilated                      | 150                   | 140-321   |
| 342  | 302  | ventilated in rear and bottom panel | 150                   | 140-371   |
| 382  | 342  | not ventilated                      | 150                   | 140-331   |
| 382  | 342  | ventilated in rear and bottom panel | 150                   | 140-381   |
| 482  | 442  | not ventilated                      | 150                   | 140-341   |
| 482  | 442  | ventilated in rear and bottom panel | 150                   | 140-391   |



## 19" enclosure 4 U

### Delivery

| Item | Pc. | Description                               |
|------|-----|-------------------------------------------|
| 1    | 2   | Frames front and rear                     |
| 2    | 4   | Vertical mountings                        |
| 3    | 2   | Side panels                               |
| 4    | 1   | Top panel                                 |
| 5    | 1   | Bottom panel (ventilated/ not ventilated) |
| 6    | 1   | Rear panel (ventilated/ not ventilated)   |
| 7    | 2   | Sliding rails                             |
| 8    |     | Assembly material                         |



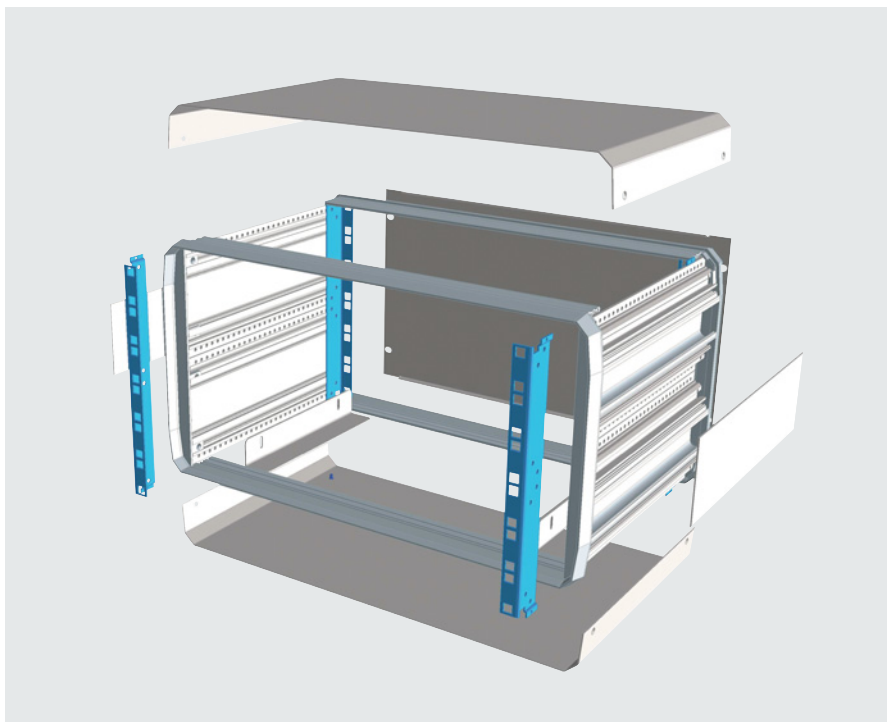
| D mm | d mm | Description                         | Enclosure height H mm | Order no. |
|------|------|-------------------------------------|-----------------------|-----------|
| 262  | 222  | not ventilated                      | 194                   | 140-401   |
| 262  | 222  | ventilated in rear and bottom panel | 194                   | 140-451   |
| 302  | 262  | not ventilated                      | 194                   | 140-411   |
| 302  | 262  | ventilated in rear and bottom panel | 194                   | 140-461   |
| 342  | 302  | not ventilated                      | 194                   | 140-421   |
| 342  | 302  | ventilated in rear and bottom panel | 194                   | 140-471   |
| 382  | 342  | not ventilated                      | 194                   | 140-431   |
| 382  | 342  | ventilated in rear and bottom panel | 194                   | 140-481   |
| 482  | 442  | not ventilated                      | 194                   | 140-441   |
| 482  | 442  | ventilated in rear and bottom panel | 194                   | 140-491   |



## 19" enclosure 6 U

### Delivery

| Item | Pc. | Description                              |
|------|-----|------------------------------------------|
| 1    | 2   | Frames front and rear                    |
| 2    | 4   | Vertical mountings                       |
| 3    | 2   | Side panels                              |
| 4    | 1   | Top panel                                |
| 5    | 1   | Bottom panel (ventilated/not ventilated) |
| 6    | 1   | Rear panel (ventilated/not ventilated)   |
| 7    | 2   | Sliding rails                            |
| 8    |     | Assembly material                        |



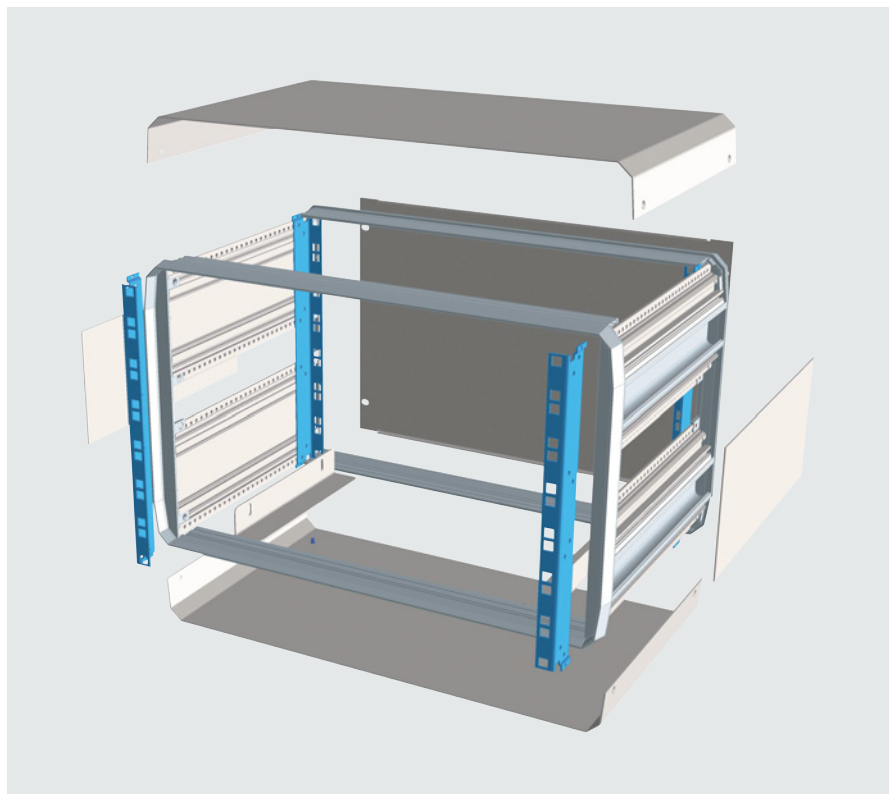
| D mm | d mm | Description                         | Enclosure height H mm | Order no. |
|------|------|-------------------------------------|-----------------------|-----------|
| 262  | 222  | not ventilated                      | 283                   | 140-601   |
| 262  | 222  | ventilated in rear and bottom panel | 283                   | 140-651   |
| 302  | 262  | not ventilated                      | 283                   | 140-611   |
| 302  | 262  | ventilated in rear and bottom panel | 283                   | 140-661   |
| 342  | 302  | not ventilated                      | 283                   | 140-621   |
| 342  | 302  | ventilated in rear and bottom panel | 283                   | 140-671   |
| 382  | 342  | not ventilated                      | 283                   | 140-631   |
| 382  | 342  | ventilated in rear and bottom panel | 283                   | 140-681   |
| 482  | 442  | not ventilated                      | 283                   | 140-641   |
| 482  | 442  | ventilated in rear and bottom panel | 283                   | 140-691   |



## 19" enclosure 7 U

### Delivery

| Item | Pc. | Description                              |
|------|-----|------------------------------------------|
| 1    | 2   | Frames front and rear                    |
| 2    | 4   | Vertical mountings                       |
| 3    | 2   | Side panels                              |
| 4    | 1   | Top panel                                |
| 5    | 1   | Bottom panel (ventilated/not ventilated) |
| 6    | 1   | Rear panel (ventilated/not ventilated)   |
| 7    | 2   | Sliding rails                            |
| 8    |     | Assembly material                        |



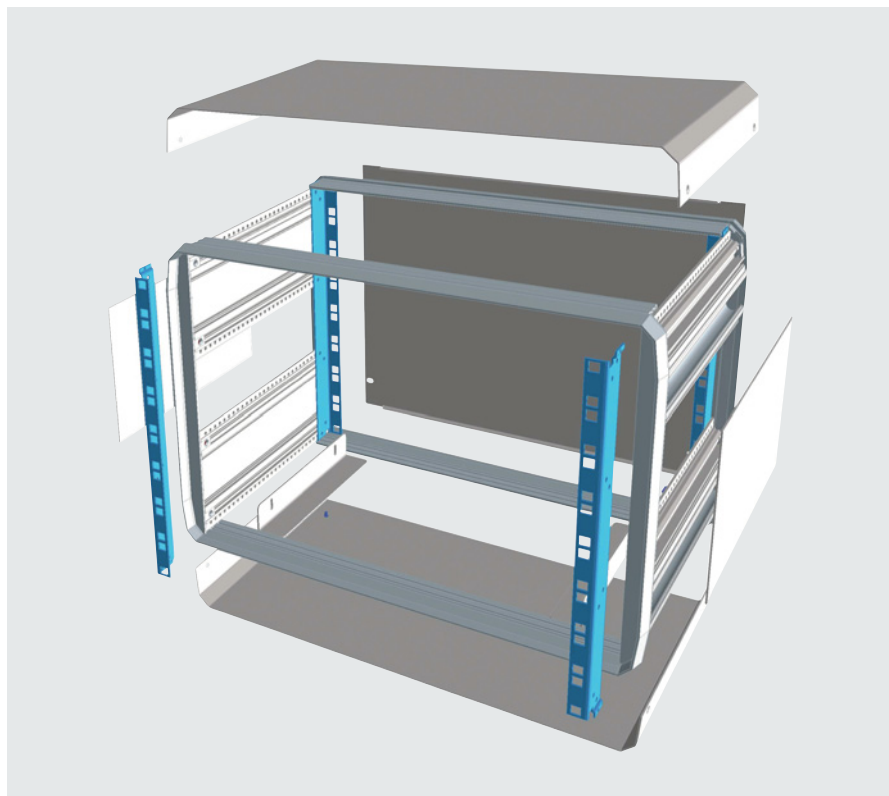
| D mm | d mm | Description                         | Enclosure height H mm | Order no. |
|------|------|-------------------------------------|-----------------------|-----------|
| 342  | 302  | not ventilated                      | 328                   | 140-721   |
| 342  | 302  | ventilated in rear and bottom panel | 328                   | 140-771   |
| 382  | 342  | not ventilated                      | 328                   | 140-731   |
| 382  | 342  | ventilated in rear and bottom panel | 328                   | 140-781   |
| 482  | 442  | not ventilated                      | 328                   | 140-741   |
| 482  | 442  | ventilated in rear and bottom panel | 328                   | 140-791   |



## 19" enclosure 8 U

### Delivery

| Item | Pc. | Description                              |
|------|-----|------------------------------------------|
| 1    | 2   | Frames front and rear                    |
| 2    | 4   | Vertical mountings                       |
| 3    | 2   | Side panels                              |
| 4    | 1   | Top panel                                |
| 5    | 1   | Bottom panel (ventilated/not ventilated) |
| 6    | 1   | Rear panel (ventilated/not ventilated)   |
| 7    | 2   | Sliding rails                            |
| 8    |     | Assembly material                        |



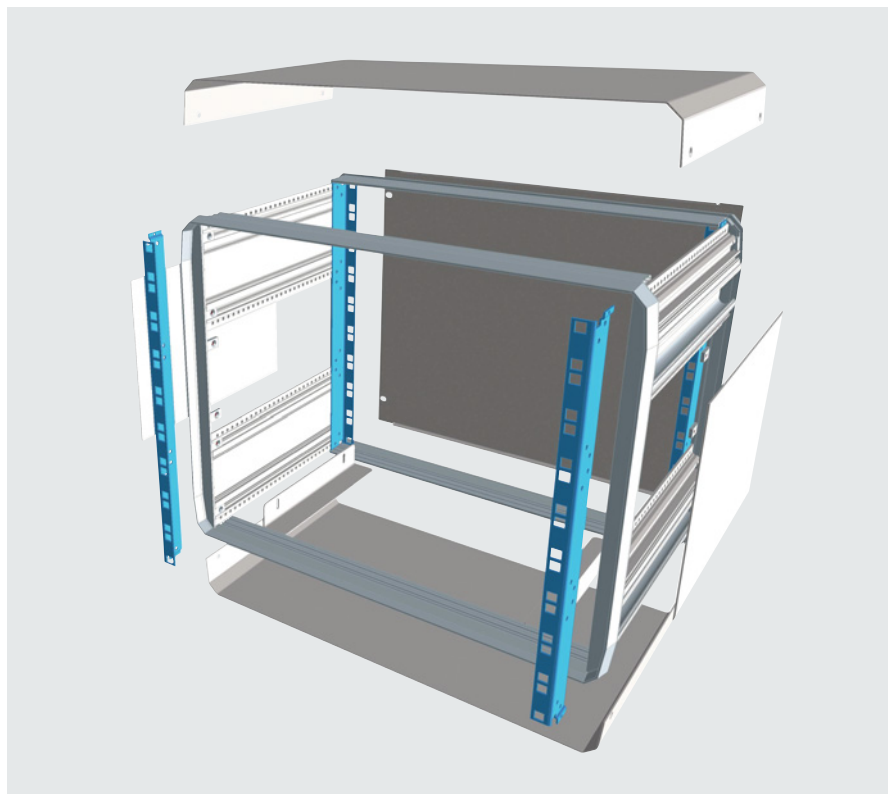
| D mm | d mm | Description                         | Enclosure height H mm | Order no. |
|------|------|-------------------------------------|-----------------------|-----------|
| 262  | 222  | not ventilated                      | 372                   | 140-801   |
| 262  | 222  | ventilated in rear and bottom panel | 372                   | 140-851   |
| 302  | 262  | not ventilated                      | 372                   | 140-811   |
| 302  | 262  | ventilated in rear and bottom panel | 372                   | 140-861   |
| 342  | 302  | not ventilated                      | 372                   | 140-821   |
| 342  | 302  | ventilated in rear and bottom panel | 372                   | 140-871   |
| 382  | 342  | not ventilated                      | 372                   | 140-831   |
| 382  | 342  | ventilated in rear and bottom panel | 372                   | 140-881   |
| 482  | 442  | not ventilated                      | 372                   | 140-841   |
| 482  | 442  | ventilated in rear and bottom panel | 372                   | 140-891   |



## 19" enclosure 9 U

### Delivery

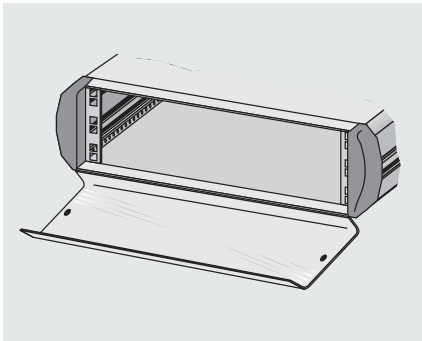
| Item | Pc. | Description                              |
|------|-----|------------------------------------------|
| 1    | 2   | Frames front and rear                    |
| 2    | 4   | Vertical mountings                       |
| 3    | 2   | Side panels                              |
| 4    | 1   | Top panel                                |
| 5    | 1   | Bottom panel (ventilated/not ventilated) |
| 6    | 1   | Rear panel (ventilated/not ventilated)   |
| 7    | 2   | Sliding rails                            |
| 8    |     | Assembly material                        |



| D mm | d mm | Description                         | Enclosure height H mm | Order no. |
|------|------|-------------------------------------|-----------------------|-----------|
| 262  | 222  | not ventilated                      | 416,50                | 140-901   |
| 262  | 222  | ventilated in rear and bottom panel | 416,50                | 140-951   |
| 302  | 262  | not ventilated                      | 416,50                | 140-911   |
| 302  | 262  | ventilated in rear and bottom panel | 416,50                | 140-961   |
| 342  | 302  | not ventilated                      | 416,50                | 140-921   |
| 342  | 302  | ventilated in rear and bottom panel | 416,50                | 140-971   |
| 382  | 342  | not ventilated                      | 416,50                | 140-931   |
| 382  | 342  | ventilated in rear and bottom panel | 416,50                | 140-981   |
| 482  | 442  | not ventilated                      | 416,50                | 140-941   |
| 482  | 442  | ventilated in rear and bottom panel | 416,50                | 140-991   |



## Plexiglas front door, hinged

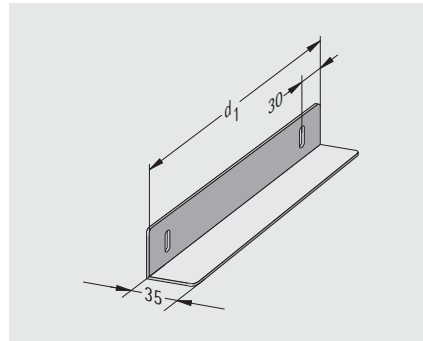


- with 2 quick-release locks

### Delivery:

mounted to the enclosure

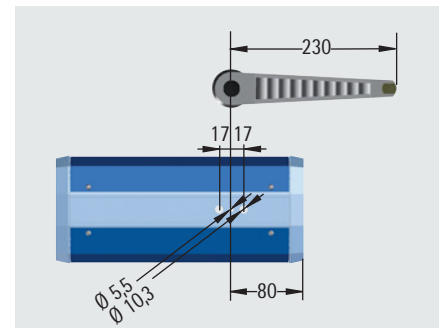
## Sliding rails



for 8 U-high enclosures: please specify order no. followed by -01 when ordering (for example, 140-020-01)

| Description  | Install. depth<br>d1 mm | Order<br>no. |
|--------------|-------------------------|--------------|
| for D=262 mm | 140                     | 140-020      |
| for D=342 mm | 220                     | 140-022      |
| for D=482 mm | 360                     | 140-024      |

## Prop-up and carrying handle



Hole pattern for handle mounting

- handle can be set in 30° steps by pressing a button to snap it into place

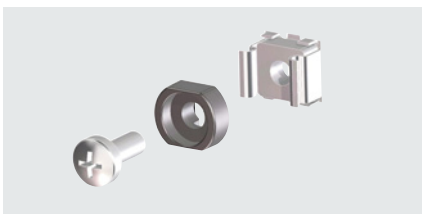
Finish: RAL 9011 graphite black

Load capacity: 50 kg

Delivery: mounted to the enclosure

| Order no.  |
|------------|
| 140-100-84 |

## Screw set M 5 (50-fold)



- necessary for mounting of 19" components into enclosures
- included in delivery:
  - 50 oval head screws M 5 x 12
  - 50 cage nuts M 5 - 8
  - 50 decorative washers M 5 with collar, flattened

| Order no. |
|-----------|
| 630-991   |

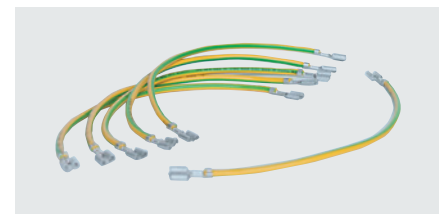
## Front panel fixing (50-fold)



- no cage nuts required
- to mount lightweight 19" components such as dummy or front panels
- clamping range (front panel + grid): 4 - 6 mm
- consisting of:
  - 50 lens head screws M 5 x 12
  - 50 washers for screws M 5, flattened

| Order no.  |
|------------|
| 630-991-10 |

## Earthing kit



- for earthing of all enclosure parts in compliance with VDE

| Installation height U | Order no. |
|-----------------------|-----------|
| 2                     | 140-032   |
| 3                     | 140-033   |
| 4                     | 140-034   |
| 6                     | 140-036   |
| 7                     | 140-037   |
| 8                     | 140-038   |
| 9                     | 140-039   |



Reliable quality – optimum protection

**apraTeK**



An optimised combination of functionality and economy characterise this enclosure system apraTEK.

Designed for high loads, the enclosure's construction with welded 19" mountings makes the apraTEK perfect for the use in rough industrial environments, either as enclosure or as a cabinet system (up to 20 U).

#### 19" enclosure system **apraTeK**

- high functionality
- perfect for mechanical engineering applications
- practical flip-up handles
- protection system IP20
- can either be used as 19" enclosure or 19" stand-alone enclosure
- skid-proof feet
- high stability
- ventilated rear and bottom panel
- installation dimensions acc. to IEC 60297-3-100

Matching 19" plug-in units

page 65

Matching 19" subracks

page 79



## 19" enclosure system apraTEK

### Application:

19" plug-in units, shelves and 19" sub-racks can be installed in the enclosure. Because the enclosure is available in different sizes up to 20 U, it can also be used as a heavy-duty cabinet system in rough environments.

### Construction:

the enclosure has a solid, welded sheet steel covering.

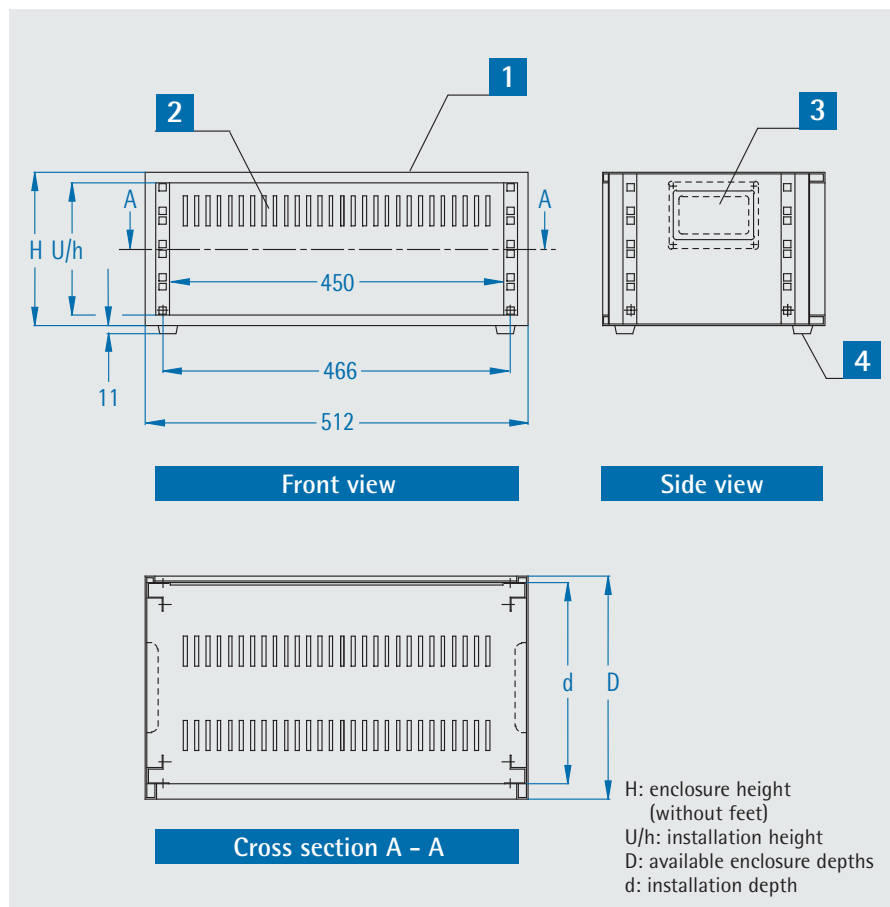
**Finish:** RAL 7035 light grey

**Protection system:** IP 20

**Standard:** installation dimensions acc. to IEC 60297-3-100

### Delivery

| Item | Pc. | Description                      |
|------|-----|----------------------------------|
| 1    | 1   | Base with 4 welded 19" mountings |
| 2    | 1   | Rear panel, ventilated           |
| 3    | 2   | Flip-up handle                   |
| 4    | 4   | Hinged feet                      |
|      |     | Assembly material                |



| Installation height                             |        | Enclosure height<br>H mm | 19" enclosure, ventilated in rear and bottom panel |                        |                        |
|-------------------------------------------------|--------|--------------------------|----------------------------------------------------|------------------------|------------------------|
| U                                               | h mm   |                          | d = 270 mm, D = 298 mm                             | d = 370 mm, D = 398 mm | d = 470 mm, D = 498 mm |
| 3                                               | 132,50 | 160,50                   | 180-223                                            | 180-323                | -                      |
| 4                                               | 177,00 | 205,00                   | 180-224                                            | 180-324                | 180-424                |
| 5                                               | 221,50 | 249,50                   | 180-225                                            | 180-325                | 180-425                |
| 6                                               | 266,00 | 294,00                   | 180-226                                            | 180-326                | 180-426                |
| 7                                               | 310,50 | 338,50                   | 180-227                                            | 180-327                | -                      |
| 8                                               | 354,50 | 382,50                   | -                                                  | 180-328                | 180-428                |
| 9                                               | 399,00 | 427,00                   | -                                                  | 180-329                | 180-429                |
| 10                                              | 444,50 | 472,00                   | -                                                  | 181-350                | 181-450                |
| 12                                              | 533,50 | 561,50                   | -                                                  | 181-352                | 181-452                |
| 14                                              | 622,00 | 650,00                   | -                                                  | 181-354                | 181-454                |
| 16                                              | 711,00 | 739,00                   | -                                                  | 181-356                | 181-456                |
| 18                                              | 800,00 | 828,00                   | -                                                  | 181-358                | 181-458                |
| 20                                              | 889,00 | 917,00                   | -                                                  | 181-360                | 181-460                |
| Sliding rail, 1 Paar (Load capacity: ca. 20 kg) |        |                          | 180-002                                            | 180-003                | 180-004                |



The enclosure for mobile application

# apraLITE



## 19" enclosure system **apraLITE**

- light, practical aluminium enclosure
- side flip-up handles standard
- protection system IP 30/20
- 1/2 19" version available
- dismantlable
- quick assembly using few screws
- installation dimensions acc. to IEC 60297-3-100

19" enclosure system 179 apraLITE is ideal for mobile use. The light construction and built-in flip-up handles allow easy transportation of this enclosure. Only a few screws are used so, it can be assembled and dismantled quickly.

Matching 19" plug-in units

page 65

Matching 19" subracks

page 79



## 19" enclosure system apraLITE

### Application:

19" plug-in units, shelves and 19" sub-racks can be installed in the enclosure.

### Construction:

the enclosure has a simple construction based on side panels with built-in vertical mountings and top and bottom covers that can be assembled quickly.

**Finish:** RAL 7035 light grey

### Protection system:

IP 30: not ventilated

IP 20: ventilated

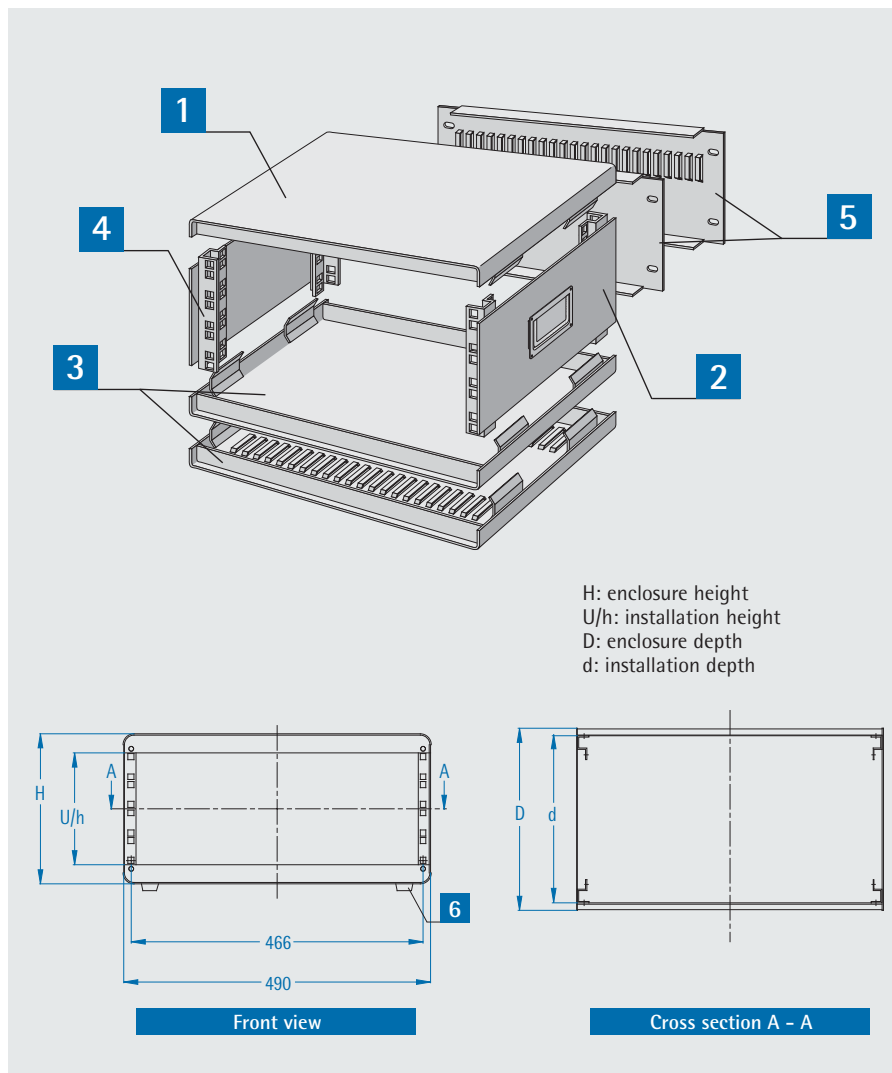
**Delivery:** not assembled

### Standard:

installation dimensions acc. to IEC 60297-3-100

### Delivery

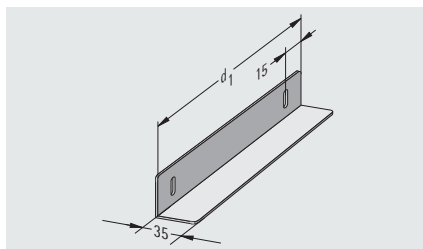
| Item | Pc. | Description                                   |
|------|-----|-----------------------------------------------|
| 1    | 1   | Top panel                                     |
| 2    | 2   | Side panels with handle                       |
| 3    | 1   | Bottom panel (ventilated/not ventilated)      |
| 4    | 4   | Vertical mountings (integrated in side panel) |
| 5    | 1   | Rear panel (ventilated/not ventilated)        |
| 6    | 4   | Enclosure feet                                |
| 7    |     | Assembly material                             |



| Installation height |       | Enclosure height<br><br>H mm | 19" enclosure, ventilated<br>in rear and bottom panel |                      |                      | 19" enclosure,<br>not ventilated |                      |                      | 1/2 19" enclosure,<br>not ventilated |                      |
|---------------------|-------|------------------------------|-------------------------------------------------------|----------------------|----------------------|----------------------------------|----------------------|----------------------|--------------------------------------|----------------------|
| U                   | h mm  |                              | d=270 mm<br>D=290 mm                                  | d=370 mm<br>D=390 mm | d=470 mm<br>D=490 mm | d=270 mm<br>D=290 mm             | d=370 mm<br>D=390 mm | d=470 mm<br>D=490 mm | d=270 mm<br>D=290 mm                 | d=370 mm<br>D=390 mm |
| 3                   | 132,5 | 194,5                        | 179-283                                               | 179-383              | 179-483              | 179-223                          | 179-323              | 179-423              | 179-823                              | 179-923              |
| 4                   | 177   | 239                          | 179-284                                               | 179-384              | 179-484              | 179-224                          | 179-324              | 179-424              | 179-824                              | 179-924              |
| 5                   | 221,5 | 283,5                        | 179-285                                               | 179-385              | 179-485              | 179-225                          | 179-325              | 179-425              | 179-825                              | 179-925              |
| 6                   | 266   | 328                          | 179-286                                               | 179-386              | 179-486              | 179-226                          | 179-326              | 179-426              | 179-826                              | 179-926              |
| 9                   | 399   | 461                          | 179-289                                               | 179-389              | 179-489              | 179-229                          | 179-329              | 179-429              | 179-829                              | 179-929              |
| 12                  | 534   | 596                          | 179-292                                               | 179-392              | 179-492              | 179-232                          | 179-332              | 179-432              | -                                    | -                    |
| 15                  | 668   | 730                          | 179-295                                               | 179-395              | 179-495              | 179-235                          | 179-335              | 179-435              | -                                    | -                    |
| 18                  | 801   | 863                          | 179-298                                               | 179-398              | 179-498              | 179-238                          | 179-338              | 179-438              | -                                    | -                    |

### Sliding rails

| Description  | Installation depth d1 | Order no. |
|--------------|-----------------------|-----------|
| for D=290 mm | 240 mm                | 179-006   |
| for D=390 mm | 340 mm                | 179-007   |
| for D=490 mm | 440 mm                | 179-008   |



### Screw set M 5 (50-fold)

- 50 screws, M5 x 12
- 50 captive nuts, M5-8
- 50 decorative washers, M5 with collar

| Order no. |
|-----------|
| 630-991   |



## Other 19" enclosure systems



### *Tamago*

- stylish design
- integrated handle bar
- easy handling
- patented "apra-lock" locking system
- clip-on trim pieces for custom design
- also available as desktop enclosure



### **BERLIN**

- modern design
- light construction
- stackable
- integrated handle bar
- mounting system with adjustable depth



You can find other cabinet systems and enclosures here:

