



# Electrical Enclosures





# Production of electrical enclosures



## Company profile

The company Senco Příbram spol. s r. o. was founded in 1992.

The company is concerned in construction and production of electrical enclosures in sheet-steel or stainless steel design, either in piece or series character of production.

Among additional activities of the company belong the surface treatment of metals with powder coating, CNC sheet-steel processing and locksmith's production.

All processes are subject to standards ISO 9001:2008 and IRIS Rev.01.

Welding processes are controlled by quality system according to the ČSN EN ISO 3834-2, they also comply with the requirements of product standards according to the ČSN EN 15085-2 CL2 and ČDV95/5. Welding is done by usage of methods MIG and TIG.

The company has corrosion technologists (corrosion technologist-KTG-C) certified in field of corrosion and corrosion protection according to the requirements of Std-401 APC:2007.

## Production capacity and floor space

• locksmith's production	2 000 h/month.	1 700 m <sup>2</sup>
• powder coating	500 h/month.	600 m <sup>2</sup>

## Production of electrical enclosures

The company produces series electrical enclosures of own construction KAPPA, ESO-A and RIO-N.

Within the scope of custom-made production we offer to our customers production of atypical dimensions, punching of separate parts according to the specification, variable finish of the surface treatment (shade and color character, thickness and number of layers), changes of used materials for steel and mechanical parts (including stainless and zinc-coated materials) or glass doors.

The electrical enclosures are intended for usage cross-wise branches of industries e.g. technological lines, working machines, electrical power distribution, cabinets of measurement and regulation (M&R), compensation electrical cabinets etc.



# Code key

## Ordering code legend

Initiated code key is only informative. You can compile the concrete ordering code according to the relevant table by particular enclosures.

<b>T</b>	<b>RIO-N</b>	- universal self-supporting steel sheet enclosure for surface assembly
<b>Y</b>	<b>ESO-A</b>	- universal enclosure, welded skeleton
<b>P</b>	<b>KAPPA</b>	- compact steel sheet construction
<b>E</b>		
<b>H</b>	<b>Height</b>	<b>Value</b>
<b>H</b>	for RIO-N	<b>in cm</b>
	for ESO-A and KAPPA	<b>in dm</b>
<b>D</b>	<b>Depth</b>	<b>Value</b>
<b>D</b>	for RIO-N	<b>in cm</b>
	for ESO-A and KAPPA	<b>in dm</b>
<b>W</b>	<b>Width</b>	<b>Value</b>
<b>W</b>	for RIO-N	<b>in cm</b>
	for ESO-A and KAPPA	<b>in dm</b>
<b>1</b>	<b>Type of locking</b>	
<b>1</b>	<b>B</b>	- Doppelbart 3
	<b>F</b>	- cylindrical inlet with unified key (DIRAK 1333)
<b>2</b>	<b>Surface treatment / Design</b>	
<b>2</b>	<b>1</b>	- powder paint RAL 7032 inner, mattng, glossy
	<b>2</b>	- powder paint RAL 7035 inner, mattng, glossy
	<b>N *</b>	- stainless design (1.4301 acc. EN 10027-2), grind P240
<b>3</b>	<b>Front door</b>	
<b>3</b>	<b>L</b>	- left-handed door (hinges on the left)
	<b>P</b>	- right-handed door (hinges on the right)
	<b>D</b>	- double-wing doors
<b>4</b>	<b>Back cover / Rear door</b>	
<b>4</b>	<b>Z</b>	- solid back cover (non-removable)
	<b>K</b>	- removable back cover
	<b>L</b>	- left-handed door (hinges on the left)
	<b>P</b>	- right-handed door (hinges on the right)
	<b>D</b>	- double-wing door
<b>5</b>	<b>Door type</b>	
<b>5</b>	<b>0</b>	- full metal door
	<b>S</b>	- 1pc glass door
	<b>V</b>	- more glass door (upon request)
<b>6</b>	<b>Protection of enclosure acc. ČSN EN 60529</b>	
<b>6</b>	<b>4</b>	- IP 54
	<b>5</b>	- IP 55
	<b>6</b>	- IP 65
	<b>7</b>	- IP 66
<b>7</b>	<b>Catalogue marking</b>	
<b>7</b>	<b>1</b>	- type production marking

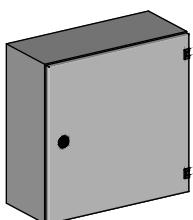
\* Except of the ESO-A enclosures, where the skeleton is extra powder coated with RAL 7043

E. G.:

**RIO-N120/30/90 B1LZ061** - electrical enclosure RIO-N with dimensions 1200x300x900 mm (HxDxW), Doppelbart inlet, powder paint RAL 7032, left-handed door, solid back cover (not type removable), without glass, IP protection 65, type (catalogue) dimension

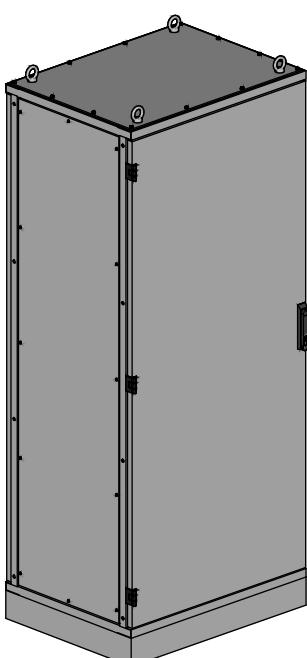
**ESO-A-20/06/08 F2PKS51** - electrical enclosure ESO-A with dimension 2000x600x800 mm (HxDxW), cylindrical inlet, powder paint RAL 7035, right-handed door, removable back cover, glass door, IP protection 55, type (catalogue) dimension

## RIO-N



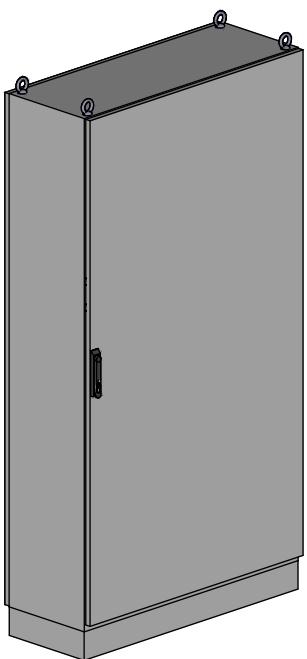
Electrical enclosure characteristics	6
Range of enclosure dimensions	7
Mechanical parts	8
Technical drawings	10

## ESO-A



Electrical enclosure characteristics	12
Range of enclosure dimensions	13
Mechanical parts	15
Examples of mechanical parts usage	23
Technical drawings	24

## KAPPA



Electrical enclosure characteristics	18
Range of enclosure dimensions	19
Mechanical parts	21
Examples of mechanical parts usage	23
Technical drawings	28

Electrical Enclosure RIO-N is self-supporting steel sheet enclosure intended to be wall-mounted. The enclosures are suitable as electrical cabinets for machinery equipment, measurement and regulation cabinets, control, terminal and delocking electrical cabinets.

### Technical Design

The body of the enclosure is a welded self-supporting skeleton made of steel sheet of thickness 1,5mm. The door is made of steel sheet 1,5mm and the mounting plate of zinc-coated steel sheet (DX51D) 2mm. The door is equipped with a lock inlet Doppelbart 3 mm. For height dimensions up to 600mm (incl.) there is only one lock, for dimension 900mm there are 2 locks. For height dimensions 1200mm and 1500mm there is one three-point lock. Hanging of the doors is done with 2 or 3 hanging stiles. The enclosure is equipped with welded-on grounding bolts.

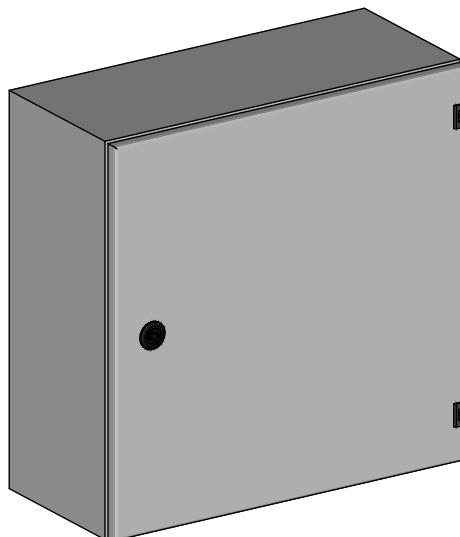
The preliminary surface treatment is done by ferrous phosphate. The powder coating technology is used as a consequential surface treatment of the enclosure (except of the stainless design). The width of the single-layer coating is min. 50µm. The resistance of the surface treatment is verified by corrosion test in NSM (neutral saline mist) - 500 hours according to the standard ČSN EN ISO 9227.

Mounting of the electrical cabinet is realized by usage of the openings in the rear side of the enclosure or with the fixing lugs for mounting from the outer side of the enclosure.

**R  
I  
O  
-  
N**  
**H**  
**/**  
**D**  
**/**  
**W**  
**1**  
**2**  
**3**  
**4**  
**5**  
**6**  
**7**

### Adjustment of ordering code:

<b>H</b>	Height	Value
	for RIO-N	in cm
<b>D</b>	Depth	Value
	for RIO-N	in cm
<b>W</b>	Width	Value
	for RIO-N	in cm
<b>1</b>	Type of locking	
	B	- doppelbart 3
	F	- cylindrical inlet with unified key (DIRAK 1333)
<b>2</b>	Surface treatment / Design	
	1	- powder paint RAL 7032 inner, matting, glossy
	2	- powder paint RAL 7035 inner, matting, glossy
	N	- stainless design (1.4301 acc. EN 10027-2), grind P240
<b>3</b>	Front door	
	L	- left-handed door (hinges on the left)
	P	- right-handed door (hinges in the right)
<b>4</b>	Back cover / Rear door	
	Z	- solid back cover (non-removable)
<b>5</b>	Door type	
	0	- full metal door
	S	- 1pc glass door
<b>6</b>	Protection of enclosure (acc. ČSN EN 60 529)	
	5	- IP 55
	6	- IP 65
<b>7</b>	Catalogue marking	
	1	- type production marking



### Standard design includes:

- enclosures skeleton RIO-N (anchorage opening in rear enclosure wall)
- full metal door
- mounting plate (enclosures with depth of 100 mm do not include mounting plates)

### Type dimensions of the enclosure RIO-N

Type dimensions of enclosure [mm]		
Height	Depth	Width
300	100	150
300	100	300
300	100	450
300	100	600
450	100	300
450	100	450
450	100	600
600	100	300
600	100	450
300	150	150
300	150	300
300	150	450
300	150	600
450	150	300
450	150	450
450	150	600
450	150	900
600	150	450
600	150	600
900	150	450
900	150	600
1200	150	600
1200	150	900
300	200	300
300	200	450
300	200	600
450	200	300
450	200	450
450	200	600
450	200	900
600	200	450
600	200	600
900	200	600
900	200	900
1200	200	600
1200	200	900
600	300	600
600	300	900
900	300	600
900	300	900
1200	300	600
1200	300	900
1500	300	600
1500	300	900

Mounting plate	Plastic lock + hinges	Metal lock + hinges	Ordering code (IP55)
✗	✓	✗	RIO-N030/10/15 B2LZ051
✗	✓	✗	RIO-N030/10/30 B2LZ051
✗	✓	✗	RIO-N030/10/45 B2LZ051
✗	✓	✗	RIO-N030/10/60 B2LZ051
✗	✓	✗	RIO-N045/10/30 B2LZ051
✗	✓	✗	RIO-N045/10/45 B2LZ051
✗	✓	✗	RIO-N045/10/60 B2LZ051
✗	✓	✗	RIO-N060/10/30 B2LZ051
✗	✓	✗	RIO-N060/10/45 B2LZ051
✓	✓	✗	RIO-N030/15/15 B2LZ051
✓	✓	✗	RIO-N030/15/30 B2LZ051
✓	✓	✗	RIO-N030/15/45 B2LZ051
✓	✓	✗	RIO-N030/15/60 B2LZ051
✓	✓	✗	RIO-N045/15/30 B2LZ051
✓	✓	✗	RIO-N045/15/45 B2LZ051
✓	✓	✗	RIO-N045/15/60 B2LZ051
✓	✓	✗	RIO-N045/15/90 B2LZ051
✓	✓	✗	RIO-N060/15/45 B2LZ051
✓	✓	✗	RIO-N060/15/60 B2LZ051
✓	✗	✓	RIO-N090/15/45 B2LZ051
✓	✗	✓	RIO-N090/15/60 B2LZ051
✓	✗	✓	RIO-N120/15/60 B2LZ051
✓	✗	✓	RIO-N120/15/90 B2LZ051
✓	✓	✗	RIO-N30/20/30 B2LZ051
✓	✓	✗	RIO-N30/20/45 B2LZ051
✓	✓	✗	RIO-N30/20/60 B2LZ051
✓	✓	✗	RIO-N045/20/30 B2LZ051
✓	✓	✗	RIO-N045/20/45 B2LZ051
✓	✓	✗	RIO-N045/20/60 B2LZ051
✓	✓	✗	RIO-N045/20/90 B2LZ051
✓	✓	✗	RIO-N060/20/45 B2LZ051
✓	✓	✗	RIO-N060/20/60 B2LZ051
✓	✗	✓	RIO-N090/20/60 B2LZ051
✓	✗	✓	RIO-N090/20/90 B2LZ051
✓	✗	✓	RIO-N120/20/60 B2LZ051
✓	✗	✓	RIO-N120/20/90 B2LZ051
✓	✓	✗	RIO-N060/30/60 B2LZ051
✓	✓	✗	RIO-N060/30/90 B2LZ051
✓	✗	✓	RIO-N090/30/60 B2LZ051
✓	✗	✓	RIO-N090/30/90 B2LZ051
✓	✗	✓	RIO-N120/30/60 B2LZ051
✓	✗	✓	RIO-N120/30/90 B2LZ051
✓	✗	✓	RIO-N150/30/60 B2LZ051
✓	✗	✓	RIO-N150/30/90 B2LZ051

Mounting plate	Metal lock + hinges	Ordering code (IP65)
✗	✓	RIO-N030/10/15 B2LZ061
✗	✓	RIO-N030/10/30 B2LZ061
✗	✓	RIO-N030/10/45 B2LZ061
✗	✓	RIO-N030/10/60 B2LZ061
✗	✓	RIO-N045/10/30 B2LZ061
✗	✓	RIO-N045/10/45 B2LZ061
✗	✓	RIO-N045/10/60 B2LZ061
✗	✓	RIO-N060/10/30 B2LZ061
✗	✓	RIO-N060/10/45 B2LZ061
✓	✓	RIO-N030/15/15 B2LZ061
✓	✓	RIO-N030/15/30 B2LZ061
✓	✓	RIO-N030/15/45 B2LZ061
✓	✓	RIO-N030/15/60 B2LZ061
✓	✓	RIO-N045/15/30 B2LZ061
✓	✓	RIO-N045/15/45 B2LZ061
✓	✓	RIO-N045/15/60 B2LZ061
✓	✓	RIO-N045/15/90 B2LZ061
✓	✓	RIO-N060/15/45 B2LZ061
✓	✓	RIO-N060/15/60 B2LZ061
✓	✓	RIO-N090/15/45 B2LZ061
✓	✓	RIO-N090/15/60 B2LZ061
✓	✓	RIO-N120/15/60 B2LZ061
✓	✓	RIO-N120/15/90 B2LZ061
✓	✓	RIO-N30/20/30 B2LZ061
✓	✓	RIO-N30/20/45 B2LZ061
✓	✓	RIO-N30/20/60 B2LZ061
✓	✓	RIO-N045/20/30 B2LZ061
✓	✓	RIO-N045/20/45 B2LZ061
✓	✓	RIO-N045/20/60 B2LZ061
✓	✓	RIO-N045/20/90 B2LZ061
✓	✓	RIO-N060/20/45 B2LZ061
✓	✓	RIO-N060/20/60 B2LZ061
✓	✓	RIO-N090/20/60 B2LZ061
✓	✓	RIO-N120/20/60 B2LZ061
✓	✓	RIO-N120/20/90 B2LZ061
✓	✓	RIO-N060/30/60 B2LZ061
✓	✓	RIO-N060/30/90 B2LZ061
✓	✓	RIO-N090/30/60 B2LZ061
✓	✓	RIO-N090/30/90 B2LZ061
✓	✓	RIO-N120/30/60 B2LZ061
✓	✓	RIO-N120/30/90 B2LZ061
✓	✓	RIO-N150/30/60 B2LZ061
✓	✓	RIO-N150/30/90 B2LZ061

Glossary:



- included in enclosure
- not included in enclosure

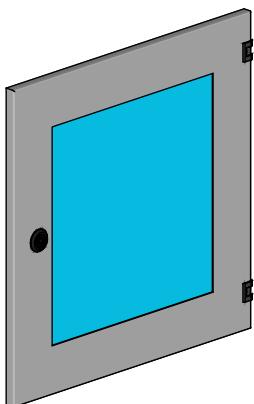
Above mentioned ordering codes are for standard versions of enclosures:

- doppelbart 3 lock
- powder paint RAL 7035 inner, matting structure, glossy
- left-handed door (hinges on the left side)
- full metal door
- protection IP 55 or IP 65

Other possible version are listed directly in separated price list.

For justification of the ordering code (for other version - e.g. color, lock type, left- /right-handed door) use the code key on page 4.

### Example of glass door



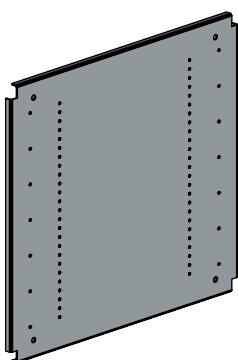
- clear safety glass CONNEX 3.3.1.
- glass thickness 6,3 mm.

**Ordering acc. to the modified specification  
of the ordering code:**

<b>Door type:</b>	(0) full metal door
	(S) glass door
Standard version:	<b>RIO-N H/D/W ... ... ... 0 ... ...</b>
Glass version:	<b>RIO-N H/D/W ... ... ... S ... ...</b>

To order glass door for type version of the electrical enclosure just change number in the code key on position 5 (door type).

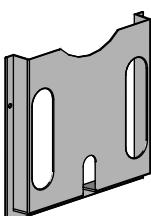
### Mounting plate



- zinc-coated sheet metal (DX51D)
- material thickness 2mm

For enclosure dimension [mm]		Ordering code
Height	Width	
300	150	<b>MP 030/15</b>
300	300	<b>MP 030/30</b>
300	450	<b>MP 030/45</b>
300	600	<b>MP 030/60</b>
450	300	<b>MP 045/30</b>
450	450	<b>MP 045/45</b>
450	600	<b>MP 045/60</b>
450	900	<b>MP 045/90</b>
600	300	<b>MP 060/30</b>
600	450	<b>MP 060/45</b>
600	600	<b>MP 060/60</b>
900	600	<b>MP 090/60</b>
900	900	<b>MP 090/90</b>
1200	600	<b>MP 120/60</b>
1200	900	<b>MP 120/90</b>
1500	600	<b>MP 150/60</b>
1500	900	<b>MP 150/90</b>

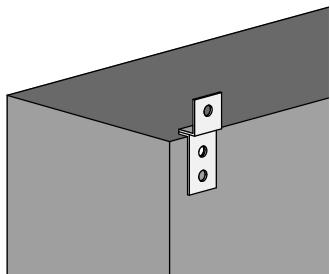
### Documentation pocket



- for minimal door dimension 450 x 450 mm
- size A4
- plastic, self-adhesive

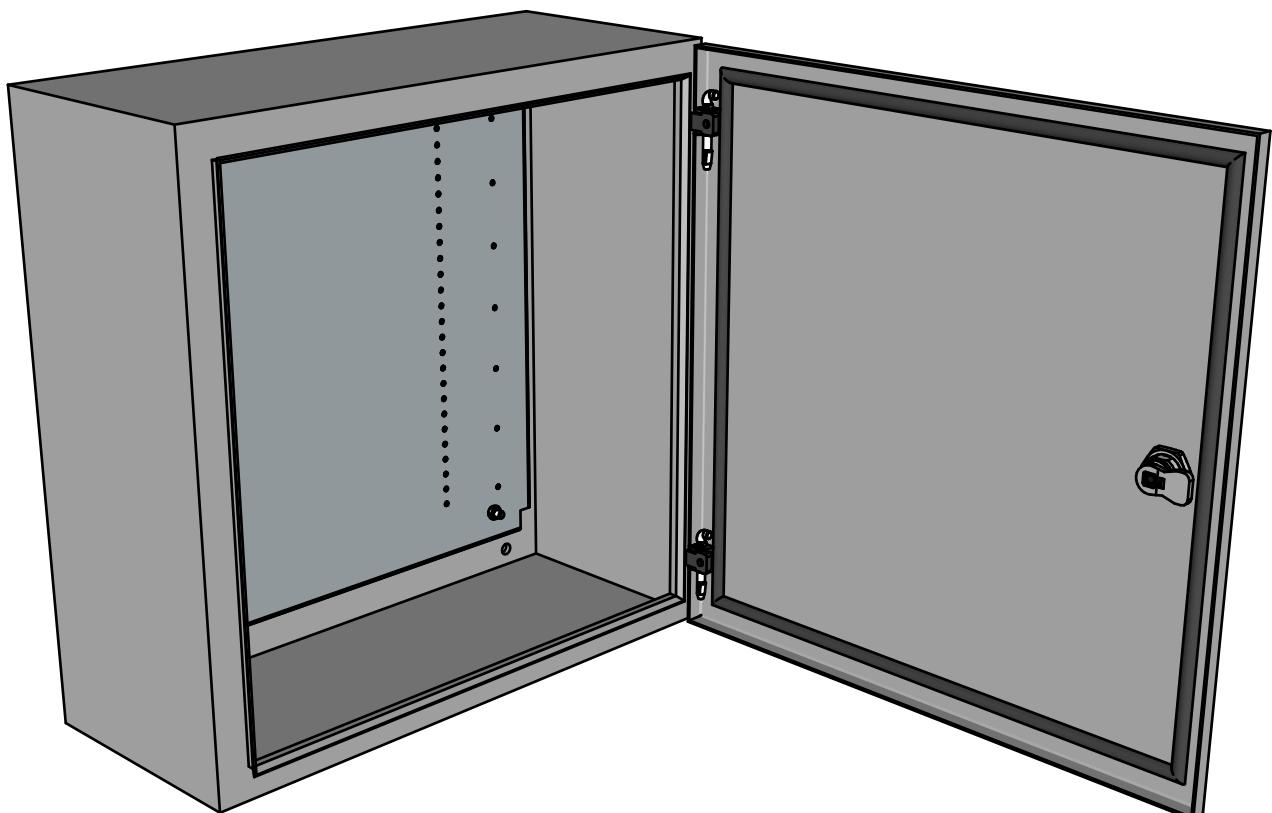
Design	Ordering code
Documentation pocket A4	<b>6A 255</b>

### Outer fixing lug

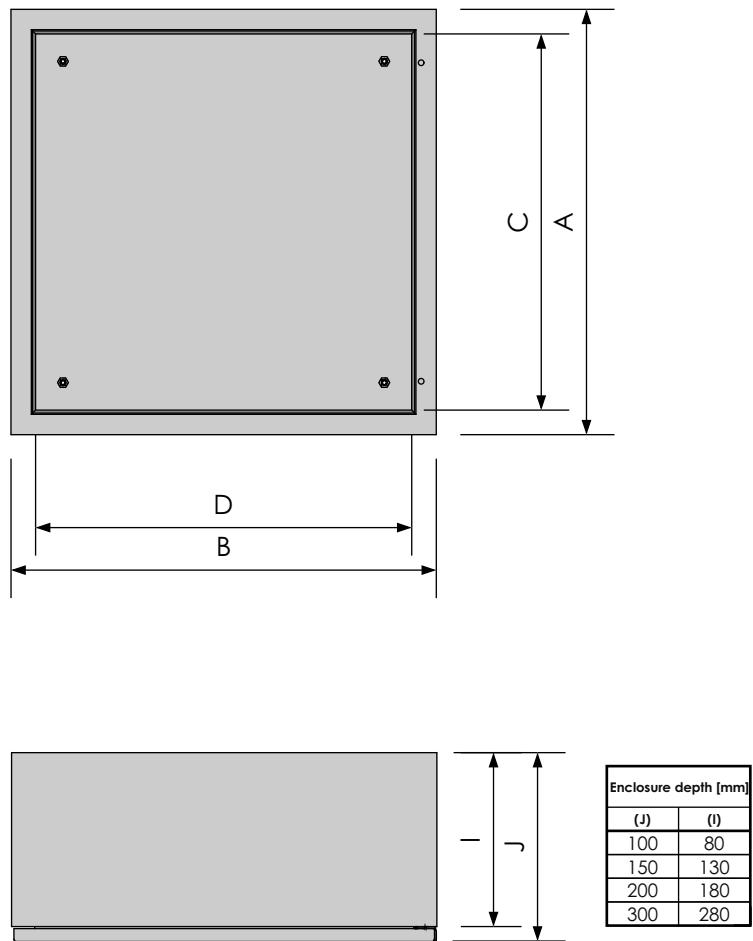


- package includes: 4 pc fixing lugs + connection accessories

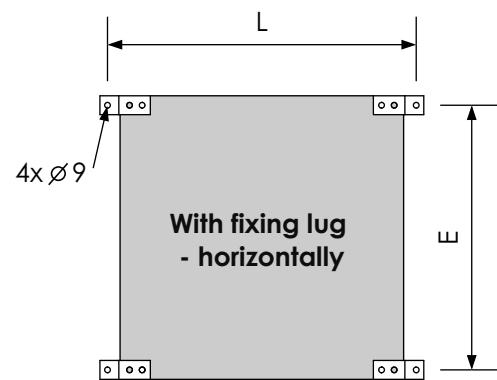
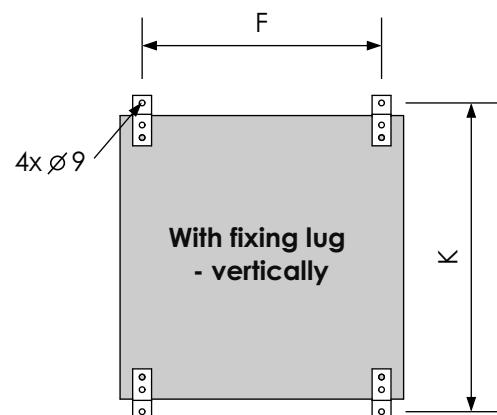
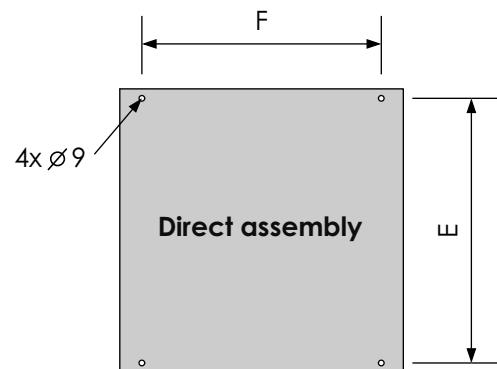
Design	Ordering code
Outer fixing lug - RAL 7032	PVRIO 0100001
Outer fixing lug - RAL 7035	PVRIO 0200001
Outer fixing lug - stainless steel (1.4301)	PVRIO 0N00001



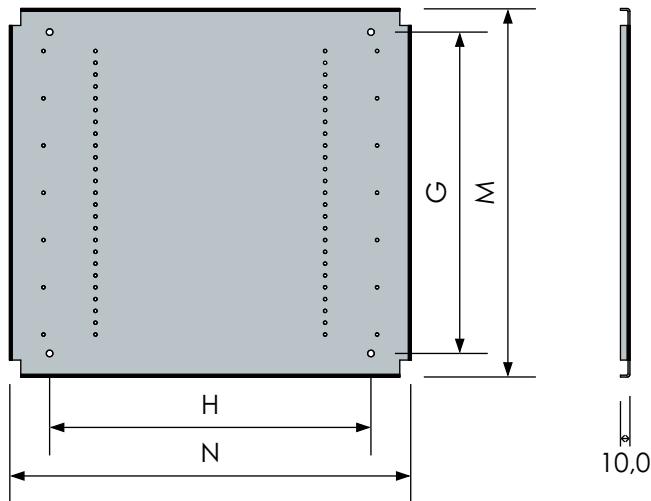
### Basic dimensions (view without doors)



### Enclosure anchorage - rear view



Enclosure dimension [mm]		Enclosure throughpass [mm]		Anchor openings [mm] direct assembly		Anchor openings [mm] -with fixing lug -vertically		Anchor openings [mm] -with fixing lug -horizontally	
Height (A)	Width (B)	Height (C)	Width (D)	Height (E)	Width (F)	Height (K)	Width (F)	Height (E)	Width (L)
300	150	248	98	270	80	340	80	270	190
300	300	248	248	270	230	340	230	270	340
300	450	248	398	270	380	340	380	270	490
300	600	248	548	270	530	340	530	270	640
450	300	398	248	420	230	490	230	420	340
450	450	398	398	420	380	490	380	420	490
450	600	398	548	420	530	490	530	420	640
450	900	398	848	420	830	490	830	420	940
600	300	548	248	570	230	640	230	570	340
600	450	548	398	570	380	640	380	570	490
600	600	548	548	570	530	640	530	570	640
900	600	844	544	870	530	940	530	870	640
900	900	844	844	870	830	940	830	870	940
1200	600	1144	544	1170	530	1240	530	1170	640
1200	900	1144	844	1170	830	1240	830	1170	940
1500	600	1444	544	1470	530	1540	530	1470	640
1500	900	1444	844	1470	830	1540	830	1470	940

Basic dimensions of mounting plate

For enclosure dimension [mm]		Mounting hole pitch [mm]		Bolts for mounting plate assembly	Mounting plate dimension [mm]	
Height	Width	Height (G)	Width (H)		Height (M)	Width (N)
300	150	190	40	M 5	240	140
300	300	190	190	M 5	240	275
300	450	190	340	M 5	240	425
300	600	190	490	M 5	240	570
450	300	340	190	M 5	390	275
450	450	340	340	M 5	390	425
450	600	340	490	M 5	390	570
450	900	340	790	M 5	390	870
600	300	490	190	M 5	540	275
600	450	490	340	M 5	540	425
600	600	490	490	M 5	540	570
900	600	790	490	M 6	840	570
900	900	790	790	M 6	840	870
1200	600	1090	490	M 6	1140	570
1200	900	1090	790	M 6	1140	870
1500	600	1390	490	M 6	1440	570
1500	900	1390	790	M 6	1440	870

Electrical enclosure ESO-A is a universal enclosure intended for standalone or single-row switchgear cabinets. Enclosures are suitable above all for technological and distribution electrical cabinets.

### Technical design

Construction of the electrical enclosure is made of non-dismountable connected bent steel sections. Covers are made of steel sheet of thickness 1,5 mm, the door of steel sheet 2,0 mm and mounting plate of zinc-coated steel sheet 2,5 mm. The door is equipped with a swing handle and a four-point lock with a lock inlet doppelbart 3 mm or with a cylindrical inlet with the unified key (DIRAK 1333). Enclosures are equipped with 4pc of lifting lugs for manipulation. The enclosure is equipped with welded-on grounding bolts.

The skeleton for the stainless design is extra powder coated with RAL 7043, other stainless parts (upper cover, sideways covers, doors) are made of grinded stainless sheet P240.

There is a prepared perforation in the skeleton of the enclosure for additional component and mechanics assembling. It is possible to buy various components, made of zinc-coated steel sheet (see page 12-15).

The preliminary surface treatment is done by ferrous phosphate. The powder coating technology is used as a consequential surface treatment of the enclosure (except of the stainless design). The width of the single-layer coating is min. 50µm. The resistance of the surface treatment is verified by corrosion test in NSM (neutral saline mist) - 500 hours according to the standard ČSN EN ISO 9227.

### Adjustment of ordering code:

**E**  
**S**  
**O**  
**-**  
**A**  
  
**H**  
  
**/**  
  
**D**  
  
**/**  
  
**W**  
  
**1**  
  
**2**  
  
**3**  
  
**4**  
  
**5**  
  
**6**  
  
**7**

<b>H</b>	Height for ESO-A	Value in dm
<b>D</b>	Depth for ESO-A	Value in dm
<b>W</b>	Width for ESO-A	Value in dm
<b>1</b>	Type of locking	
	B	- doppelbart 3
	F	- cylindrical inlet with unified key (DIRAK 1333)
<b>2</b>	Surface treatment / Design	
	1	- powder paint RAL 7032 inner, matting, glossy
	2	- powder paint RAL 7035 inner, matting, glossy
	N	- stainless design (1.4301), P240 - stainless skeleton powder coat.
<b>3</b>	Front door	
	L	- left-handed door (hinges on the left)
	P	- right-handed door (hinges on the right)
	D	- double wing door
<b>4</b>	Back cover / Rear door	
	K	- removable back cover
	L	- left-handed door (hinges on the left)
	P	- right-handed door (hinges on the right)
	D	- double wing doors
<b>5</b>	Door type	
	O	- full metal door
	S	- 1pc glass door
	V	- more glass doors
<b>6</b>	Protection of enclosure (acc. ČSN EN 60 529)	
	4	- IP 54 (double-wing design)
	5	- IP 55 (single-wing design)
<b>7</b>	Catalogue marking	
	1	- production type marking



### Standard design includes:

- enclosure skeleton
- door with four-point lock
- upper cover + lifting lug
- back cover

### Type dimensions of the enclosure ESO-A

Type dimensions of enclosure [mm]		
Height	Depth	Width
1600	400	600
1600	400	800
1600	400	1000
1600	400	1200
1600	600	600
1600	600	800
1600	600	1000
1600	600	1200
1600	800	600
1600	800	800
1600	800	1000
1600	800	1200
1800	400	600
1800	400	800
1800	400	1000
1800	400	1200
1800	600	600
1800	600	800
1800	600	1000
1800	600	1200
1800	800	600
1800	800	800
1800	800	1000
1800	800	1200
2000	400	600
2000	400	800
2000	400	1000
2000	400	1200
2000	600	600
2000	600	800
2000	600	1000
2000	600	1200
2000	800	600
2000	800	800
2000	800	1000
2000	800	1200
2200	400	600
2200	400	800
2200	400	1000
2200	400	1200
2200	600	600
2200	600	800
2200	600	1000
2200	600	1200
2200	800	600
2200	800	800
2200	800	1000
2200	800	1200

Ordering code (single-wing design)
ESO-A16/04/06 B2LK051
ESO-A16/04/08 B2LK051
ESO-A16/04/10 B2LK051
-
ESO-A16/06/06 B2LK051
ESO-A16/06/08 B2LK051
ESO-A16/06/10 B2LK051
-
ESO-A16/08/06 B2LK051
ESO-A16/08/08 B2LK051
ESO-A16/08/10 B2LK051
-
ESO-A18/04/06 B2LK051
ESO-A18/04/08 B2LK051
ESO-A18/04/10 B2LK051
-
ESO-A18/06/06 B2LK051
ESO-A18/06/08 B2LK051
ESO-A18/06/10 B2LK051
-
ESO-A18/08/06 B2LK051
ESO-A18/08/08 B2LK051
ESO-A18/08/10 B2LK051
-
ESO-A20/04/06 B2LK051
ESO-A20/04/08 B2LK051
ESO-A20/04/10 B2LK051
-
ESO-A20/06/06 B2LK051
ESO-A20/06/08 B2LK051
ESO-A20/06/10 B2LK051
-
ESO-A20/08/06 B2LK051
ESO-A20/08/08 B2LK051
ESO-A20/08/10 B2LK051
-
ESO-A22/04/06 B2LK051
ESO-A22/04/08 B2LK051
ESO-A22/04/10 B2LK051
-
ESO-A22/06/06 B2LK051
ESO-A22/06/08 B2LK051
ESO-A22/06/10 B2LK051
-
ESO-A22/08/06 B2LK051
ESO-A22/08/08 B2LK051
ESO-A22/08/10 B2LK051
-

Ordering code (double-wing design)
-
ESO-A16/04/08 B2DK041
ESO-A16/04/10 B2DK041
ESO-A16/04/12 B2DK041
-
ESO-A16/06/08 B2DK041
ESO-A16/06/10 B2DK041
ESO-A16/06/12 B2DK041
-
ESO-A16/08/08 B2DK041
ESO-A16/08/10 B2DK041
ESO-A16/08/12 B2DK041
-
ESO-A18/04/08 B2DK041
ESO-A18/04/10 B2DK041
ESO-A18/04/12 B2DK041
-
ESO-A18/06/08 B2DK041
ESO-A18/06/10 B2DK041
ESO-A18/06/12 B2DK041
-
ESO-A18/08/08 B2DK041
ESO-A18/08/10 B2DK041
ESO-A18/08/12 B2DK041
-
ESO-A20/04/08 B2DK041
ESO-A20/04/10 B2DK041
ESO-A20/04/12 B2DK041
-
ESO-A20/06/08 B2DK041
ESO-A20/06/10 B2DK041
ESO-A20/06/12 B2DK041
-
ESO-A20/08/08 B2DK041
ESO-A20/08/10 B2DK041
ESO-A20/08/12 B2DK041
-
ESO-A22/04/08 B2DK041
ESO-A22/04/10 B2DK041
ESO-A22/04/12 B2DK041
-
ESO-A22/06/08 B2DK041
ESO-A22/06/10 B2DK041
ESO-A22/06/12 B2DK041
-
ESO-A22/08/08 B2DK041
ESO-A22/08/10 B2DK041
ESO-A22/08/12 B2DK041
-

Ordering code (single-wing, glass design)
ESO-A16/04/06 F2LKS51
ESO-A16/04/08 F2LKS51
ESO-A16/04/10 F2LKS51
-
ESO-A16/06/06 F2LKS51
ESO-A16/06/08 F2LKS51
ESO-A16/06/10 F2LKS51
-
ESO-A16/08/06 F2LKS51
ESO-A16/08/08 F2LKS51
ESO-A16/08/10 F2LKS51
-
ESO-A18/04/06 F2LKS51
ESO-A18/04/08 F2LKS51
ESO-A18/04/10 F2LKS51
-
ESO-A18/06/06 F2LKS51
ESO-A18/06/08 F2LKS51
ESO-A18/06/10 F2LKS51
-
ESO-A18/08/06 F2LKS51
ESO-A18/08/08 F2LKS51
ESO-A18/08/10 F2LKS51
-
ESO-A20/04/06 F2LKS51
ESO-A20/04/08 F2LKS51
ESO-A20/04/10 F2LKS51
-
ESO-A20/06/06 F2LKS51
ESO-A20/06/08 F2LKS51
ESO-A20/06/10 F2LKS51
-
ESO-A20/08/06 F2LKS51
ESO-A20/08/08 F2LKS51
ESO-A20/08/10 F2LKS51
-
ESO-A22/04/06 F2LKS51
ESO-A22/04/08 F2LKS51
ESO-A22/04/10 F2LKS51
-
ESO-A22/06/06 F2LKS51
ESO-A22/06/08 F2LKS51
ESO-A22/06/10 F2LKS51
-
ESO-A22/08/06 F2LKS51
ESO-A22/08/08 F2LKS51
ESO-A22/08/10 F2LKS51
-

Above mentioned ordering codes are for standard versions of the enclosures:

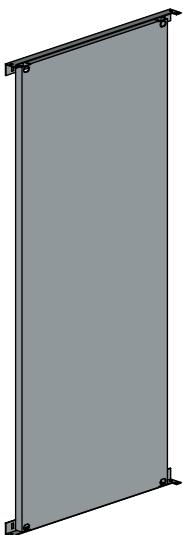
- swing handle with doppelbart 3 (glass door with unified key DIRAK 1333)
- powder paint RAL 7035 inner, matting structure, glossy
- left-handed door (hinges on the left)
- IP protection 55 (single-wing design), IP protection 54 (double-wing design)
- without side covers and bottom cover

Other possible versions are listed directly in separate price list.

For justification of the ordering code (for other versions - e. g. color, lock type, left-/right-handed door) use the code key on page 10.

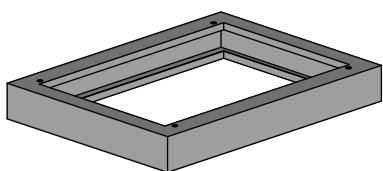
### Additional mechanical parts:

- mechanical parts of the mounting system
- documentation pocket
- mounting plate
- stand

Mounting plate

- zinc-coated sheet metal (DX51D)
- material thickness 2,5 mm
- mounting plate holders - 2 pc

For enclosure dimension [mm]		Ordering code
Height	Width	
1600	600	MPE-A 16/06
1600	800	MPE-A 16/08
1600	1000	MPE-A 16/10
1600	1200	MPE-A 16/12
1800	600	MPE-A 18/06
1800	800	MPE-A 18/08
1800	1000	MPE-A 18/10
1800	1200	MPE-A 18/12
2000	600	MPE-A 20/06
2000	800	MPE-A 20/08
2000	1000	MPE-A 20/10
2000	1200	MPE-A 20/12
2200	600	MPE-A 22/06
2200	800	MPE-A 22/08
2200	1000	MPE-A 22/10
2200	1200	MPE-A 22/12

Stand

- stand height: 100 mm
- powder paint RAL 7035 \*
- material thickness 2,0 mm

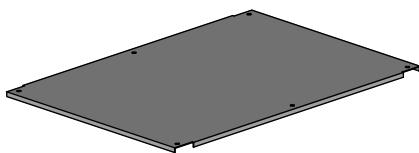
For enclosure dimensions [mm]		Ordering code
Depth	Width	
400	600	PDSE-A10 04/06 0200001
400	800	PDSE-A10 04/08 0200001
400	1000	PDSE-A10 04/10 0200001
400	1200	PDSE-A10 04/12 0200001
600	600	PDSE-A10 06/06 0200001
600	800	PDSE-A10 06/08 0200001
600	1000	PDSE-A10 06/10 0200001
600	1200	PDSE-A10 06/12 0200001
800	600	PDSE-A10 08/06 0200001
800	800	PDSE-A10 08/08 0200001
800	1000	PDSE-A10 08/10 0200001
800	1200	PDSE-A10 08/12 0200001

Side cover

- powder paint RAL 7035 \*
- material thickness 1,5 mm
- connection accessories + sealing enclosed

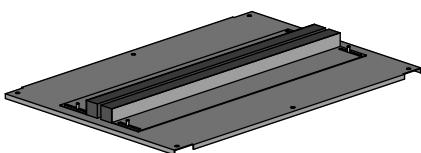
For enclosure dimensions [mm]		Ordering code
Height	Depth	
1600	400	BKE-A 16/04 0200001
1600	600	BKE-A 16/06 0200001
1600	800	BKE-A 16/08 0200001
1800	400	BKE-A 18/04 0200001
1800	600	BKE-A 18/06 0200001
1800	800	BKE-A 18/08 0200001
2000	400	BKE-A 20/04 0200001
2000	600	BKE-A 20/06 0200001
2000	800	BKE-A 20/08 0200001
2200	400	BKE-A 22/04 0200001
2200	600	BKE-A 22/06 0200001
2200	800	BKE-A 22/08 0200001

\* In case of color change requirement (design) change the number **2 (RAL 7035)** for number **1 (RAL 7032)** or letter **N (stainless design)**.

**Bottom cover**

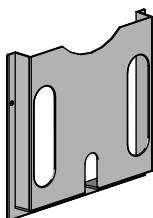
- powder paint RAL 7035 \*
- connection accessories + sealing enclosed

For enclosure dimension [mm]		Ordering code
Depth	Width	
400	600	KDE-A 04/06 0200001
400	800	KDE-A 04/08 0200001
400	1000	KDE-A 04/10 0200001
400	1200	KDE-A 04/12 0200001
600	600	KDE-A 06/06 0200001
600	800	KDE-A 06/08 0200001
600	1000	KDE-A 06/10 0200001
600	1200	KDE-A 06/12 0200001
800	600	KDE-A 08/06 0200001
800	800	KDE-A 08/08 0200001
800	1000	KDE-A 08/10 0200001
800	1200	KDE-A 08/12 0200001

**Bottom cover with adjustable rails**

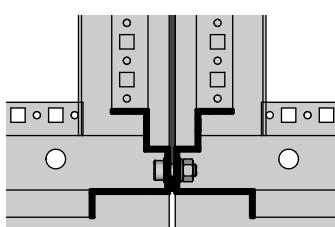
- powder paint RAL 7035 \*
- adjustable rails with foam
- connection accessories + sealing enclosed

For enclosure dimension [mm]		Ordering code
Depth	Width	
400	600	KDLE-A 04/06 0200001
400	800	KDLE-A 04/08 0200001
400	1000	KDLE-A 04/10 0200001
400	1200	KDLE-A 04/12 0200001
600	600	KDLE-A 06/06 0200001
600	800	KDLE-A 06/08 0200001
600	1000	KDLE-A 06/10 0200001
600	1200	KDLE-A 06/12 0200001
800	600	KDLE-A 08/06 0200001
800	800	KDLE-A 08/08 0200001
800	1000	KDLE-A 08/10 0200001
800	1200	KDLE-A 08/12 0200001

**Documentation pocket**

- size A4
- plastic, self-adhesive

Design	Ordering code
Documentation pocket A4	<b>6A 255</b>

**Connection accessory**

- made for connection of two enclosures into single-row side-by-side
- connection of enclosures with 8 pc of socket-head screws
- set includes:
  - sealing between enclosures
  - screws, mats, nuts - M8 (8 pc)

Design	Ordering code
Connection accessory	<b>SSE-A</b>

\* In case of color change requirement (design) change the number **2 (RAL 7035)** for number **1 (RAL 7032)** or with letter **N (stainless design)**.

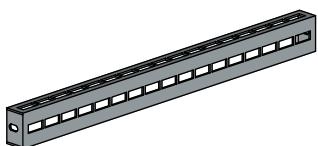
### Vertical beam



- zinc-coated sheet metal (DX51D)
- material thickness 2,0 mm

For enclosure dimension H [mm]	Ordering code
1600	NE-A 16
1800	NE-A 18
2000	NE-A 20
2200	NE-A 22

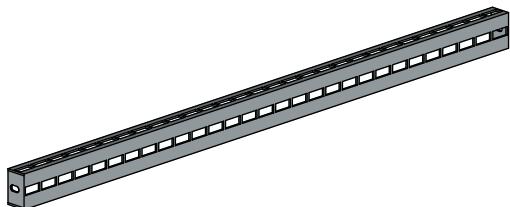
### Side beam



- zinc-coated sheet metal (DX51D)
- material thickness 2,0 mm

For enclosure dimension D [mm]	Ordering code
400	NBE-A 04
600	NBE-A 06
800	NBE-A 08

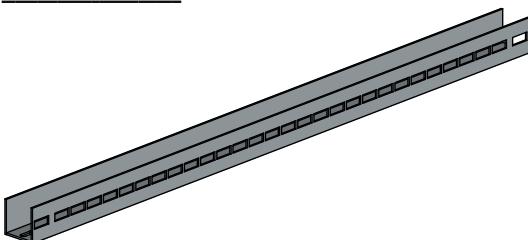
### Inner beam



- zinc-coated sheet metal (DX51D)
- material thickness 2,0 mm

For enclosure dimension W [mm]	Ordering code
600	NSVE-A 06
800	NSVE-A 08
1000	NSVE-A 10
1200	NSVE-A 12

### SONAP holder



- zinc-coated sheet metal (DX51D)
- material thickness 2,0 mm

For enclosure dimension W [mm]	Ordering code
600	DSE-A 06
800	DSE-A 08
1000	DSE-A 10
1200	DSE-A 12

### Cableduct holder



- zinc-coated sheet metal (DX51D)  
- material thickness 2,0 mm

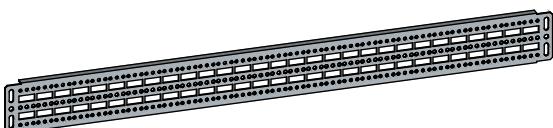
For enclosure dimension W [mm]	Ordering code
600	DZ4E06U
800	DZ4E08U
1000	DZ4E10U
1200	DZ4E12U

### Device beams



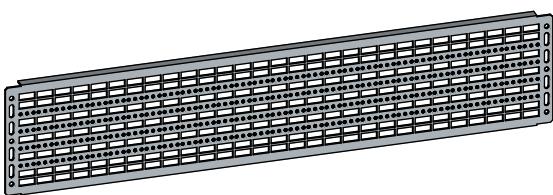
- zinc-coated sheet metal (DX51D)  
- material thickness 2,0 mm

For enclosure dimension W [mm]	Ordering code
600	N04E06U
800	N04E08U
1000	N04E10U
1200	N04E12U



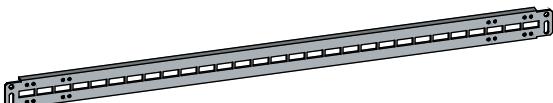
- zinc-coated sheet metal (DX51D)  
- material thickness 2,0 mm

For enclosure dimension W [mm]	Ordering code
600	N08E06U
800	N08E08U
1000	N08E10U
1200	N08E12U



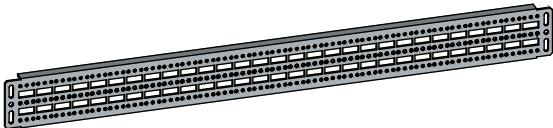
- zinc-coated sheet metal (DX51D)  
- material thickness 2,5 mm

For enclosure dimension W [mm]	Ordering code
600	N17E06U
800	N17E08U
1000	N17E10U
1200	N17E12U



- zinc-coated sheet metal (DX51D)  
- material thickness 3,0 mm

For enclosure dimension W [mm]	Ordering code
600	N04E06U3
800	N04E08U3
1000	N04E10U3
1200	N04E12U3



- zinc-coated sheet metal (DX51D)  
- material thickness 3,0 mm

For enclosure dimension W [mm]	Ordering code
600	N08E06U3
800	N08E08U3
1000	N08E10U3
1200	N08E12U3

Electrical enclosure KAPPA is a compact universal enclosure intended for standalone switchgear cabinets. Enclosures are suitable above all for technological and distribution electrical cabinets.

### Technical design

KAPPA is a compact steel sheet enclosure with removable back cover. Frame of the enclosure is made of steel sheet of thickness 1,3 mm (with stainless design 1,25 mm). Back cover is made of steel sheet of thickness 1,0 mm, doors of steel sheet 2,0 mm and mounting plate of zinc-coated steel sheet of thickness 2,5 mm. Enclosure doors are equipped with a swing handle and four-point lock with Doppelbart 3mm inlet or cylindrical inlet with the unified key (DIRAK 1333). The enclosures are equipped with 4pc of lifting lugs for manipulation.

There is a polyurethane cast sealing that guarantees the high degree of protection IP 65. The enclosure is equipped with welded-on grounding bolts.

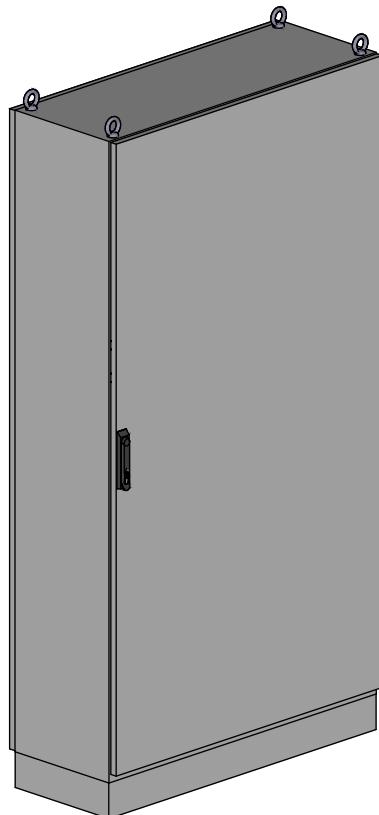
It is possible to buy various components made of zinc-coated steel sheet (see page 18-20).

The preliminary surface treatment is done by ferrous phosphate. The powder coating technology is used as a consequential surface treatment of the enclosure (except of the stainless design). The width of the single-layer coating is min. 50µm. The resistance of the surface treatment is verified by corrosion test in NSM (neutral saline mist) - 500 hours according to the standard ČSN EN ISO 9227.

### Adjustment of ordering code:

**K**  
**A**  
**P**  
**P**  
**A**  
  
**H**  
  
**/**  
  
**D**  
  
**/**  
  
**W**  
  
**1**  
  
**2**  
  
**3**  
  
**4**  
  
**5**  
  
**6**  
  
**7**

<b>H</b>	Height for KAPPA	Value in dm
<b>D</b>	Depth for KAPPA	Value in dm
<b>W</b>	Width for KAPPA	Value in dm
<b>1</b>	Type of locking	
	B	- doppelbart 3
	F	- cylindrical inlet with unified key (DIRAK 1333)
<b>2</b>	Surface treatment / Design	
	1	- powder paint RAL 7032 inner, matting, glossy
	2	- powder paint RAL 7035 inner, matting, glossy
	N	- stainless design (1.4301 acc. EN 10027-2), grind P240
<b>3</b>	Front door	
	L	- left-handed door (hinges on the left)
	P	- right-handed door (hinges on the right)
	D	- double wing door
<b>4</b>	Back cover / Rear door	
	K	- removable back cover
	L	- left-handed door (hinges on the left)
	P	- right-handed door (hinges on the right)
	D	- double wing doors
<b>5</b>	Door type	
	O	- full metal door
	S	- 1pc glass door
	V	- more glass doors
<b>6</b>	Protection of enclosure (acc. ČSN EN 60 529)	
	5	- IP 55 (double-wing design)
	7	- IP 66 (single-wing design)
<b>7</b>	Catalogue marking	
	1	- production type marking



### Standard design included:

- enclosure skeleton
- door with four-point lock
- back cover
- bottom cover (full, unperforated)
- lifting lugs

## Type dimensions of the enclosure KAPPA

Type dimensions of enclosure [mm]		
Height	Depth	Width
1600	400	600
1600	400	800
1600	400	1000
1600	400	1200
1600	600	600
1600	600	800
1600	600	1000
1600	600	1200
1600	800	600
1600	800	800
1600	800	1000
1600	800	1200
1800	400	600
1800	400	800
1800	400	1000
1800	400	1200
1800	600	600
1800	600	800
1800	600	1000
1800	600	1200
1800	800	600
1800	800	800
1800	800	1000
1800	800	1200
2000	400	600
2000	400	800
2000	400	1000
2000	400	1200
2000	600	600
2000	600	800
2000	600	1000
2000	600	1200
2000	800	600
2000	800	800
2000	800	1000
2000	800	1200
2200	400	600
2200	400	800
2200	400	1000
2200	400	1200
2200	600	600
2200	600	800
2200	600	1000
2200	600	1200
2200	800	600
2200	800	800
2200	800	1000
2200	800	1200

Ordering code (single-wing powder coated design)
KAPPA-16/04/06 B2LK071
KAPPA-16/04/08 B2LK071
KAPPA-16/04/10 B2LK071
-
KAPPA-16/06/06 B2LK071
KAPPA-16/06/08 B2LK071
KAPPA-16/06/10 B2LK071
-
KAPPA-16/08/06 B2LK071
KAPPA-16/08/08 B2LK071
KAPPA-16/08/10 B2LK071
-
KAPPA-18/04/06 B2LK071
KAPPA-18/04/08 B2LK071
KAPPA-18/04/10 B2LK071
-
KAPPA-18/06/06 B2LK071
KAPPA-18/06/08 B2LK071
KAPPA-18/06/10 B2LK071
-
KAPPA-18/08/06 B2LK071
KAPPA-18/08/08 B2LK071
KAPPA-18/08/10 B2LK071
-
KAPPA-20/04/06 B2LK071
KAPPA-20/04/08 B2LK071
KAPPA-20/04/10 B2LK071
-
KAPPA-20/06/06 B2LK071
KAPPA-20/06/08 B2LK071
KAPPA-20/06/10 B2LK071
-
KAPPA-20/08/06 B2LK071
KAPPA-20/08/08 B2LK071
KAPPA-20/08/10 B2LK071
-
KAPPA-22/04/06 B2LK071
KAPPA-22/04/08 B2LK071
KAPPA-22/04/10 B2LK071
-
KAPPA-22/06/06 B2LK071
KAPPA-22/06/08 B2LK071
KAPPA-22/06/10 B2LK071
-
KAPPA-22/08/06 B2LK071
KAPPA-22/08/08 B2LK071
KAPPA-22/08/10 B2LK071
-

Ordering code (double-wing powder coated design)
-
KAPPA-16/04/08 B2DK051
KAPPA-16/04/10 B2DK051
KAPPA-16/04/12 B2DK051
-
KAPPA-16/06/08 B2DK051
KAPPA-16/06/10 B2DK051
KAPPA-16/06/12 B2DK051
-
KAPPA-16/08/08 B2DK051
KAPPA-16/08/10 B2DK051
KAPPA-16/08/12 B2DK051
-
KAPPA-18/04/08 B2DK051
KAPPA-18/04/10 B2DK051
KAPPA-18/04/12 B2DK051
-
KAPPA-18/06/08 B2DK051
KAPPA-18/06/10 B2DK051
KAPPA-18/06/12 B2DK051
-
KAPPA-18/08/08 B2DK051
KAPPA-18/08/10 B2DK051
KAPPA-18/08/12 B2DK051
-
KAPPA-20/04/08 B2DK051
KAPPA-20/04/10 B2DK051
KAPPA-20/04/12 B2DK051
-
KAPPA-20/06/08 B2DK051
KAPPA-20/06/10 B2DK051
KAPPA-20/06/12 B2DK051
-
KAPPA-20/08/08 B2DK051
KAPPA-20/08/10 B2DK051
KAPPA-20/08/12 B2DK051
-
KAPPA-22/04/08 B2DK051
KAPPA-22/04/10 B2DK051
KAPPA-22/04/12 B2DK051
-
KAPPA-22/06/08 B2DK051
KAPPA-22/06/10 B2DK051
KAPPA-22/06/12 B2DK051
-
KAPPA-22/08/08 B2DK051
KAPPA-22/08/10 B2DK051
KAPPA-22/08/12 B2DK051
-

Ordering code (single-wing stainless design)
KAPPA-16/04/06 BNLK071
KAPPA-16/04/08 BNLK071
KAPPA-16/04/10 BNLK071
-
KAPPA-16/06/06 BNLK071
KAPPA-16/06/08 BNLK071
KAPPA-16/06/10 BNLK071
-
KAPPA-16/08/06 BNLK071
KAPPA-16/08/08 BNLK071
KAPPA-16/08/10 BNLK071
-
KAPPA-18/04/06 BNLK071
KAPPA-18/04/08 BNLK071
KAPPA-18/04/10 BNLK071
-
KAPPA-18/06/06 BNLK071
KAPPA-18/06/08 BNLK071
KAPPA-18/06/10 BNLK071
-
KAPPA-18/08/06 BNLK071
KAPPA-18/08/08 BNLK071
KAPPA-18/08/10 BNLK071
-
KAPPA-20/04/06 BNLK071
KAPPA-20/04/08 BNLK071
KAPPA-20/04/10 BNLK071
-
KAPPA-20/06/06 BNLK071
KAPPA-20/06/08 BNLK071
KAPPA-20/06/10 BNLK071
-
KAPPA-20/08/06 BNLK071
KAPPA-20/08/08 BNLK071
KAPPA-20/08/10 BNLK071
-
KAPPA-22/04/06 BNLK071
KAPPA-22/04/08 BNLK071
KAPPA-22/04/10 BNLK071
-
KAPPA-22/06/06 BNLK071
KAPPA-22/06/08 BNLK071
KAPPA-22/06/10 BNLK071
-
KAPPA-22/08/06 BNLK071
KAPPA-22/08/08 BNLK071
KAPPA-22/08/10 BNLK071
-

Above mentioned ordering codes are intended for standard versions of enclosures:

- swing handle with doppelbart 3 inlet
- stainless design or powder paint RAL 7035 inner, matting structure, glossy
- left-handed door (hinges on the left)
- IP protection 66 (single-wing design), IP protection 55 (double-wing design)
- including bottom cover

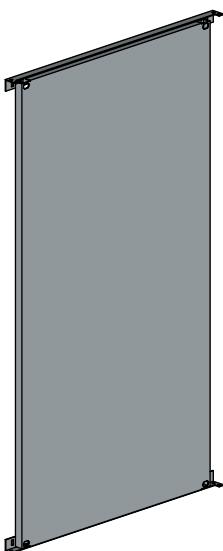
Other possible versions are listed directly in separated price list.

For justification of the ordering code (for other versions - e. g. color, lock type, left-/right-handed door) use the code key on page 16.

## Additional mechanical parts:

- mechanical parts of the mounting system
- documentation pocket
- mounting plate
- stand

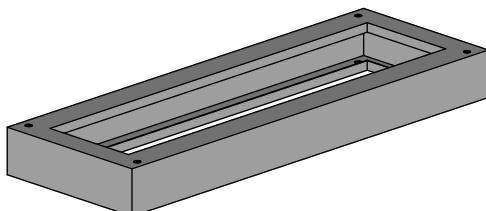
### Mounting plate



- zinc-coated sheet metal (DX51D)
- material thickness 2,5 mm
- mounting plate holders - 2 pc

For enclosure dimension [mm]		Ordering code
Height	Width	
1600	600	<b>MPK 16/06</b>
1600	800	<b>MPK 16/08</b>
1600	1000	<b>MPK 16/10</b>
1600	1200	<b>MPK 16/12</b>
1800	600	<b>MPK 18/06</b>
1800	800	<b>MPK 18/08</b>
1800	1000	<b>MPK 18/10</b>
1800	1200	<b>MPK 18/12</b>
2000	600	<b>MPK 20/06</b>
2000	800	<b>MPK 20/08</b>
2000	1000	<b>MPK 20/10</b>
2000	1200	<b>MPK 20/12</b>
2200	600	<b>MPK 22/06</b>
2200	800	<b>MPK 22/08</b>
2200	1000	<b>MPK 22/10</b>
2200	1200	<b>MPK 22/12</b>

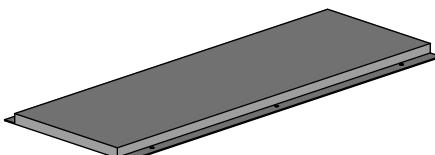
### Stand



- stand height: 100 mm
- powder paint RAL 7035 \*
- material thickness 2,0 mm

For enclosure dimension [mm]		Ordering code
Depth	Width	
400	600	<b>PDSK10 04/06 0200001</b>
400	800	<b>PDSK10 04/08 0200001</b>
400	1000	<b>PDSK10 04/10 0200001</b>
400	1200	<b>PDSK10 04/12 0200001</b>
600	600	<b>PDSK10 06/06 0200001</b>
600	800	<b>PDSK10 06/08 0200001</b>
600	1000	<b>PDSK10 06/10 0200001</b>
600	1200	<b>PDSK10 06/12 0200001</b>
800	600	<b>PDSK10 08/06 0200001</b>
800	800	<b>PDSK10 08/08 0200001</b>
800	1000	<b>PDSK10 08/10 0200001</b>
800	1200	<b>PDSK10 08/12 0200001</b>

### Bottom cover

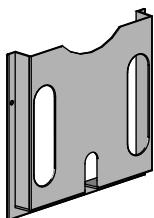


- powder paint RAL 7035 \*
- connection accessories + sealing enclosed

For enclosure dimension [mm]		Ordering code
Depth	Width	
400	600	<b>KDK 04/06 0200001</b>
400	800	<b>KDK 04/08 0200001</b>
400	1000	<b>KDK 04/10 0200001</b>
400	1200	<b>KDK 04/12 0200001</b>
600	600	<b>KDK 06/06 0200001</b>
600	800	<b>KDK 06/08 0200001</b>
600	1000	<b>KDK 06/10 0200001</b>
600	1200	<b>KDK 06/12 0200001</b>
800	600	<b>KDK 08/06 0200001</b>
800	800	<b>KDK 08/08 0200001</b>
800	1000	<b>KDK 08/10 0200001</b>
800	1200	<b>KDK 08/12 0200001</b>

\* In case of color change requirement (design) change the number **2 (RAL 7035)** for number **1 (RAL 7032)** or letter **N (stainless design)**.

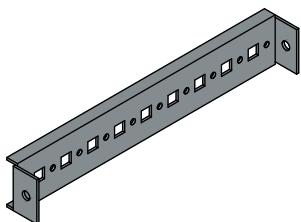
### Documentation pocket



- size A4
- plastic, self-adhesive

Design	Ordering code
Documentation pocket A4	<b>6A 255</b>

### Side beam



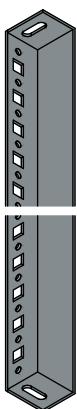
- zinc-coated sheet metal (DX51D)
- material thickness 2,0 mm

For enclosure dimension D [mm]	Ordering code
400	<b>NBK 04</b>
600	<b>NBK 06</b>
800	<b>NBK 08</b>

- for usage it is necessary to order:

- application without mounting plate:  
2 pc vertical beam (NK)
- application together with mounting plate  
1 pc vertical beam (NK) and  
1 pc vertical rear beam (NZK)

### Vertical beam

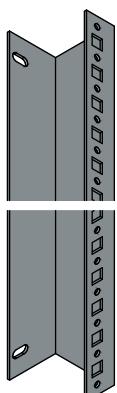


- zinc-coated sheet metal (DX51D)
- material thickness 2,0 mm

For enclosure dimension H [mm]	Ordering code
1600	<b>NK 16</b>
1800	<b>NK 18</b>
2000	<b>NK 20</b>
2200	<b>NK 22</b>

- for usage of device plates

### Vertical rear beam



- zinc-coated sheet metal (DX51D)
- material thickness 2,0 mm

For enclosure dimension H [mm]	Ordering code
1600	<b>NZK 16</b>
1800	<b>NZK 18</b>
2000	<b>NZK 20</b>
2200	<b>NZK 22</b>

- to be used with mounting plate together with side beam

### Cableduct holder



- zinc-coated sheet metal (DX51D)  
- material thickness 2,0 mm

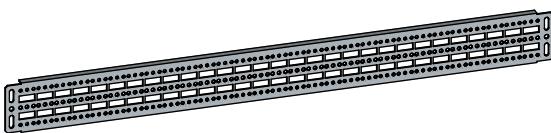
For enclosure dimension W [mm]	Ordering code
600	DZ4E06U
800	DZ4E08U
1000	DZ4E10U
1200	DZ4E12U

### Device beams



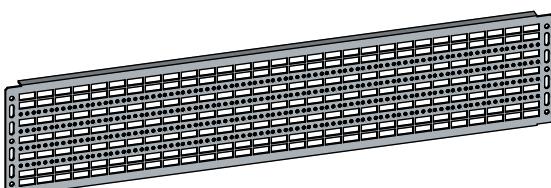
- zinc-coated sheet metal (DX51D)  
- material thickness 2,0 mm

For enclosure dimension W [mm]	Ordering code
600	N04E06U
800	N04E08U
1000	N04E10U
1200	N04E12U



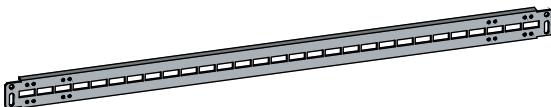
- zinc-coated sheet metal (DX51D)  
- material thickness 2,0 mm

For enclosure dimension W [mm]	Ordering code
600	N08E06U
800	N08E08U
1000	N08E10U
1200	N08E12U



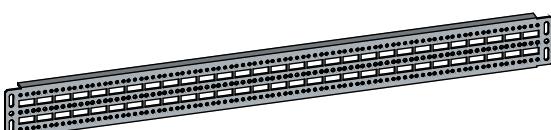
- zinc-coated sheet metal (DX51D)  
- material thickness 2,5 mm

For enclosure dimension W [mm]	Ordering code
600	N17E06U
800	N17E08U
1000	N17E10U
1200	N17E12U



- zinc-coated sheet metal (DX51D)  
- material thickness 3,0 mm

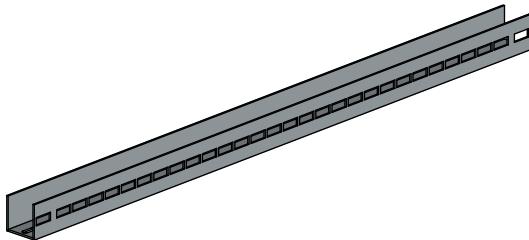
For enclosure dimension W [mm]	Ordering code
600	N04E06U3
800	N04E08U3
1000	N04E10U3
1200	N04E12U3



- zinc-coated sheet metal (DX51D)  
- material thickness 3,0 mm

For enclosure dimension W [mm]	Ordering code
600	N08E06U3
800	N08E08U3
1000	N08E10U3
1200	N08E12U3

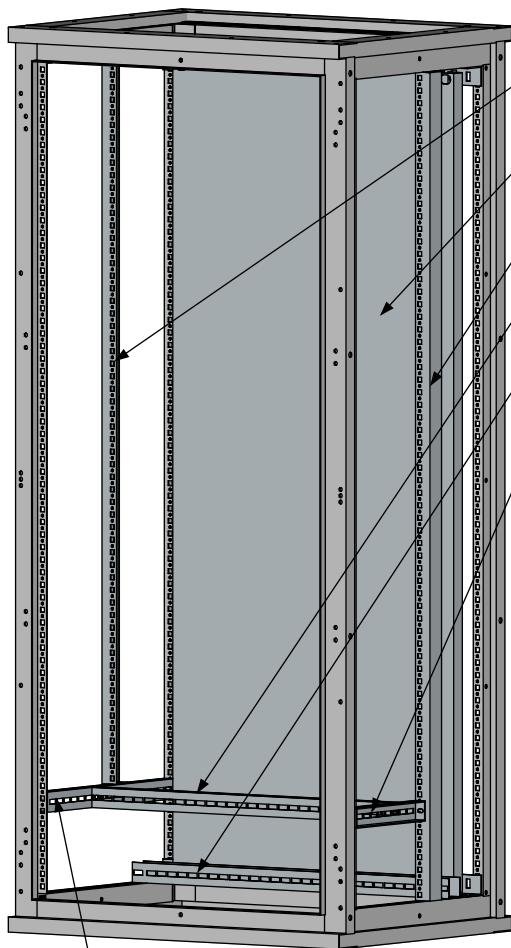
## SONAP holder



- zinc-coated sheet metal (DX51D)  
- material thickness 2,0 mm

For enclosure dimension W [mm]	Ordering code
600	DSE-A 06
800	DSE-A 08
1000	DSE-A 10
1200	DSE-A 12

## ESO-A



**NBE-A** - Side beam ESO-A

**NE-A** - Vertical beam ESO-A

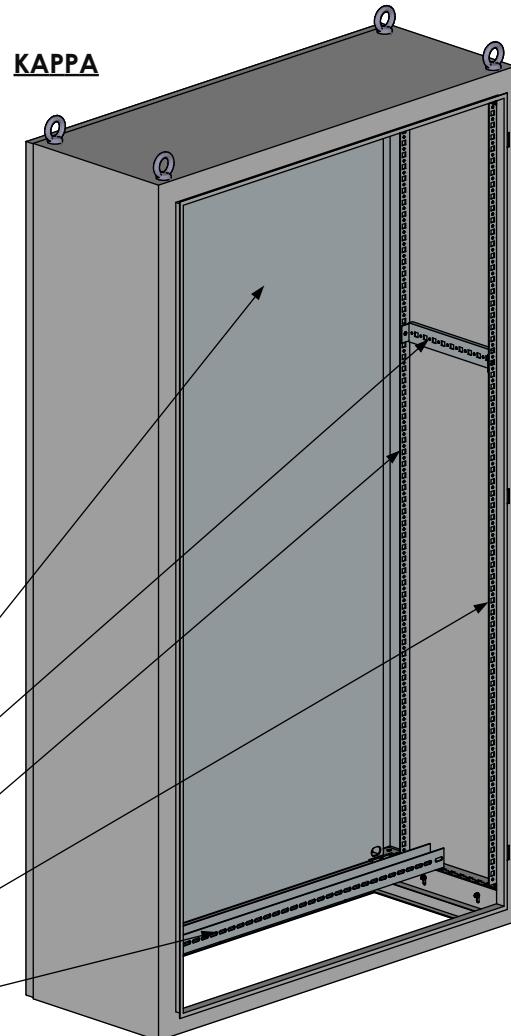
**MPE-A** - Mounting plate ESO-A

**NE-A** - Vertical beam ESO-A

**NSVE-A** - Inner beam ESO-A

**DSE-A** - SONAP holder ESO-A

**NBE-A** - Side beam ESO-A



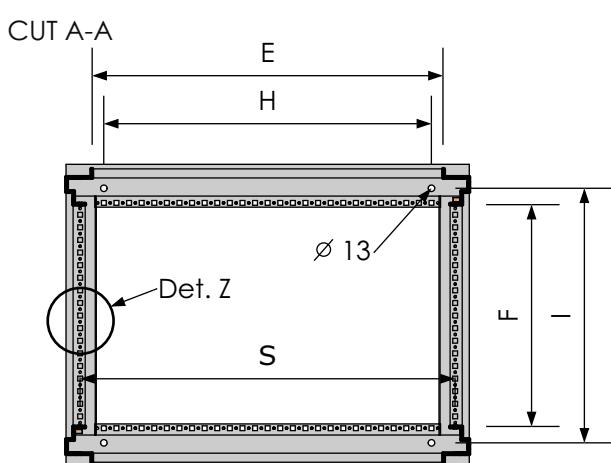
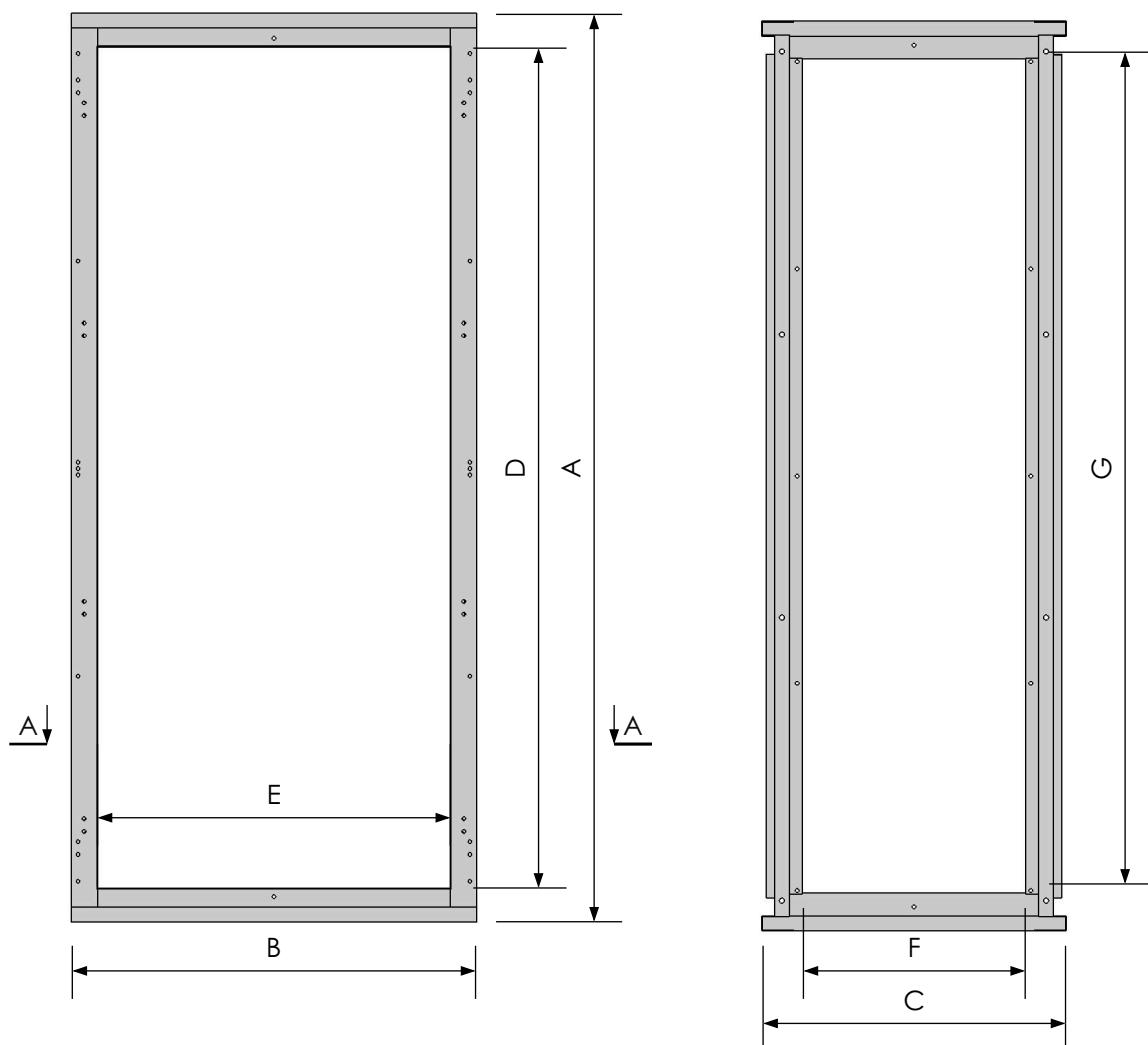
Mounting plate KAPPA - **MPK**

Side beam KAPPA - **NBK**

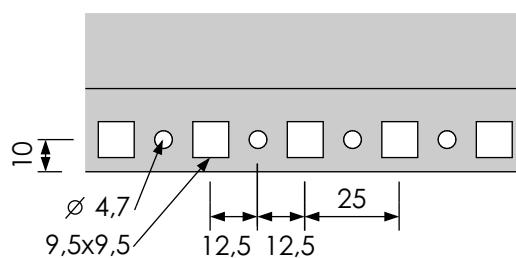
Vertical rear beam KAPPA - **NZK**

Vertical beam KAPPA - **NK**

SONAP holder KAPPA - **DSE**

Basic enclosure dimensionsMounting openings in frame

- for mounting of additional mechanics
- avg. 4,7 mm is prepared for self-drilling screw ST 5,5 mm
- openings 9,5x9,5 mm are prepared for cage nuts M4 - M6

DETAIL Z

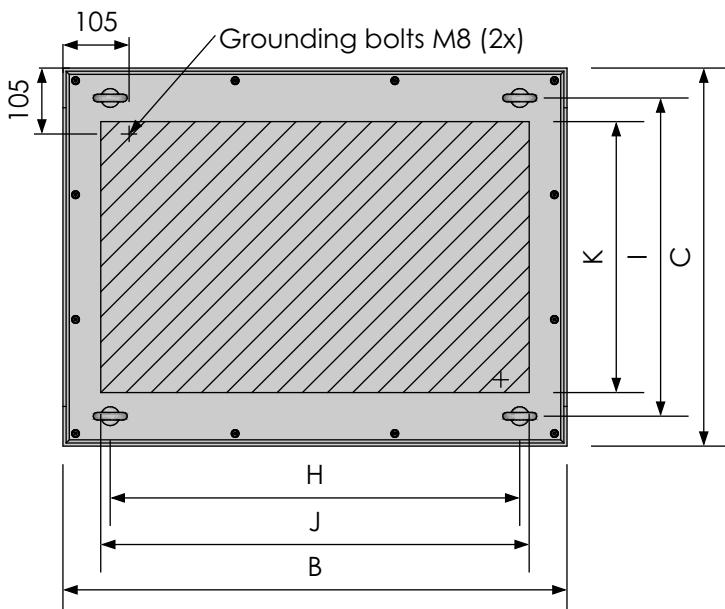
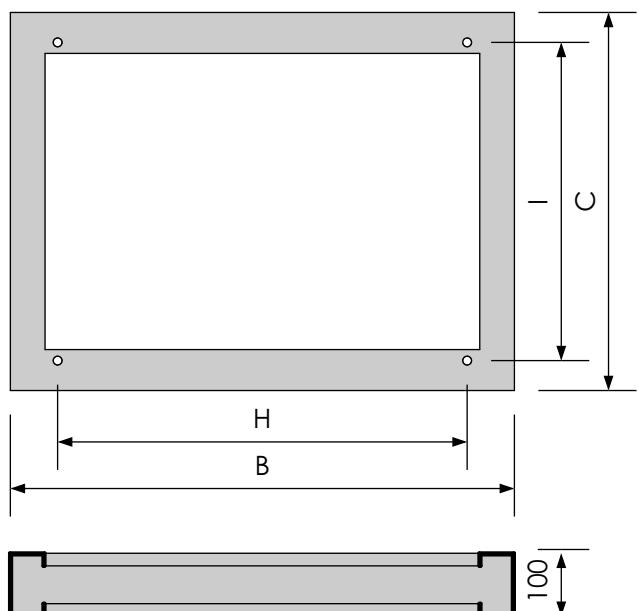
Height dimensions [mm]				
A	1600	1800	2000	2200
D	1466	1666	1866	2066
G	1450	1650	1850	2050

Width dimensions [mm]				
B	600	800	1000	1200
E	496	696	896	1096
H	450	650	850	1050
S	543	743	943	1143

Depth dimensions [mm]			
C	400	600	800
F	240	440	640
I	305	505	705

- AxBxC** - basic enclosure dimension (HxDxW)  
**DxE** - basic enclosure inlet opening  
**GxF** - basic side enclosure opening  
**HxI** - anchorage enclosure dimensions

Grounding bolts M8.

Upper cover (top view)Stand

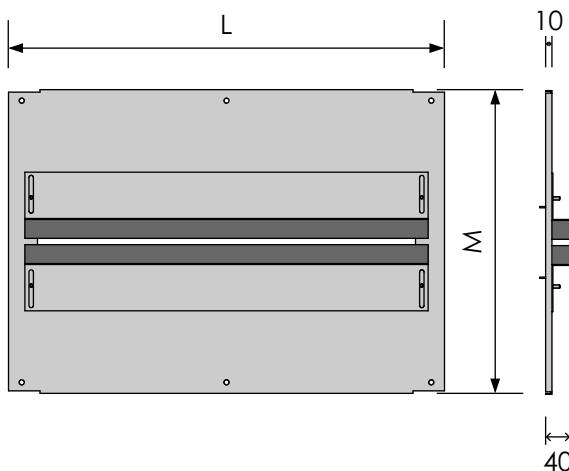
Width dimensions [mm]			
B	600	800	1000
J	480	680	880
H	450	650	850
C	400	600	800
K	230	430	630
I	305	505	705

Depth dimensions [mm]			
C	400	600	800
K	230	430	630
I	305	505	705

**BxC** - basic enclosure dimension (WxD)  
**JxK** - maximum dimension for bushing assembly  
**HxI** - anchorage enclosure dimensions (mounting lifting lugs)

Dimensions of upper cover are about 10 mm shorter than basic enclosure dimensions.

Material thickness 1,5 mm.  
 Grounding bolts M8.

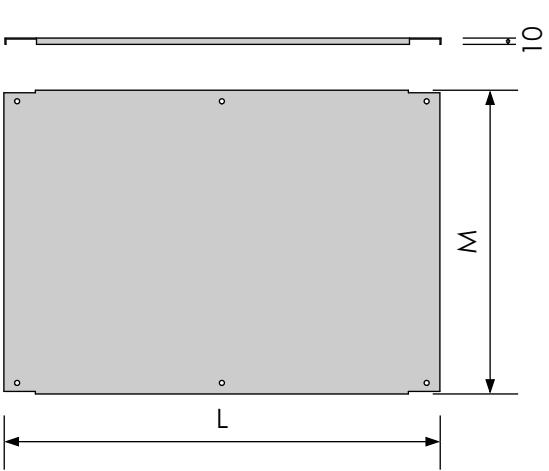
Bottom cover with adjustable rails

Width dimensions [mm]			
B	600	800	1000
L	492	692	892
C	400	600	800
M	282	482	682

Depth dimensions [mm]			
C	400	600	800
M	282	482	682

**BxC** - basic enclosure dimension (WxD)  
**LxM** - bottom cover dimension

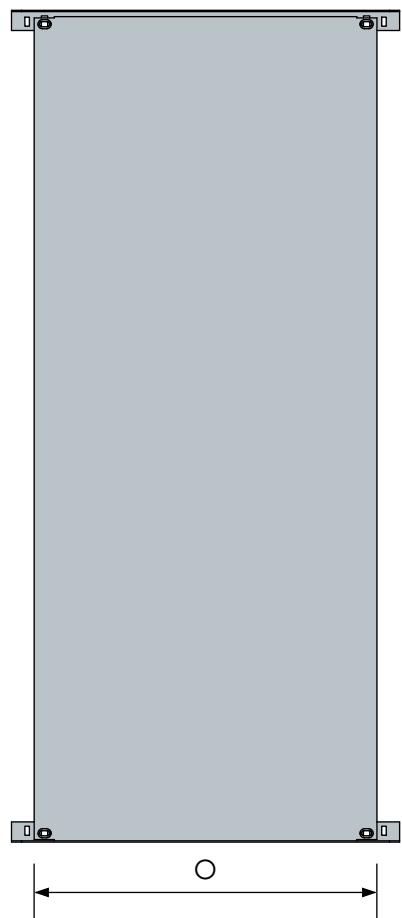
Opening depth under adjustable rails is 100 mm.  
 Material thickness 1,5 mm.  
 Grounding bolt M8.

Bottom cover

Width dimensions [mm]			
B	600	800	1000
L	492	692	892
C	400	600	800
M	282	482	682

**BxC** - basic enclosure dimension (WxD)  
**LxM** - bottom cover dimension

Material thickness 1,5 mm.  
 Grounding bolt M8.

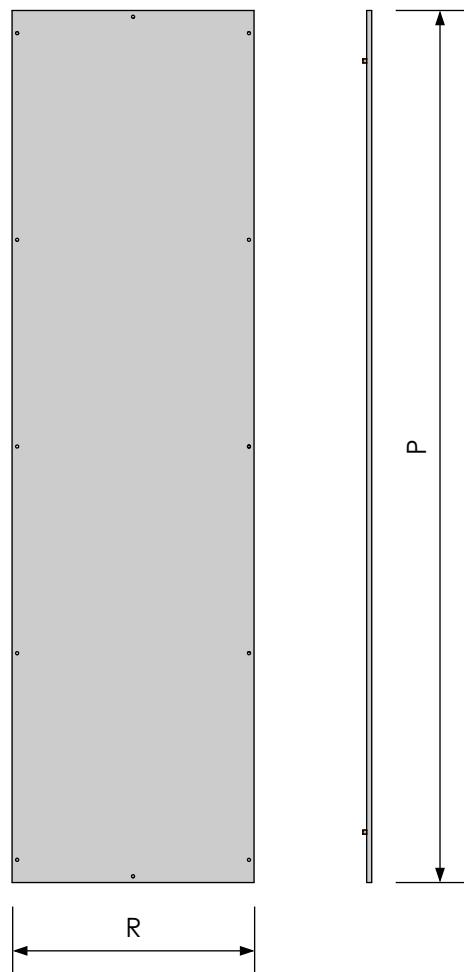
Mounting plate

Height dimensions [mm]				
A	1600	1800	2000	2200
G	1450	1650	1850	2050
N	1435	1635	1835	2035

Width dimensions [mm]				
B	600	800	1000	1200
O	480	680	880	1080

**AxB** - basic enclosure dimension (HxW)  
**GxY** - mounting openings distance  
**NxO** - mounting plate dimension

Assembly of the mounting plate requires 2pc of mounting plate holders - included in delivery.  
 Material thickness 2,5 mm.  
 Grounding bolt M8.

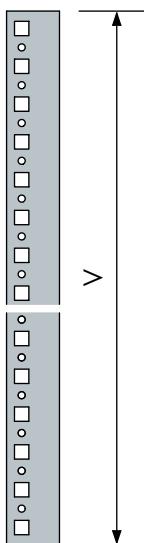
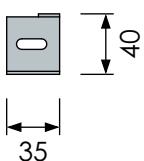
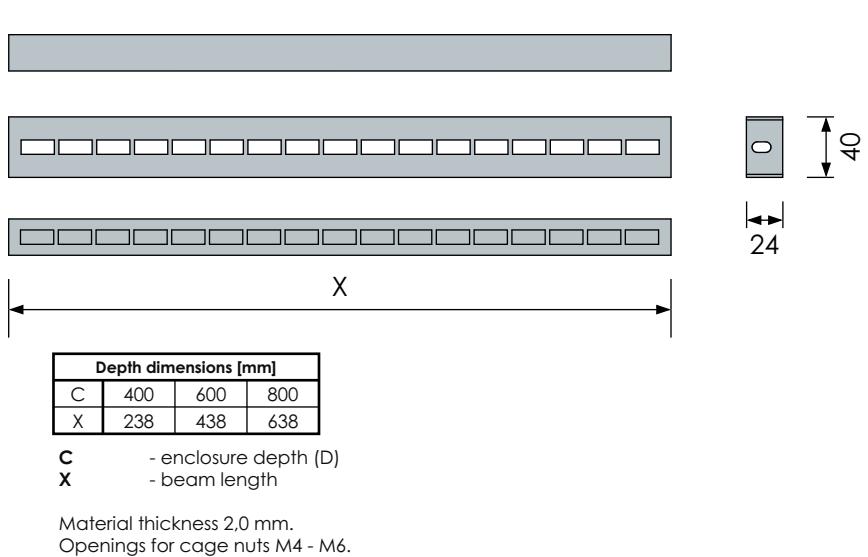
Side cover

Height dimensions [mm]				
A	1600	1800	2000	2200
P	1530	1730	1930	2130

Width dimensions [mm]				
C	400	600	800	
R	280	480	680	

**AxC** - basic enclosure dimension (HxD)  
**PxR** - side cover dimension

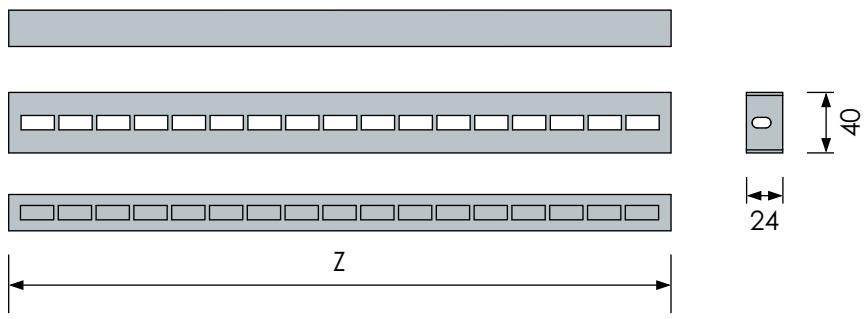
Material thickness 1,5 mm.  
 Grounding bolts M8.

Vertical beamSide beam

Height dimensions [mm]			
A	1600	1800	2000
V	1448	1648	1848
	2200	2048	

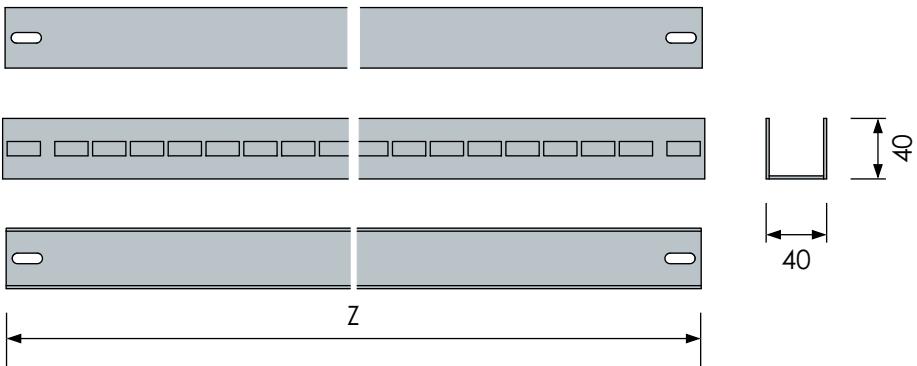
**A** - enclosure height (H)  
**V** - beam height

Material thickness 2.0 mm.  
 Openings for cage nuts M4 - M6.  
 Openings for self-drilling screws ST 5.5 mm.

Inner beam

**B** - enclosure width (W)  
**Z** - beam length

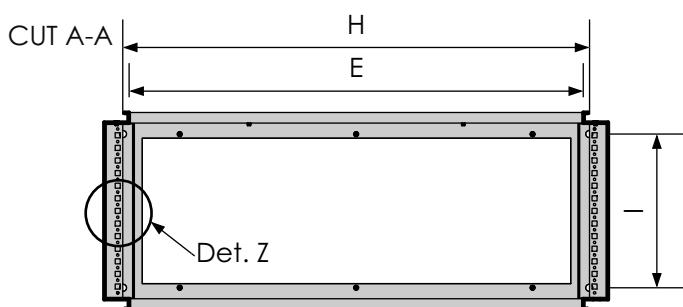
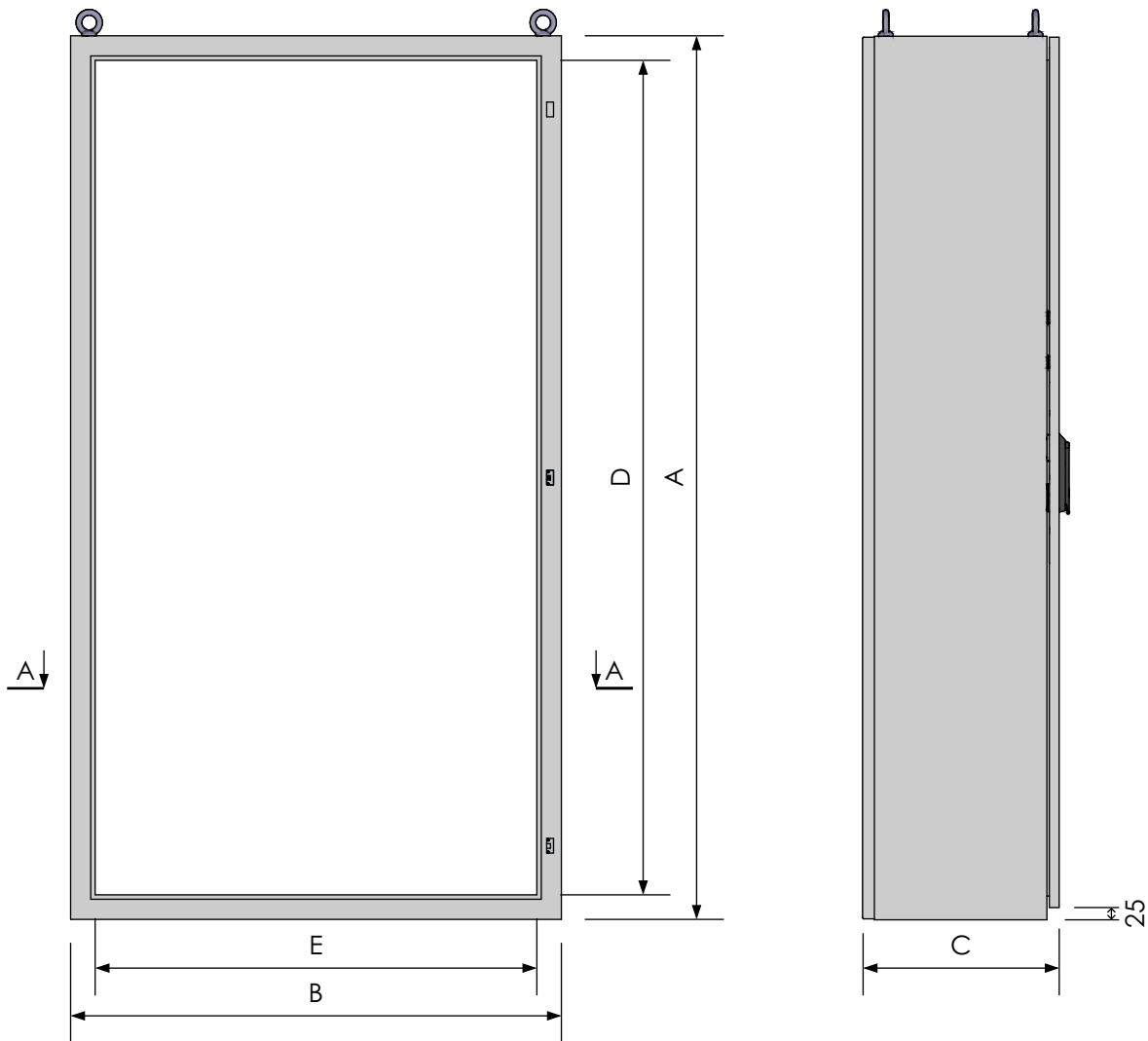
Material thickness 2.0 mm.  
 Openings for cage nuts M4 - M6.  
 Beam is inserted between vertical beams. (It has to be ordered separately.)

SONAP holder

**B** - enclosure width (W)  
**Z** - beam length

Material thickness 2.0 mm.  
 Openings for cage nuts M4 - M6.

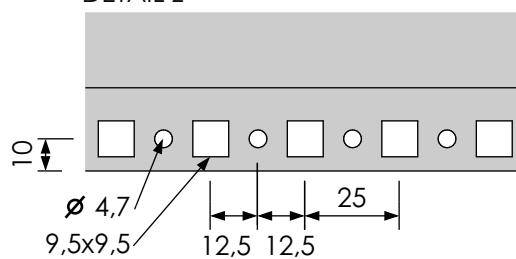
### Basic enclosure dimensions



### Mounting opening in frame

- for mounting of additional mechanics
- avg. 4,7 mm is prepared for self-drilling screws ST 5,5 mm
- opening 9,5x9,5 mm are prepared for cage nuts M4 - M6

DETAIL Z



Height dimensions [mm]				
A	1600	1800	2000	2200
D	1496	1696	1896	2096

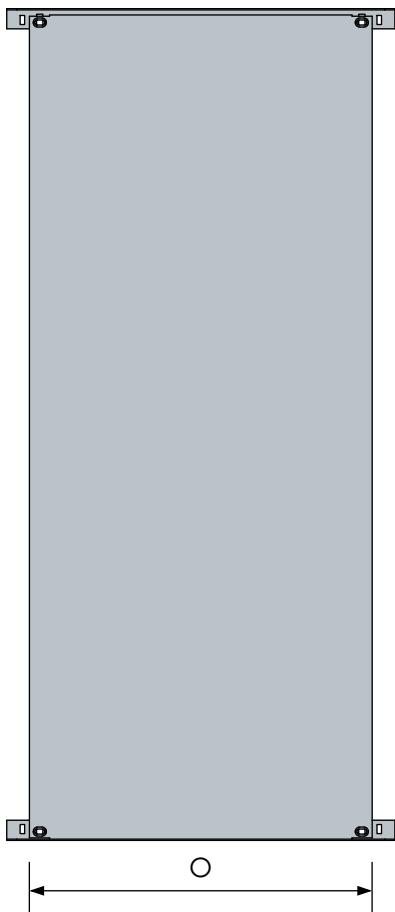
Width dimensions [mm]				
B	600	800	1000	1200
E	496	696	896	1096
H	525	725	925	1125

Depth dimensions [mm]				
C	400	600	800	
I	305	505	705	

**AxBxC** - basic enclosure dimensions  
**DxE** - basic enclosure inlet opening  
**HxI** - anchorage enclosure dimensions

Grounding bolts M6.

### Mounting plate



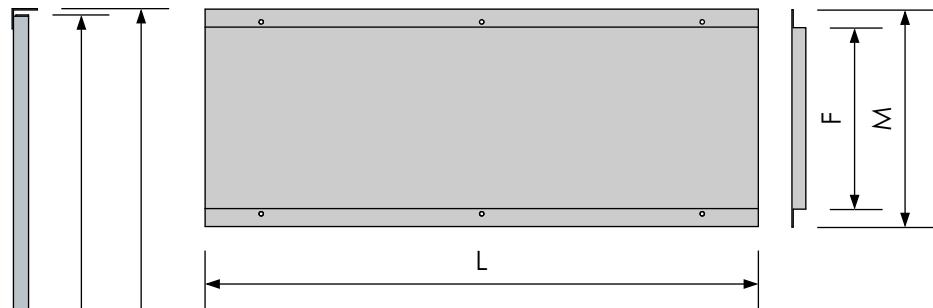
Height dimensions [mm]				
A	1600	1800	2000	2200
G	1450	1650	1850	2050
N	1435	1635	1835	2035

Width dimensions [mm]				
B	600	800	1000	1200
O	480	680	880	1080

**AxB** - basic enclosure dimension (HxW)  
**GxY** - mounting openings distance  
**NxO** - mounting plate dimensions

Material thickness 2,5 mm.  
Grounding bolts M6.

### Bottom cover



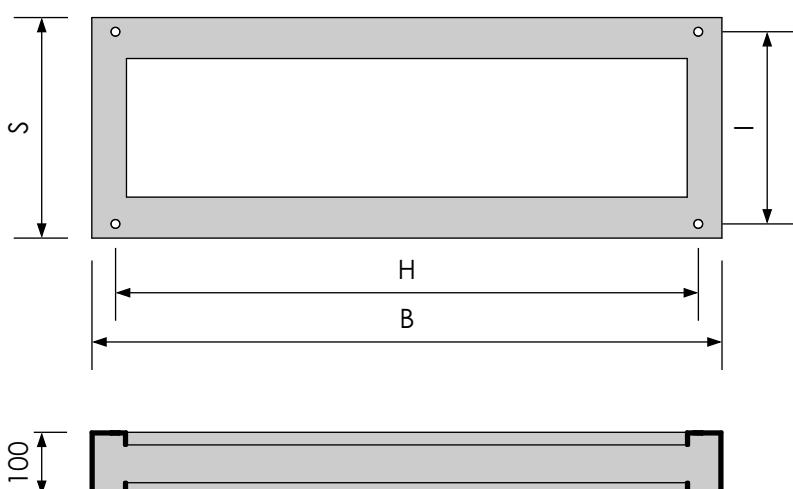
Width dimensions [mm]				
B	600	800	1000	1200
L	478	678	878	1078

Depth dimensions [mm]			
C	400	600	800
F	1450	1650	1850
M	1435	1635	1835

**BxC** - basic enclosure dimensions (WxD)  
**LxM** - bottom cover dimensions  
**F** - utilizable bottom cover depth

Material thickness 2,0 mm.  
Grounding bolt M6.

### Stand



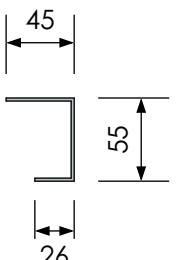
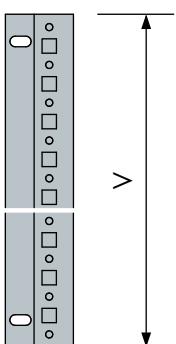
Width dimensions [mm]				
B	600	800	1000	1200
H	525	725	925	1125

Depth dimensions [mm]			
C	400	600	800
I	305	505	705
S	350	550	750

**BxC** - basic enclosure dimension (WxD)  
**HxI** - anchorage enclosure dimensions  
**BxS** - stand dimensions

Stand height 100 mm.  
Material thickness 2,0 mm.

### Vertical rear beam

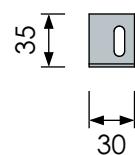
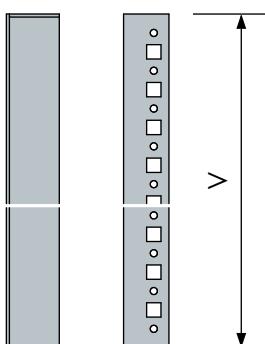


Height dimensions [mm]				
A	1600	1800	2000	2200
V	1443	1643	1843	2043

**A** - enclosure height (H)  
**V** - beam height

Material thickness 2,0 mm.  
 Openings for cage nuts M4 - M6.  
 Openings for self-drilling screws ST 5,5 mm.

### Vertical beam

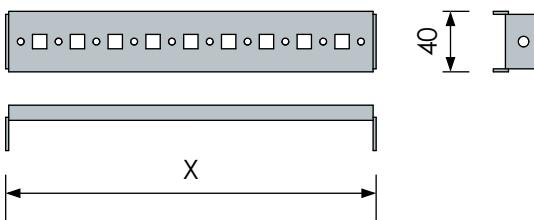


Height dimensions [mm]				
A	1600	1800	2000	2200
V	1450	1650	1850	2050

**A** - enclosure height (H)  
**V** - beam height

Material thickness 2,0 mm.  
 Openings for cage nuts M4 - M6.  
 Openings for self-drilling screws ST 5,5 mm.

### Side beam

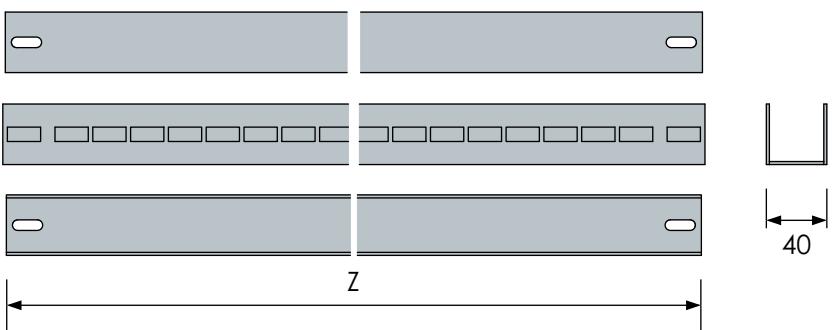


Depth dimensions [mm]			
C	400	600	800
X	245	445	645

**C** - enclosure depth (D)  
**X** - beam length

Material thickness 2,0 mm.  
 Openings for cage nuts M4 - M6.

### SONAP holder

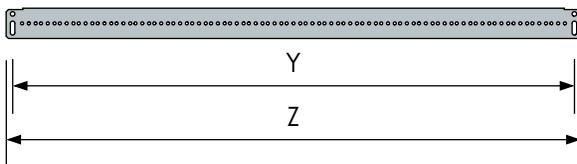


Width dimensions [mm]			
B	600	800	1000
Z	566	766	966

**B** - enclosure width (W)  
**Z** - beam length

Material thickness 2,0 mm.  
 Openings for cage nuts M4 - M6.

### Cableduct holder



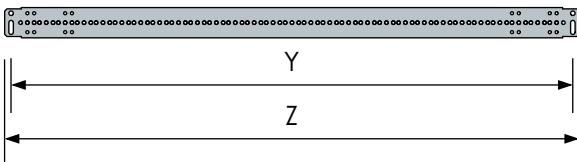
1 ↕ 40

Width dimensions [mm]				
B	600	800	1000	1200
Y	543	743	943	1143
Z	560	760	960	1160

**B** - enclosure width (W)  
**Y** - beam length for mounting  
**Z** - beam length

Material thickness 2,0 mm.  
 Openings for mounting of plastic rivets for cableduct.

### Device beams

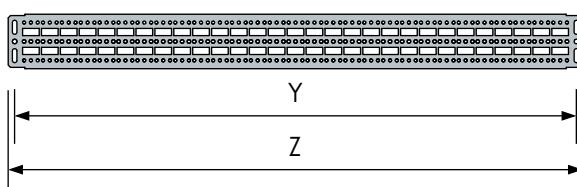


1 ↕ 40

Width dimensions [mm]				
B	600	800	1000	1200
Y	543	743	943	1143
Z	560	760	960	1160

**B** - enclosure width (W)  
**Y** - beam length for assembling  
**Z** - beam length

Material thickness 2,0 mm.  
 Openings for mounting of plastic rivets for cableduct.  
 Openings for self-drilling screws ST 5,5 mm.

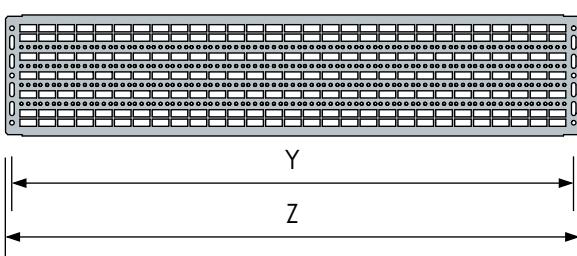


1 ↕ 72

Width dimensions [mm]				
B	600	800	1000	1200
Y	543	743	943	1143
Z	560	760	960	1160

**B** - enclosure width (W)  
**Y** - beam length for assembling  
**Z** - beam length

Material thickness 2,0 mm.  
 Openings for mounting of plastic rivets for cableduct.  
 Openings for self-drilling screws ST 5,5 mm.  
 Openings for cage nuts M4 - M6.

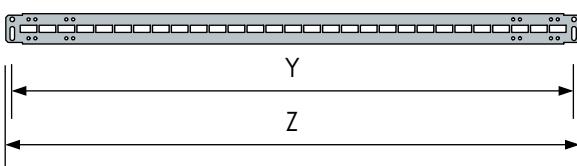


1 ↕ 170

Width dimensions [mm]				
B	600	800	1000	1200
Y	543	743	943	1143
Z	560	760	960	1160

**B** - enclosure width (W)  
**Y** - beam length for assembling  
**Z** - beam length

Material thickness 2,5 mm.  
 Openings for mounting of plastic rivets for cableduct.  
 Openings for self-drilling screws ST 5,5 mm.  
 Openings for cage nuts M4 - M6.

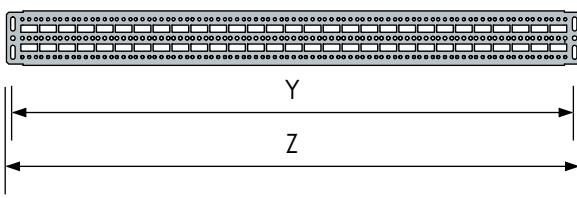


1 ↕ 40

Width dimensions [mm]				
B	600	800	1000	1200
Y	543	743	943	1143
Z	560	760	960	1160

**B** - enclosure width (W)  
**Y** - beam length for assembling  
**Z** - beam length

Material thickness 3,0 mm.  
 Openings for mounting of plastic rivets for cableduct.  
 Openings for cage nuts M4 - M6.



1 ↕ 72

Width dimensions [mm]				
B	600	800	1000	1200
Y	543	743	943	1143
Z	560	760	960	1160

**B** - enclosure width (W)  
**Y** - beam length for assembling  
**Z** - beam length

Material thickness 3,0 mm.  
 Openings for mounting of plastic rivets for cableduct.  
 Openings for self-drilling screws ST 5,5 mm.  
 Openings for cage nuts M4 - M6.

# Company activities

- Construction and production of series electrical enclosures and their accessories
- Custom-made production of atypical electrical enclosures
- Construction and production of LV electrical switchgear cabinets
- Powder coating
- Production of locksmith's units, punching and bending on CNC machines
- OEM production



## Contact:

SENCO Příbram spol. s r.o.  
Plynárenská 292  
261 01 Příbram I

IČ: 25096087  
DIČ: CZ25096087

Tel.: +420 318 493 611  
Fax: +420 318 493 628  
Web: <http://www.sencopb.cz>  
E-mail: [info@sencopb.cz](mailto:info@sencopb.cz)  
GPS: 49° 41' 48.50" N  
14° 00' 18.50" E