

Electrical installation solutions for buildings – Technical details

General purpose enclosures

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General purpose enclosures technical details

Power dissipation values

According to EN 62208, IEC 62208 and IEC 60890

For each enclosures range

- The 4 or 5 different matrix tables contain all the enclosure **dimensions**.
- The tables are created according to the **positioning** of the enclosure.
- **Two different values** of temperature rise are given depending on the measuring point in the cabinet: **half way or on top**.

What is acceptable according to EN 62208, IEC 62208 and IEC 60890

- For common electrical applications, a **temperature rise of 50 K** is generally accepted. If the rise is above 50 K, a larger enclosure should be chosen. More volume results in a decrease of the temperature rise.
- The **absolute** temperature in °C in the enclosure is **the sum** of the **ambient** temperature in °C and the **temperature rise** in K. According to the standards, the absolute temperature is **max. 70 °C**

How to use a matrix?

First choose the right matrix according to the position and the size of the enclosure.

Second calculate the effective power loss in Watt (left column). Add 10-20% to the total effective power loss of the components in order to compensate the small wiring and connections.

Third read in the matrix the temperature rise in the cabinet due to the thermal power dissipation.

Example of an individual enclosure PolySafe 452

Enclosure: height = 1000mm, width = 1250mm, depth = 320mm. Placed against the wall.

The calculated effective power loss of the components: 600W
Components are placed in the centre of the cabinet.

In the table 'Rear against wall' (see below) read for **600W** and column '**Half**': **40K** temperature rise.

With an ambient temperature of 20 °C, the absolute temperature around the components will be approximately $20 + 40 = 60$ °C
If the temperature is too high for the components, then choose a larger cabinet to allow air ventilation.

Example of coupled enclosures PolySafe 452

Enclosure on the **left side**: height 1000, width 1250 mm, depth 320 mm. Enclosure **in the middle**: height 1000, width 1250 mm, depth 320 mm. Enclosure on the **right side**: height 1000, width 1250 mm, depth 320 mm. Placed against the wall
Do the same calculation as above for each individual enclosure.

Find the temperature rise for the **left and right side** enclosure in the table '**Front, left and upperside free**', see page 24/10 and find '**Half**': **42K**

Find the temperature rise for the **middle** enclosure in the table '**Frontside and upperside free**', see page 24/11 and find '**Half**': **44K**

Power dissipation values – APO

[illegible]

General purpose enclosures technical details

Power dissipation values – APO

Frontside and upperside free

[illegible]

**Frontside free,
upper side not free**

[illegible]

Power dissipation values – VMS

[illegible]

Power dissipation values – VMS

[illegible]

Power dissipation values – ARIA

[illegible]



General purpose enclosures technical details

Power dissipation values – ARIA

[illegible][illegible]

General purpose enclosures technical details

Power dissipation values – PolySafe

Rear against wall (wall mounting)											Temperature rise [Kelvin]													
Dissipation Watt	PS 220 500×500		PS 230 500×750		PS 320 750×500		PS 330 750×750		PS 340 750×1.000		PS 352 750×1.250		PS 420 1.000×500		PS 430 1.000×750		PS 440/442 1.000×1.000		PS 452 1.000×1.250		PS 530 1.250×750		PS 542/546 1.250×1.000	
	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top
10	4	5	4	4	4	5																		
20	8	9	7	7	6	8	5	6	4	5			5	7										
30	11	13																						
40	13	16	11	13	11	14	9	11	7	9	6	7	9	13	7	9	5	7	5	6	5	8		
50	16	19																						
60	19	22	16	18	16	19	12	16	10	12	8	10	12	18	10	13	7	10	6	8	8	11	6	8
70	21	25																						
80	23	28	20	23	20	24	15	20	12	16	10	12	16	22	12	16								
90	26	31																						
100	28	33	24	27	23	29	18	23	15	19	12	14	19	27	14	19	11	14	9	12	11	16	9	13
120	32	38	28	31	27	33	21	27					22	31	17	23								
140	37	44	31	35	31	38	24	31	19	24	15	19	25	35	19	26	15	19	12	16	15	21	12	16
160	41	48	35	39	34	42	27	34					27	39	21	28								
180	45	53	38	43	38	46	29	38	24	30	19	23	30	43	23	31	18	23	15	19	18	25	15	20
200	49	58	42	47	41	51	32	41					33	47	25	34								
220	53	63	45	51	44	55	34	44	28	35	22	27	35	50	27	37	21	27	18	23	21	30	18	24
240			48	55	47	58	37	47					38	54	29	39								
260			52	58	51	62	39	51	32	40	25	31	40	58	31	42	24	31	20	26	24	34	20	27
280							42	54					43	61	33	45								
300							44	57	36	45	28	35	45	65	35	47	27	35	23	29	27	38	23	30
350							50	64	40	51	32	40	51	73	40	53	30	39	26	33	31	43	25	34
400									45	57	36	44			44	59	34	44	29	37	34	48	28	38
450									49	62	39	48			48	65	37	48	32	40	38	53	31	42
500											43	53			53	71	40	53	34	44	41	58	34	46
550											46	57					44	57	37	47	45	63	37	49
600											49	61					47	61	40	51	48	67	39	53
650											53	65					50	65	42	54	51	72	42	57
700																			45	57			45	60
750																			48	61			47	63
800																			50	64			50	67

Front, left and upperside free											Temperature rise [Kelvin]													
Dissipation Watt	PS 220 500×500		PS 230 500×750		PS 320 750×500		PS 330 750×750		PS 340 750×1.000		PS 352 750×1.250		PS 420 1.000×500		PS 430 1.000×750		PS 440/442 1.000×1.000		PS 452 1.000×1.250		PS 530 1.250×750		PS 542/546 1.250×1.000	
	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top
10	4	5	4	4	4	5																		
20	8	10	7	8	7	8	5	7	4	5			5	8	4	6								
30	11	13	9	11	9	12																		
40	14	17	12	13	12	15	9	12	7	9	6	7	10	13	7	10	6	7	5	6	6	8	5	6
50	17	20	14	16	14	17																		
60	19	23	16	19	16	20	13	16	10	13	8	10	13	19	10	14	8	10	7	8	8	11	7	9
70	22	26	19	21	19	23																		
80	25	29	21	23	21	25	16	20	13	16	10	13	17	23	13	17	10	13	8	10	10	14	8	11
90	27	32	23	26	23	28																		
100	29	35	25	28	25	30	19	24	16	19	12	15	20	28	16	21	12	15	10	12	12	17	10	13
120	34	40	29	32	29	35	22	28	18	22			23	32	18	24								
140	39	46	32	37	32	40	25	32	20	25	16	20	26	37	20	27	15	20	13	16	16	22	13	17
160	43	51	36	41	36	44	28	35	23	28			29	41	23	30								
180	47	56	40	45	40	49	31	39	25	31	20	24	32	45	25	33	19	24	16	20	20	27	16	21
200	51	61	43	49	43	53	33	42	27	34			35	49	27	36								
220			47	53	47	57	36	46	29	36	23	28	38	53	29	39	22	28	19	23	23	32	19	25
240			50	56	50	62	39	49	32	39			40	57	32	42								
260							41	52	34	42	27	32	43	60	34	45	25	32	21	27	27	37	21	28
280							44	55	36	44			46	64	36	47								
300							46	58	38	47	30	36	48	68	38	50	28	36	24	30	30	41	24	32
350							52	66	43	53	34	41	55	77	43	57	32	41	27	34	34	47	27	36
400									48	59	38	46			48	63	36	46	30	38	38	52	30	40
450									52	65	41	50			52	69	39	50	33	41	41	57	33	44
500											45	55					43	55	36	45	45	62	36	48
550											49	59					46	59	39	49	49	67	39	52
600											52	63					50	63	42	52	52	72	42	55
650																			45	56			45	59
700																			47	59			47	63
750																			50	62			50	66

General purpose enclosures technical details

Power dissipation values – PolySafe

Frontside and upperside free												Temperature rise [Kelvin]														
Dissipa- tion Watt	PS 220 500×500		PS 230 500×750		PS 320 750×500		PS 330 750×750		PS 340 750×1.000		PS 352 750×1.250		PS 420 1.000×500		PS 430 1.000×750		PS 440/442 1.000×1.000		PS 452 1.000×1.250		PS 530 1.250×750		PS 542/546 1.250×1.000			
	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top		
10	5	6	4	5	4	5																				
20	9	10	7	8	7	9	5	7	5	5			6	8	5	6										
30	12	14	10	11	10	12																				
40	15	18	12	14	12	15	10	12	8	9	6	7	11	13	8	10	6	7	5	6	7	9	5	6		
50	18	21	15	17	15	18																				
60	21	25	17	19	17	21	13	16	11	13	9	10	15	19	11	14	8	10	7	8	9	12	7	9		
70	23	28	19	22	19	24																				
80	26	31	21	24	22	27	17	20	14	16	11	13	19	23	14	18	11	13	9	11	11	15	9	11		
90	29	34	23	26	24	29																				
100	31	37	26	29	26	32	20	25	17	20	13	15	23	28	17	22	13	16	10	13	14	18	11	14		
120	36	43	30	33	30	37	23	28	19	23			26	33	19	25	15	18								
140	41	49	33	38	34	42	26	32	22	26	17	20	30	37	22	28	17	21	14	16	18	24	14	18		
160	46	54	37	42	38	47	29	36	24	29			33	41	25	31	18	23								
180	50	59	41	46	42	51	32	39	27	32	21	25	36	45	27	35	20	25	17	20	22	29	17	22		
200			45	50	45	56	35	43	29	34			39	49	29	38	22	27								
220			48	54	49	60	38	46	31	37	25	29	42	53	32	41	24	29	20	24	26	35	20	26		
240			52	58	52	65	41	50	33	40			46	57												
260							43	53	36	42	28	33	49	61	36	46	27	34	22	27	29	40	23	29		
280							46	56	38	45			52	64												
300							48	59	40	48	32	37			41	52	31	38	25	30	33	44	24	33		
350							55	67	45	54	36	42			46	59	35	43	28	34	37	50	26	37		
400									50	60	40	47			51	66	39	48	32	38	42	56	29	41		
450											44	52					42	52	35	42	46	61	32	45		
500											48	56					46	57	38	46	50	67	38	49		
550											52	61					50	62	41	50			42	53		
600																			44	53			45	57		
650																			47	57			47	61		
700																			50	60			50	65		

Frontside free, upperside not free												Temperature rise [Kelvin]													
Dissipation Watt	PS 220 500×500		PS 230 500×750		PS 320 750×500		PS 330 750×750		PS 340 750×1.000		PS 352 750×1.250		PS 420 1.000×500		PS 430 1.000×750		PS 440/442 1.000×1.000		PS 452 1.000×1.250		PS 530 1.250×750		PS 542/546 1.250×1.000		
	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	
10	6	7	4	5	4	5							4	5											
20	10	12	8	9	8	9	6	8	5	6	4	5	7	8	5	7					4	6			
30	14	16	11	12	11	13							9	11											
40	17	20	13	15	13	16	11	13	9	11	7	9	12	14	9	12	7	9	5	7	7	10	5	7	
50	20	24	16	18	16	20							14	17											
60	24	28	19	21	18	23	15	18	12	15	10	13	16	20	12	16	10	12	8	9	10	14	7	10	
70	27	32	21	24	21	26																			
80	30	35	24	27	23	28	19	23	16	19	13	16	20	25	15	20	12	16	10	12	13	18	9	13	
90	33	39	26	29	25	31																			
100	36	42	28	32	28	34	23	28	19	23	16	19	24	30	18	24	15	19	11	14	15	21	11	15	
120	41	49	33	37	32	39	27	32	22	27	18	22	28	35	21	28					18	24			
140	47	55	37	42	36	45	31	36	24	30	21	25	32	39	24	32	19	25	15	19	20	28	15	20	
160	52	62	41	46	40	50	34	40	27	33	23	28	35	44	27	35					22	31			
180			45	51	44	55	37	44	30	37	25	30	39	48	29	39	23	30	18	23	24	34	18	24	
200			49	55	48	60	41	48	32	40	27	33	42	53	32	42									
220			53	60	52	64	44	52	35	43	30	36	46	57	35	46	28	35	22	27	29	40	21	28	
240							47	56	38	46	32	38	49	61	37	49									
260							50	60	40	49	34	41	52	65	40	52	32	40	25	31	33	45	24	32	
280									43	52	36	43			42	56									
300									45	55	38	46			44	59	35	45	28	34	37	51	27	36	
350									51	63	43	52			50	66	40	51	31	39	42	58	31	41	
400											48	58					45	57	35	43	46	64	34	46	
450											52	64					49	63	38	48	51	70	38	50	
500																	53	68	42	52			41	55	
550																			45	56			44	59	
600																			48	60			48	63	
650																			51	64			51	67	

Power dissipation values – PolySafe

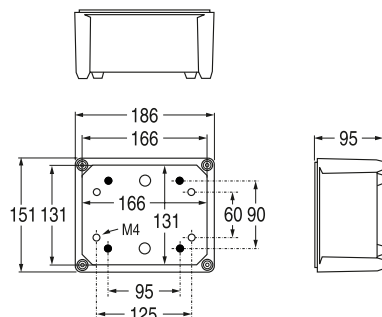
Stand alone										Temperature rise [Kelvin]															
Dissipa- tion Watt	PS 220 500×500		PS 230 500×750		PS 320 750×500		PS 330 750×750		PS 340 750×1.000		PS 352 750×1.250		PS 420 1.000×500		PS 430 1.000×750		PS 440/442 1.000×1.000		PS 452 1.000×1.250		PS 530 1.250×750		PS 542/546 1.250×1.000		
	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	Half	Top	
20	7	9	6	7	6	8	4	6					5	7											
40	13	15	10	13	10	13	8	10	6	8	5	6	8	12	6	8	5	6	4	5	5	7			
60	17	21	14	17	14	19	11	14					11	16	8	11									
80	22	26	17	22	17	23	13	18	10	13	9	11	14	21	10	14	8	11	7	9	8	12	7	9	
100	26	31	21	26	20	28	16	21					17	25	12	16									
120	30	36	24	30	24	33	19	25	14	18	12	15	20	28	14	19	11	15	9	12	12	17	9	13	
140	34	41	27	34	27	37	21	28					22	32	16	22									
160	38	46	30	38	30	41	24	31	18	23	15	19	25	36	17	24	14	19	12	15	15	21	12	16	
180	42	50	33	42	33	45	26	34					27	39	19	26									
200	46	55	36	46	36	49	28	37	21	27	18	23	29	43	21	29	17	22	14	18	17	25	14	19	
220	50	59	39	50	38	53	30	40					32	46	23	31									
250			43	55	43	59	34	45	25	33	21	27	35	51	25	34	20	27	17	22	21	30	17	23	
300			50	64	49	68	39	52	29	38	25	31	41	59	29	40	23	31	19	25	24	34	19	27	
350							44	58	33	43	28	36	46	67	33	45	26	35	22	29	27	39	22	30	
400							49	65	37	48	31	40	51	75	36	50	29	39	24	32	30	43	24	34	
450							54	71	41	53	34	43			40	55	32	43	27	35	33	48	27	37	
500									44	57	37	47			44	60	35	47	29	38	36	52	29	40	
550									48	62	40	51			47	65	38	51	32	41	39	56	31	43	
600									51	66	43	55			50	69	41	54	34	44	42	60	34	46	
700											49	62					46	61	38	50	48	68	38	53	
800											54	69					51	68	43	56	53	76	42	58	
900																			47	61			47	64	
1.000																			51	67			51	70	

General purpose enclosures technical details

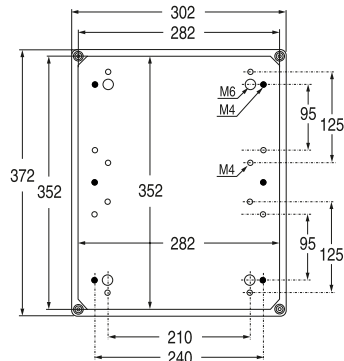
APO – dimensions

Bases

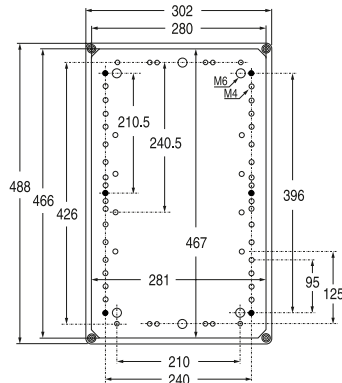
APO 1



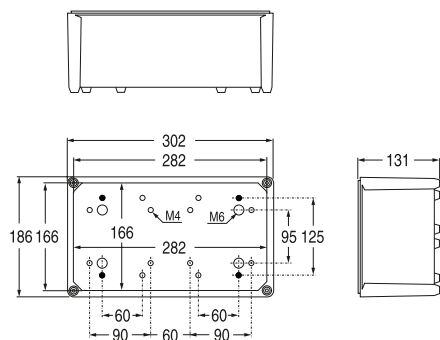
APO 71



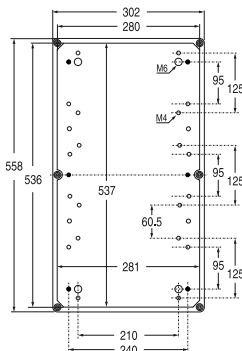
APO 51



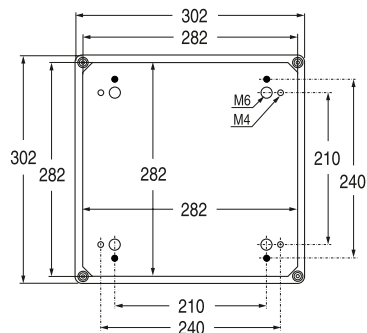
APO 31



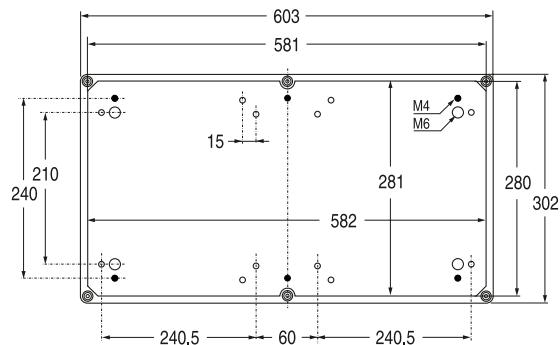
APO 81



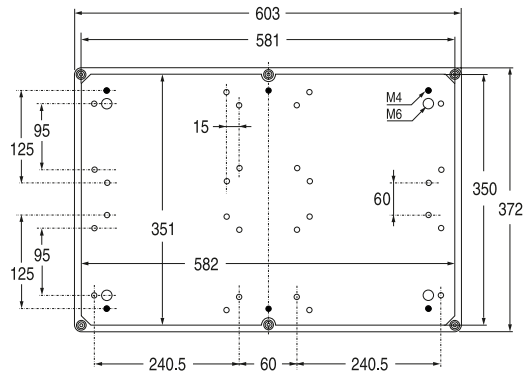
APO 41



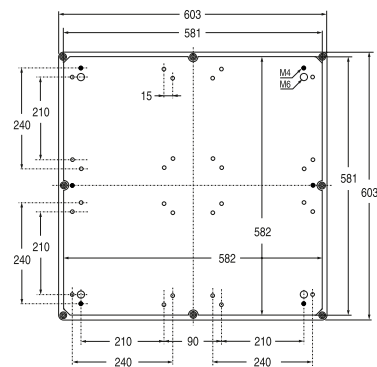
APO 61



APO 11



APO 12



● = insert standard delivered in APO boxes (base + cover)

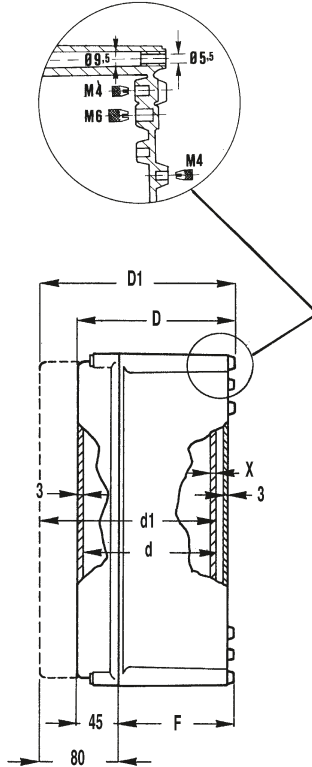
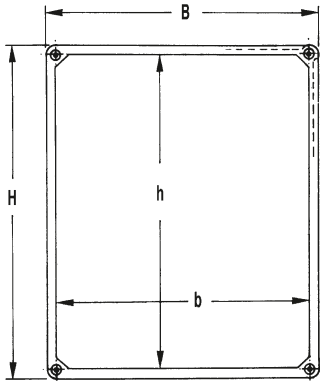
○ = with insert M4 or M6

General purpose enclosures technical details

APO - dimensions

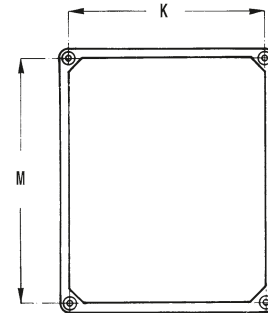
For mounting

Boxes

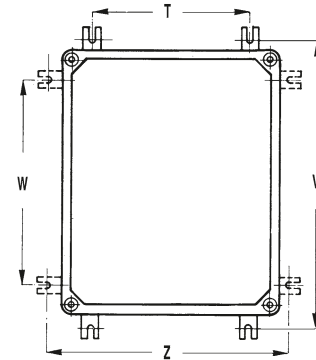


Wall mounting

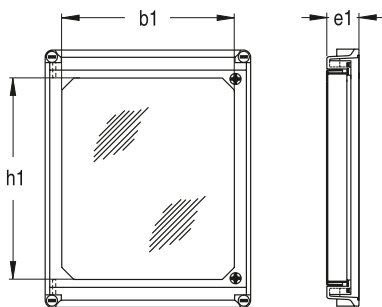
Direct to the wall



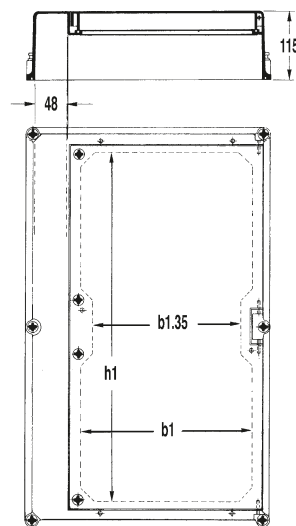
With stainless steel mounting brackets



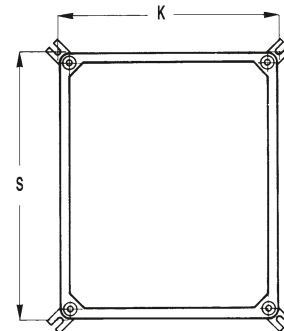
Transparent hinged cover



APO 11 Hinged cover with side flange



With polyamide mounting brackets



Dimensions

H	B	D	D1	h	b	d	d1	F	h1	b1	e1	Type	K	M	R	S	T	V	W	Z
186	151	140	-	166	131	118-X	-	95	-	-	-	APO 1	131	166	155	190	-	-	-	-
302	186	175	-	282	166	150-X	-	130	110	260	45	APO 31	282	166	190	306	125	312	241	197
302	302	175	-	282	282	150-X	-	130	225	260	45	APO 41	282	282	306	306	241	313	241	313
372	302	175	-	352	282	150-X	-	130	295	260	45	APO 71	282	352	376	306	241	383	311	313
488	302	175	210	467	281	150-X	185-X	130	410	260	45	APO 51	280	466	490	304	241	499	427	313
558	302	175	210	537	281	150-X	185-X	130	-	-	-	APO 81	280	536	561	305	241	569	497	313
603	302	175	210	582	281	150-X	185-X	130	525	260	45	APO 61	280	581	606	305	241	614	542	313
603	372	175	210	582	351	150-X	185-X	130	525	260	115	APO 11	350	581	606	374	311	614	542	383
603	603	175	210	582	582	150-X	185-X	130	-	-	-	APO 12	581	581	605	605	542	614	542	614

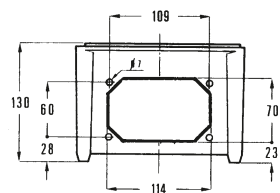
X = thickness of mounting plate

General purpose enclosures technical details

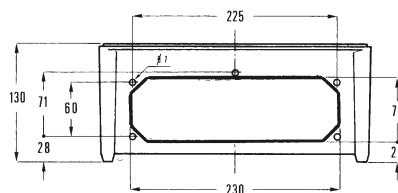
APO – dimensions

Cut-outs in side panels

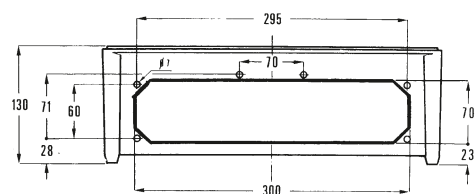
Side 185



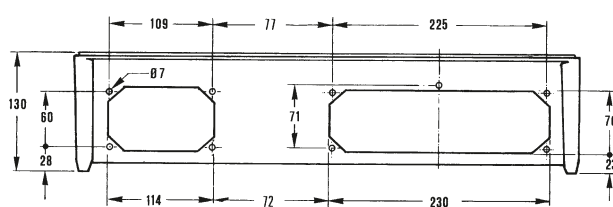
Side 300



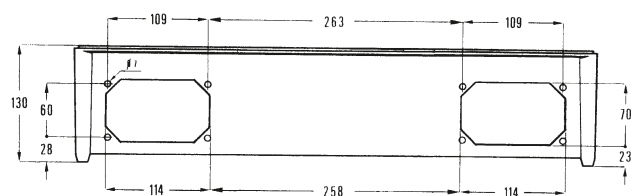
Side 370



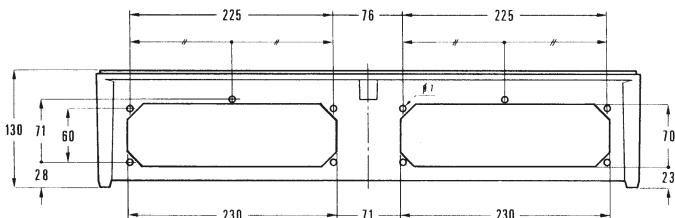
Side 485



Side 555



Side 600



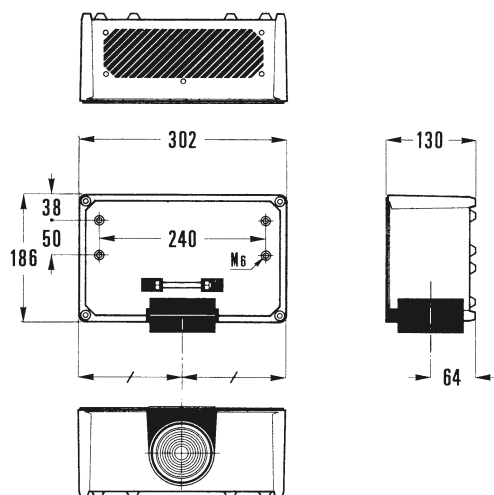
General purpose enclosures technical details

APO – dimensions

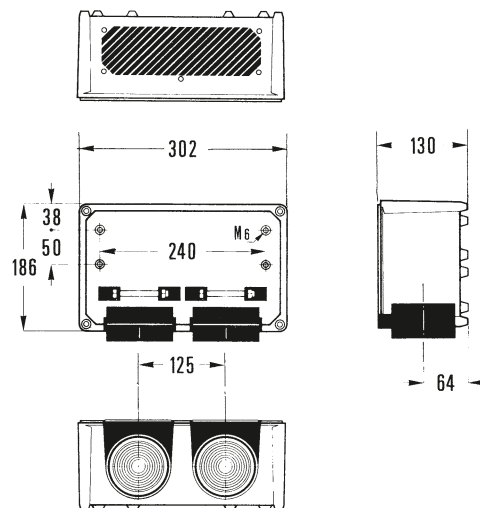
Cable-end boxes

APO 31

1 entry

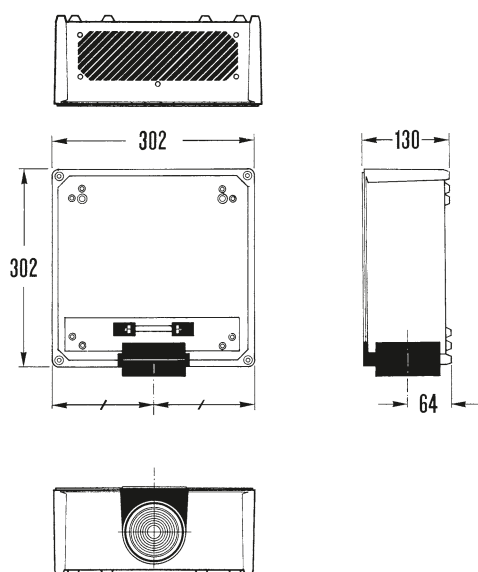


2 entries



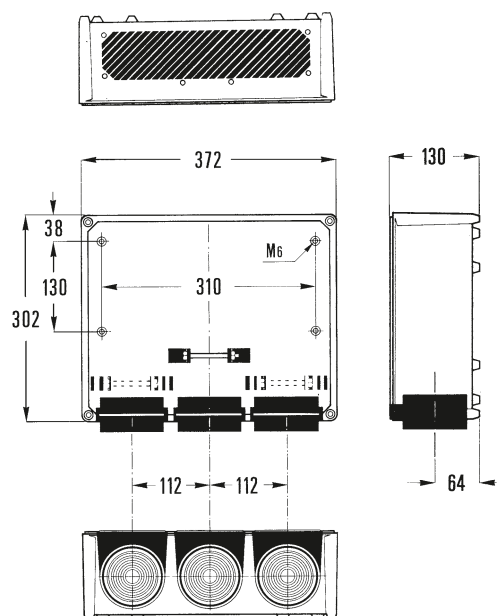
APO 41

1 entry



APO 71

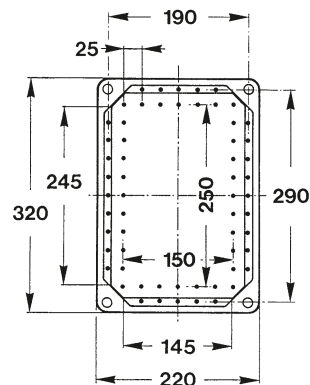
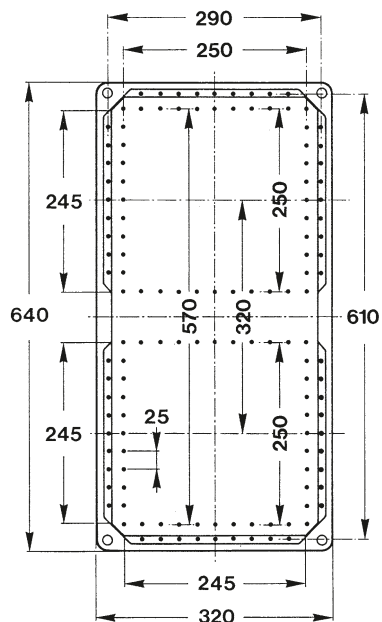
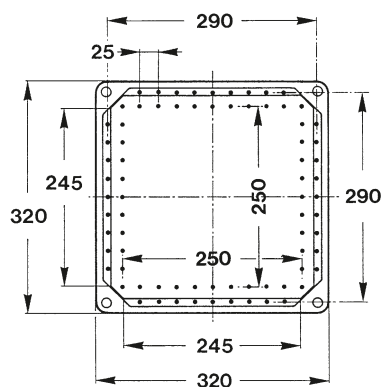
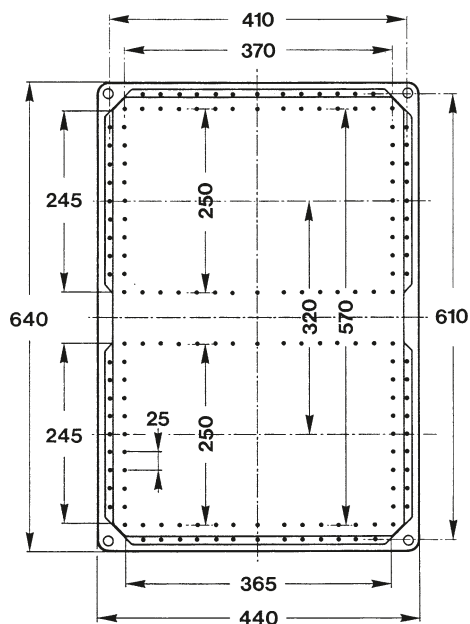
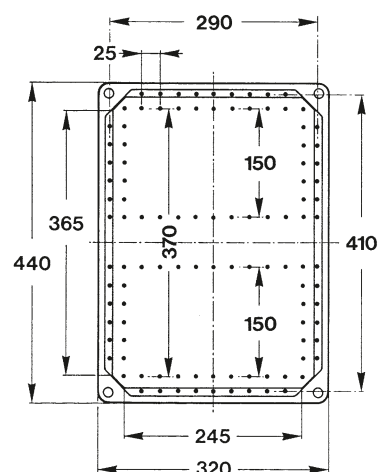
3 entries



General purpose enclosures technical details

VMS – dimensions

Bases

VMS 32**VMS 63****VMS 33****VMS 64****VMS 43**

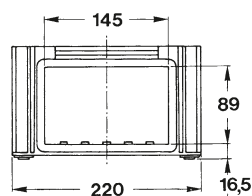
General purpose enclosures technical details

VMS – dimensions

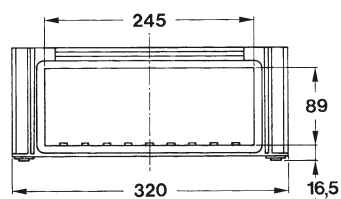
Bases

Openings in the base side walls

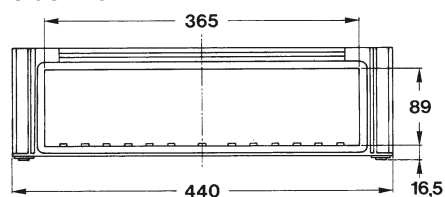
Side 220



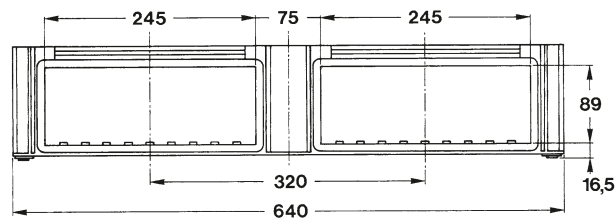
Side 320



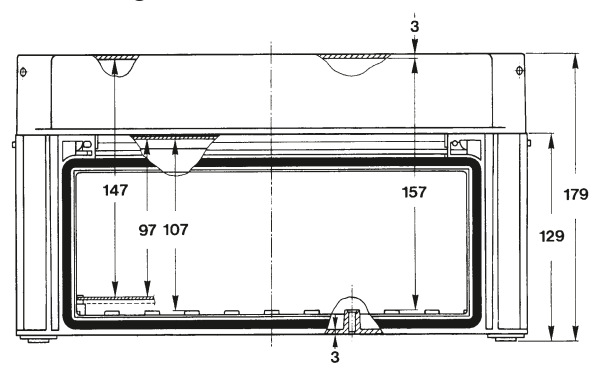
Side 440



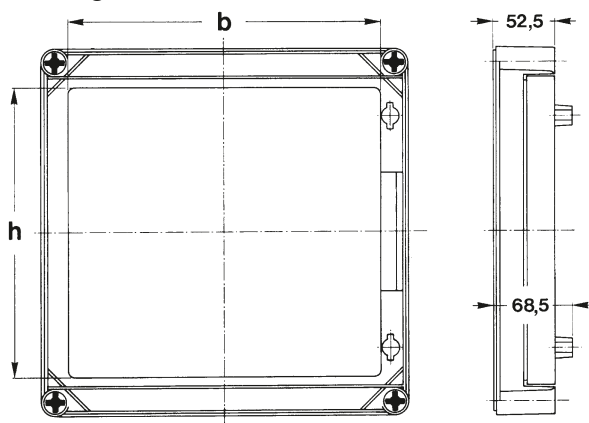
Side 640



Built-in heights



Pivoting covers



Type	Dimensions	b	h
VMS 33	320×320mm	260	241
VMS 43	440×320mm	260	361

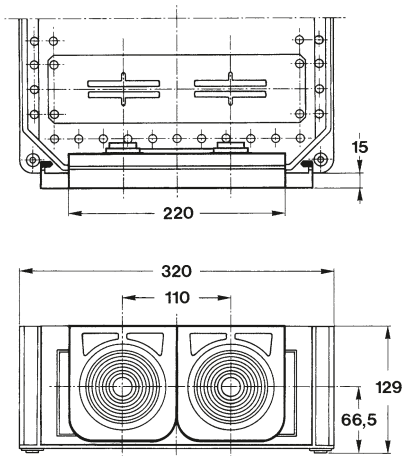
General purpose enclosures technical details

VMS – dimensions

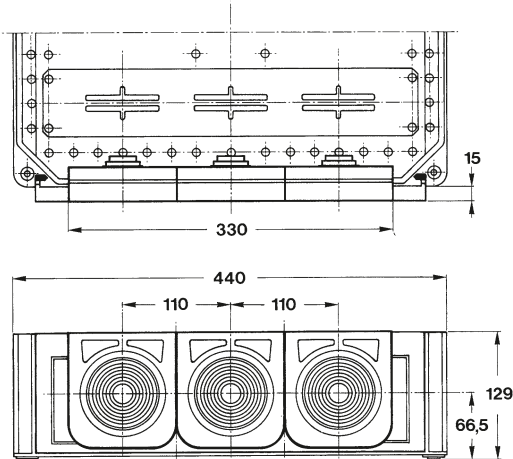
Bases

Cable end plates and universal cable stress releases

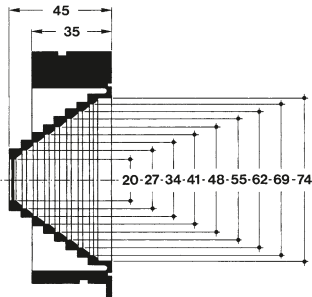
Side 320



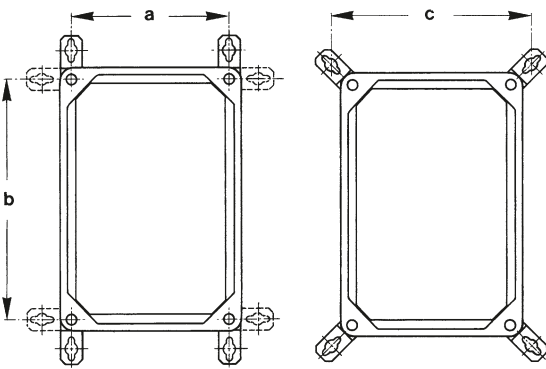
Side 440



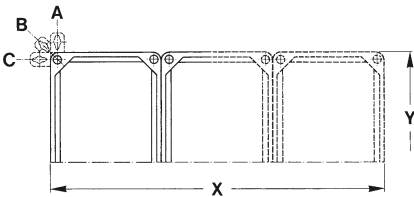
Side view



Mounting brackets



Type	Dimensions	a	b	c
VMS 32	320×220 mm	193	293	254
VMS 33	320×320 mm	293	293	354
VMS 43	440×320 mm	293	413	354
VMS 63	640×320 mm	293	613	354
VMS 64	640×440 mm	413	613	474



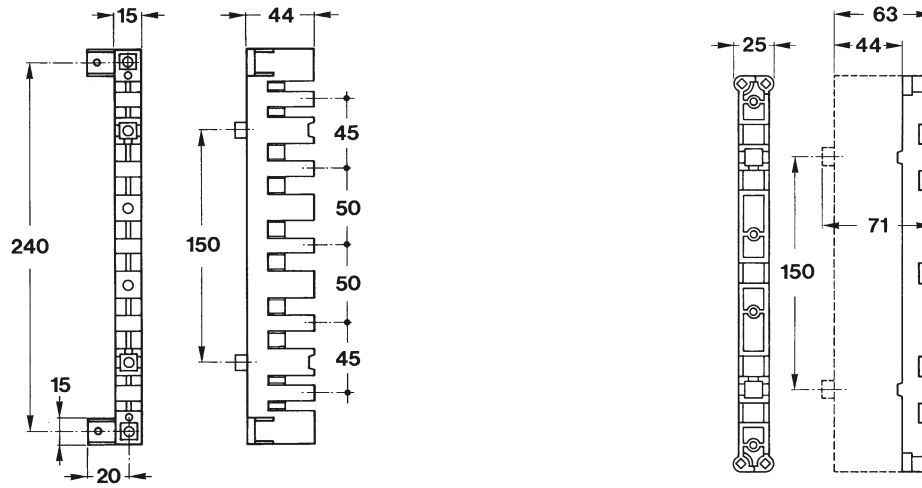
Centre dimensions		
A	X - 27	Y + 40
B	X + 34	Y + 34
C	X + 40	Y - 27

General purpose enclosures technical details

VMS – dimensions

Busbar supports

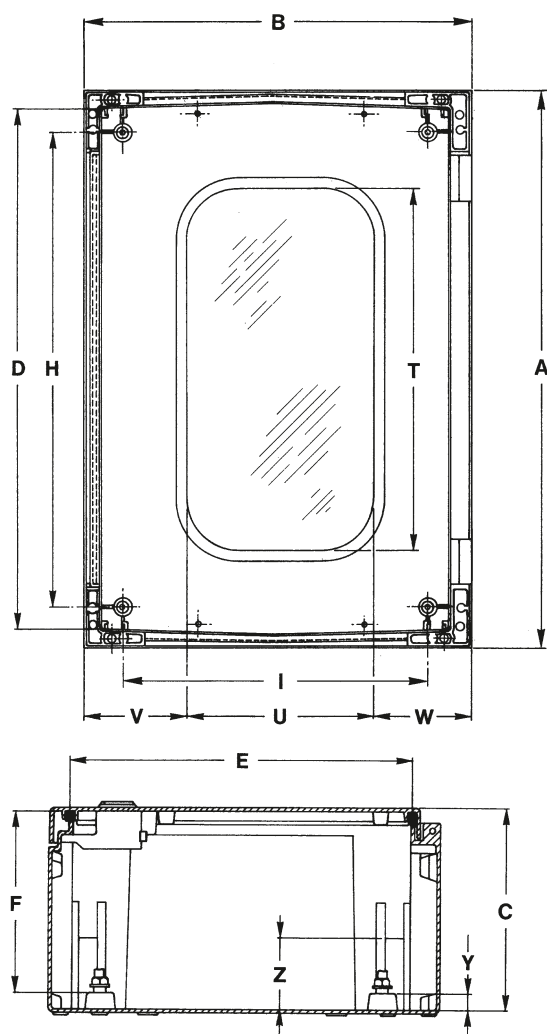
630 A – 1 250 A - parallel



General purpose enclosures technical details

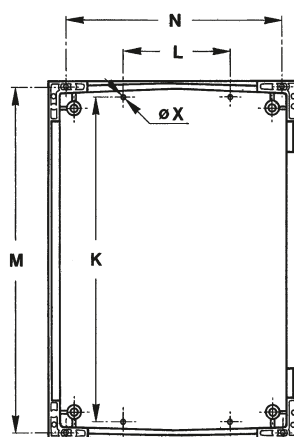
ARIA – dimensions

Cabinets

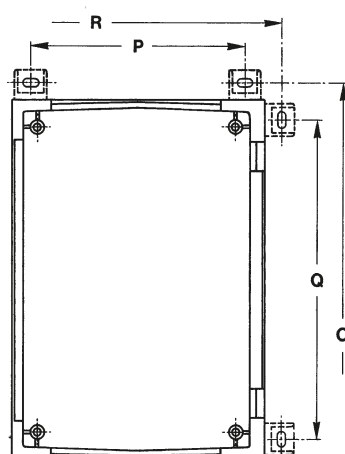


Wall mounting

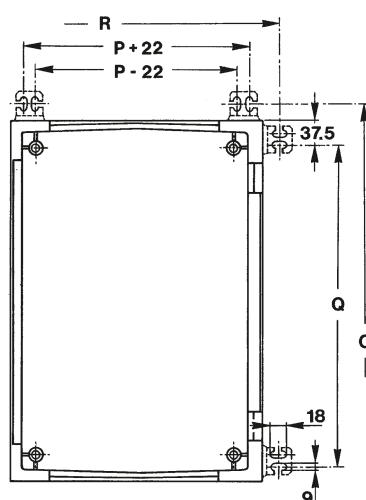
Direct to the wall



By fixing lugs in polyamide



By fixing lugs in stainless steel



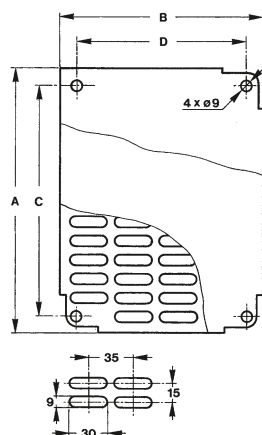
Dimensions

ARIA	32	43	54	64	75	86	108
A	315	415	515	615	735	835	1035
B	215	315	415	415	535	635	835
C	170	170	230	230	270	300	300
D	275	375	475	575	675	775	975
E	170	270	370	370	470	570	770
F	148	148	208	208	248	278	277
H	225	325	425	525	625	725	925
I	125	225	325	325	425	525	725
K	275	375	475	575	675	775	975
L	70	150	200	200	300	400	600
M	295	395	495	595	-	-	-
N	155	255	355	355	-	-	-
O	362	462	562	662	782	882	1082
P	162	262	362	362	482	582	782
Q	262	362	462	562	682	782	982
R	262	362	462	462	582	682	882
T	-	280	380	480	580	680	880
U	-	130	230	230	330	430	630
V	-	70	70	70	80	80	80
W	-	115	115	115	125	125	125
X	6	6	6	6	8	8	8
Y	14	14	15,5	15,5	15,5	15,5	15,5
Z	28	25	88	88	118	148	148

General purpose enclosures technical details

ARIA – dimensions

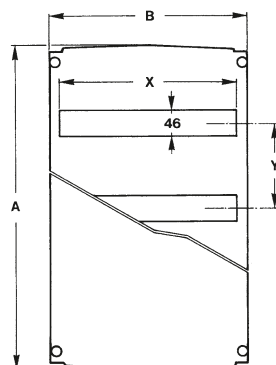
Mounting plates



Dimensions				
ARIA	A	B	C	D
32	250	150	225	125
43	350	250	325	225
54	450	350	425	325
64	550	350	525	325
75	650	450	625	425
86	750	550	725	525
108	950	750	925	725

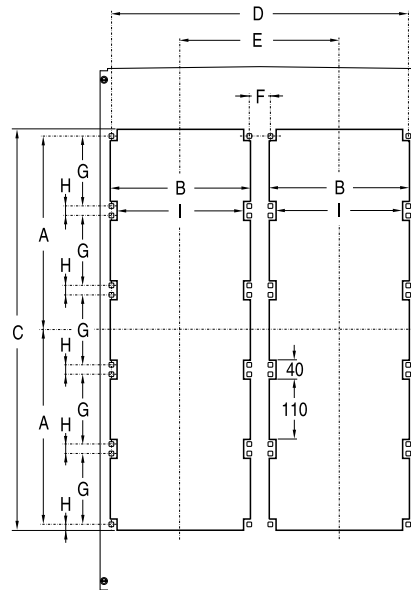
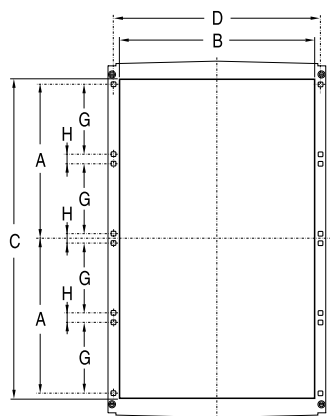
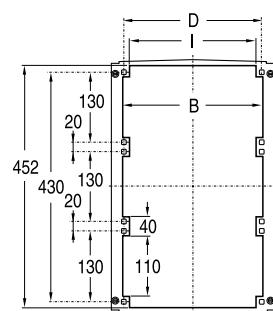
Cover plates

Plain and with openings for DIN-rail equipment



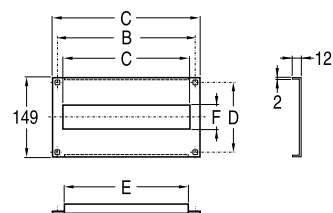
Dimensions					
ARIA		A	B	X	Y
32	2 rows	279	162	108	125
43	2 rows	379	262	216	150
54	3 rows	479	362	324	150
64	3 rows	579	362	324	150
75	4 rows	690	462	396	150
86	4 rows	790	562	2 x 216	150
108	5 rows	990	762	2 x 324	150

Cover plates with cut-out for individual modular cover plates



Dimensions										
Type	A	B	C	D	E	F	G	H	I	Mod.
ARIA 43	140	216	302	236	-	-	130	20	-	24
ARIA 54	-	308	-	303	-	-	-	-	283	51
ARIA 64	-	326	-	336	-	-	-	-	316	54
ARIA 75	290	400	602	428	-	-	130	20	-	88
ARIA 86	290	216	602	524	288	52	130	20	-	96
ARIA 108	365	326	752	732	396	60	130	20	316	180

Individual modular cover plate

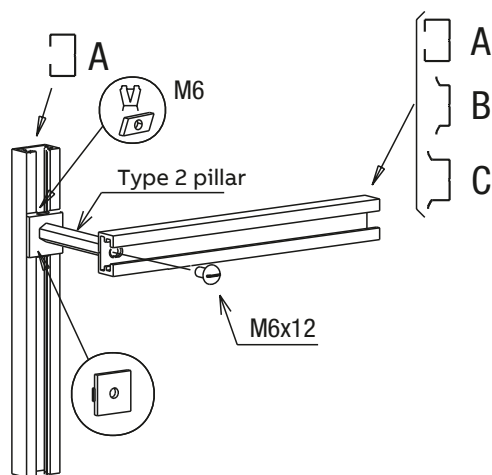
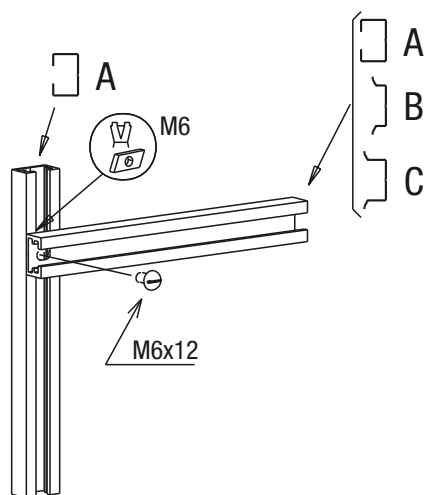


Dimensions						
Type	A	B	C	D	E	F
831796	255	236	216	130	210	46
831797	255	236	0	130	210	0
831798	322	303	306	130	280	46
831799	322	303	0	130	280	0
831800	355	336	324	130	312	46
831801	355	336	0	130	312	0
831802	455	428	396	130	396	46
831803	455	428	0	130	396	0

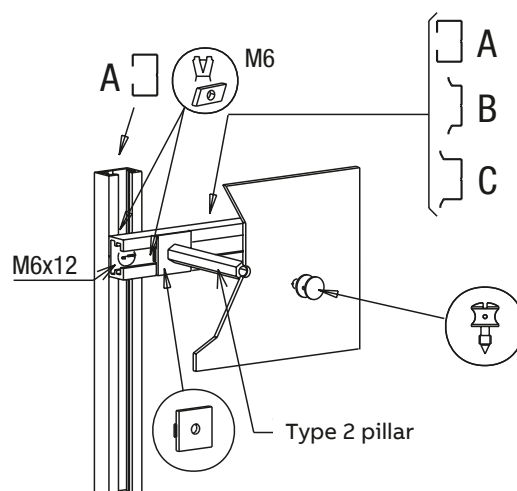
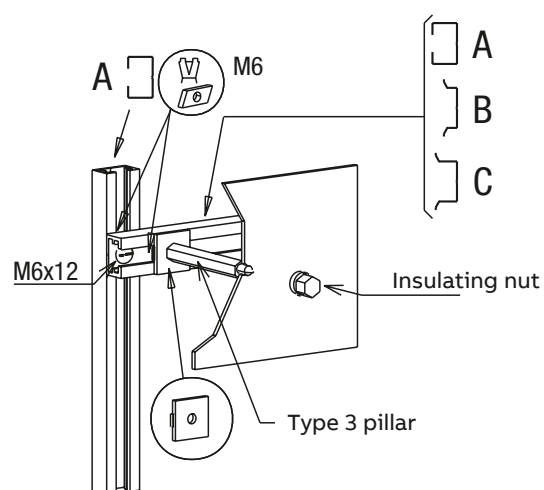
General purpose enclosures technical details

PolySafe – Alu frame mounting applications

Alu frame with progressive adjustment

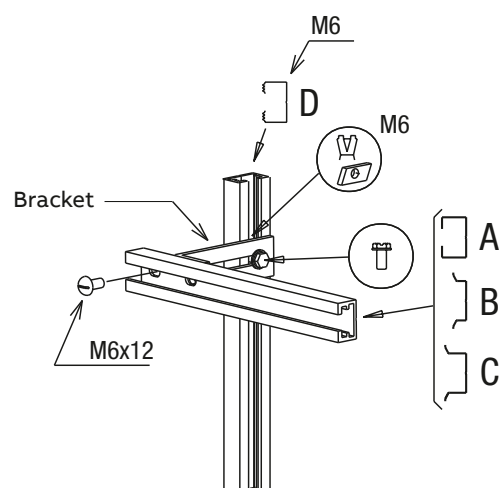


Installation of the cover plate



Note:
Same installation technique as for the
cover plate on the mounting plate.

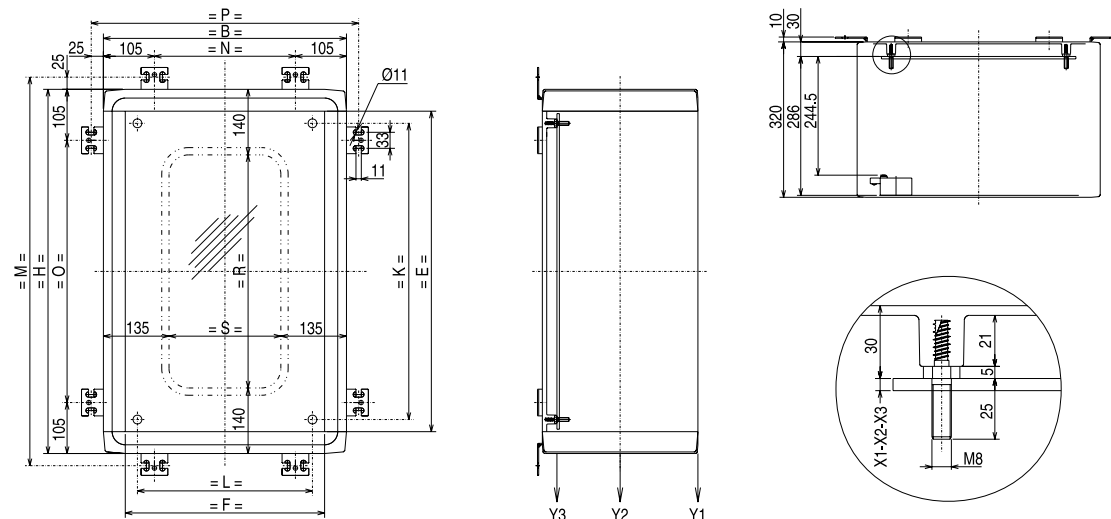
Alu frame with adjustment in 12.5 mm increments



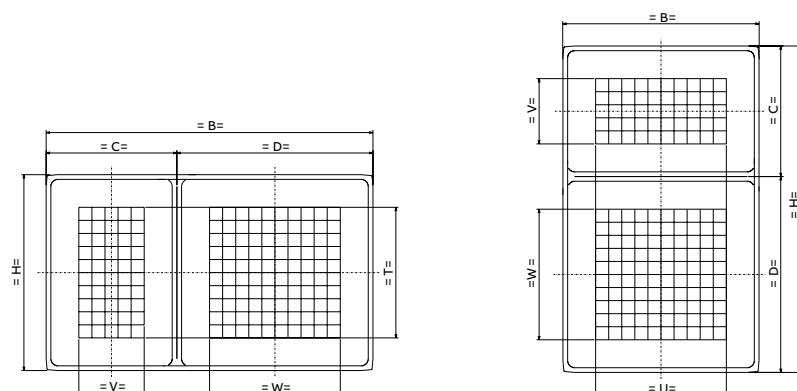
General purpose enclosures technical details

PolySafe – dimensions

Enclosures



Usable mounting space on the doors



Dimensions

Type	H	B	C	D	E	F	K	L	M	N	O	P	R	S	T	U	V	W	X1	X2	X3	Y1	Y2	Y3
220	500	500			410	410	360	360	550	290	290	550	220	230	250	250			5	2	-	8	80	110
230	500	750			410	660	360	610	550	540	290	800	220	480	250	500			5	2	-	8	80	110
320	750	500			660	410	610	360	800	290	540	550	470	230	500	250			5	2	-	8	80	110
330	750	750			660	660	610	610	800	540	540	800	470	480	500	500			5	2	-	8	80	110
340	750	1.000			660	910	610	860	800	790	540	1050	470	730	500	750			5	2	-	6	80	110
352	750	1.250	500	750	660		610	1.110	800	1.040	540	1.300			500		250	500	5	2	10	5	80	110
420	1.000	500			910	410	860	360	1.050	290	790	550	720	230	750	250			5	2	-	8	80	110
430	1.000	750			910	660	860	610	1.050	540	790	800	720	480	750	500			5	2	-	8	80	110
440	1.000	1.000			910	910	860	860	1.050	790	790	1.050	720	730	750	750			5	2	10	6	80	110
442	1.000	1.000	500	500	910		860	860	1.050	790	790	1.050			750		250	250	5	2	10	6	80	110
452	1.000	1.250	500	750	910		860	1.110	1.050	1.040	790	1.300			750		250	500	5	2	10	5	80	110
530	1.250	750			1.160	660	1.110	610	1.300	540	1.040	800	970	480	1.000	500			5	2	10	8	80	110
542	1.250	1.000	500	750		910	1.110	860	1.300	790	1.040	1.050				750	250	500	5	2	10	6	80	110
546	1.250	1.000	500	750		910	1.110	860	1.300	790	1.040	1.050				750	250	500	5	2	10	6	80	110

Enclosure
external
dimensions

Door
dimensions

Enclosure
let-through
plate

Centres of
the mounting
plate

Centres for wall mounting

Window
surface

Usable mounting space
on the doors

Thickness of
the mounting
plate

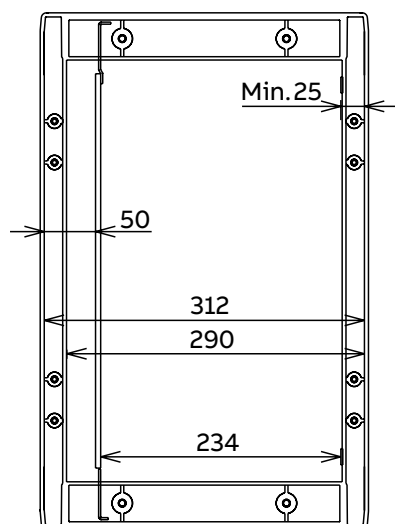
Admissible
charge in kg

X1 = pertinax 5mm
X2 = metal
perforated 2mm
X3 = pertinax 10mm

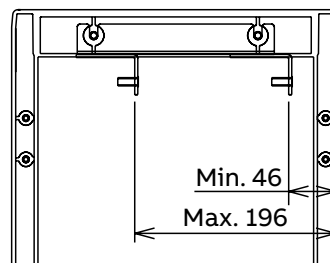
General purpose enclosures technical details

PolySafe – dimensions

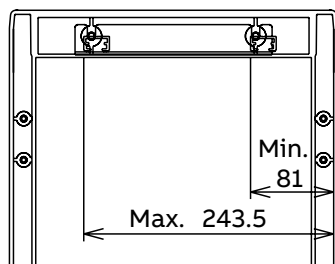
Inner door



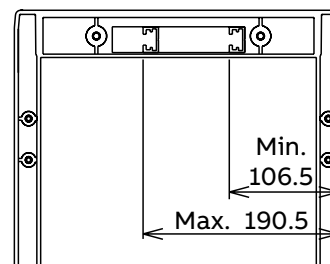
Adjustable mounting plate



Adjustable mounting frame in steps of 12.5 mm



Continuously adjustable mounting frame



General purpose enclosures technical details

Compliance with standards and technical characteristics – Gemini

Reference Standards

Standard IEC 62208 (“Empty enclosures for low voltage switch-gear and control gear assemblies. General requirements”), that has implemented at an international level the Standard EN 50298, presently EN 62208, is the prescriptive reference for Gemini switchboards.

The object of Standard CEI EN 50298 is to formulate definitions, classifications, characteristics and test prescriptions for cases designed to be used as part of protection and operating equipment (switchboards) in compliance with the Standards of the EN 61439 series, that have a maximum rated voltage of 1000 V in alternating current for maximum frequencies of 1000 Hz or 1500 V in direct current and are suitable for general use in both internal and external applications.

The Standard applies to empty enclosures, before the user has installed protection and operating devices inside them. The Standard does not apply to enclosures with structural and functional characteristics that make them subject to other prescriptions (e.g. cases for domestic installations and the like). In this case Standards IEC 60670 – CEI 23-48 (“General requirements for enclosures for accessories for household and similar fixed electrical installations”) and CEI 23-49 (“Enclosures for accessories for household and similar fixed electrical installations. Part 2: particular requirements for enclosures for protection devices and accessories dissipating a considerable power in normal use”) apply. On the basis of the indications of the ABB SACE technical characteristics’ table, the installer may have to certify compliance with Standards CEI 23-51 – EN 61439 – CEI 17-13-1 (“Part 1: standard equipment subject”).

General purpose enclosures technical details

Compliance with standards and technical characteristics – Gemini

Gemini switchboards features table

Size	1	2	3	4	5	6
Gemini with transparent door	1SL0211A00	1SL0212A00	1SL0213A00	1SL0214A00	1SL0215A00	1SL0216A00
Gemini with opaque door	1SL0201A00	1SL0202A00	1SL0203A00	1SL0204A00	1SL0205A00	1SL0206A00
External dimensions WxHxD (mm)	335x400x210	460x550x260	460x700x260	590x700x260	590x855x360	840x1005x360
Internal dimensions WxHxD (mm)	250x300x180	375x450x230	375x600x230	500x600x230	500x750x330	750x900x330
IP degree	IP66	IP66	IP66	IP66	IP66	IP66
Double isolation	Si	Si	Si	Si	Si	Si
IK degree	10	10	10	10	10	10
GWT (°C)	750	750	750	750	750	750
Operating temperature	-25 °C ... +100 °C	-25 °C ... +100 °C	-25 °C ... +100 °C	-25 °C ... +100 °C	-25 °C ... +100 °C	-25 °C ... +100 °C
No. of DIN modules	24 (12x2)	54 (18x3)	72 (18x4)	96 (24x4)	120 (24x5)	216 (36x6)
No. of vertical modules (H=150 mm)	2	3	4	4	5	6
Material	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic	Thermoplastic
Color	Gray RAL7035	Gray RAL7035	Gray RAL7035	Gray RAL7035	Gray RAL7035	Gray RAL7035
Fast wiring system	Unifix L	Unifix L	Unifix L	Unifix L	Unifix L	Unifix L
No. of locks	2	2	2	2	3	3
Rated frequency	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz
STANDARD CEI 23-51⁽¹⁾						
- Max. dispersible power ⁽²⁾	45 W	72 W	85 W	102 W	156 W	248 W
STANDARD CEI EN 61439						
Over-temperature (par. 8.2.1)⁽³⁾						
- Max. dispersible power with over-temperature of 25 °C	40 W	65 W	77 W	91 W	133 W	205 W
- Max. dispersible power with over-temperature of 30 °C	45 W	72 W	85 W	102 W	156 W	248 W
- Max. dispersible power with over-temperature of 35 °C	52 W	85 W	100 W	121 W	187 W	299 W
- Max. dispersible power with over-temperature of 40 °C	62 W	100 W	118 W	143 W	221 W	355 W
Impulse withstand (par. 8.2.2)						
- Rated service voltage ⁽⁴⁾	≤ 800 V	≤ 800 V	≤ 800 V	≤ 800 V	≤ 800 V	≤ 800 V
- Rated impulse withstand voltage	8 kV	8 kV	8 kV	8 kV	8 kV	8 kV

⁽¹⁾ Limits of applicability of the standard CEI 23-51

The standard may be applied only when the wired switchboard meets all the following conditions:

- fixed installation with average ambient temperature up to 25 °C, occasionally up to 35 °C;
- alternate current with rated voltage up to 440 V;
- input rated current up to 125 A;
- assumed short circuit rated current up to 10 kA or limiting current devices protection with limited current up to 15 kA at their rated breaking capacity.

⁽²⁾ Maximum dissipation power data was obtained following the indications of Standard CEI 23-49, with a temperature difference of Dt=30 °C.

⁽³⁾ Note to paragraph 8.2.1 of Standard CEI EN 61439-1

The table gives the thermal dissipation values of Gemini switchboards when they are wall-mounted. The dispersible power figures (in Watts) vary according to the overtemperature allowed in the accessible parts of the switchboard and must be compared with the total amount of power dissipated by all the components installed inside the switchboard taking into due account the factor of contemporaneity.

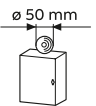
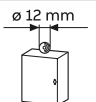
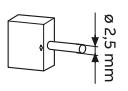
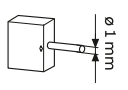
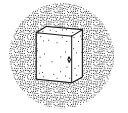
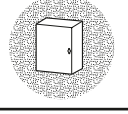
⁽⁴⁾ Rated service voltage according to CEI EN 61439-1 1000V AC and 1500V DC

General purpose enclosures technical details

IP degree of protection – Gemini

As indicated in the following table, the IP degree of protection is expressed by two characteristic numbers depending on the behavior of the product to which it refers according to the prescriptions of CEI 70-1 and IEC 529 Standards.

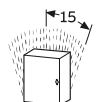
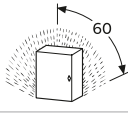
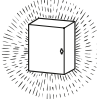
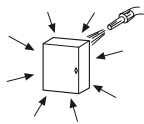
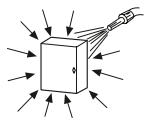
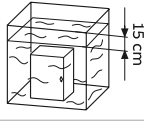
First number: protection against the penetration of solid bodies

IP		
0		No protection
1		Protection against the penetration of solid bodies with a diameter of over 50 mm
2		Protection against the penetration of solid bodies with a diameter of over 12 mm or a length of over 80 mm
3		Protection against the penetration of solid bodies with a diameter or thickness of over 2,5 mm
4		Protection against the penetration of solid bodies with a diameter or thickness of over 1,0 mm
5		Protection against the penetration of dusts
6		Total protection against the penetration of dusts

1st number defined by Standards CEI 70-1 – IEC 60529

With IP66 degree of protection, Gemini switchboards are totally protected against the penetration of dusts and sprays of seawater.

Second number: protection against the penetration of water

IP		
0		No protection
1		Protection against the penetration of drops of water falling vertically
2		Protection against the penetration of drops of water falling at an angle of up to 15° from vertical
3		Protection against the penetration of drops of water falling at an angle of up to 60° from vertical
4		Protection against the penetration of splashes of water from all directions
5		Protection against the penetration of water sprayed by a hose from all directions
6		Protection against the penetration of sea water
7		Protection against the penetration of water during temporary immersion
8		Protection against the penetration of water during continual immersion

2nd number defined by Standards CEI 70-1 - IEC 60529.

General purpose enclosures technical details

IK degree of resistance to impacts – Gemini

The IK degree is expressed in Joules in compliance with Standard CEI EN 50102.

IK 0		No protection against impacts	IK 06		Resistance to impacts with impact energy up to 1,00 J
IK 01		Resistance to impacts with impact energy up to 0,150 J	IK 07		Resistance to impacts with impact energy up to 2,00 J
IK 02		Resistance to impacts with impact energy up to 0,200 J	IK 08		Resistance to impacts with impact energy up to 5,00 J
IK 03		Resistance to impacts with impact energy up to 0,350 J	IK 09		Resistance to impacts with impact energy up to 10,00 J
IK 04		Resistance to impacts with impact energy up to 0,500 J	IK 10		Resistance to impacts with impact energy up to 20,00 J
IK 05		Resistance to impacts with impact energy up to 0,700 J			

General purpose enclosures technical details

Double insulation and self-extinguishing tests – Gemini

Double insulation

Double insulation guarantees that Gemini is protected against indirect contacts on condition that the manufacturer’s instructions are observed when carrying out mounting

and wiring operations on the switchboard and that the appropriate accessories are used (e.g. screw-cover caps). Double insulation is indicated by the graphic symbol

Self-extinguishing tests

Test text	Equipment required	Compliance with Standards	Purpose	Test results of the test	Test conditions		
					Heat source	Test period	Characteristic elements
Glow-wire test		IEC 695-2-1 CEI 50-11	To assess the danger of fire by simulating thermal stresses produced by heat sources or by ignition (e.g. glowing elements, resistances overloaded for short intervals)	If a flame is generated, it must go out within 30 seconds of removing the glow wire. The test is conducted at temperatures of: - 650 °C - 750 °C - 850 °C - 960 °C	Glow wire ø 4 mm	30 sec.	Assessment of the time it takes for the flame to go out



General purpose enclosures technical details

Resistance to chemical agents – Gemini

Resistance to chemical agents

The behavior of Gemini switchboards in the presence of chemical agents is indicated in the table with the symbols:

Cold water	■
Hot water	■
Sulfuric acid 50%	■
Hydrochloric acid 36%	■
Acetic acid 60%	■
Benzol	▲
Gasoline	▲
Acetone	■
Ethyl alcohol	■
Ammonia	■
Dichloromethane	▲
Diesel oil - naphtha	▲
Mineral oils and greases	■
Food oils and greases	■
Perchloroethylene	▲
Trichlorethene	▲
Ethylether	■
Toluene	▲
Methanol	■
Wine	■
Fruit juices	■
Laundry lye	■
Detergents	■

Caption:

■ high resistance

▲ limited resistance

General purpose enclosures technical details

Integration with ABB products – Gemini

Installation of Tmax XT moulded-case circuit breakers

The table indicates the type of installation required for the different versions of Tmax XT moulded-case circuit breakers in Gemini switchboards.

Before carrying out wiring operations check compliance with Standards on the basis of the technical characteristics of the switchboard and circuit breaker (CEI EN 60439-1).

Size	Installation	XT1				XT2				XT3				XT4			
		3p	4p	3p D	4p D	3p	4p	3p D	4p D	3p	4p	3p D	4p D	3p	4p	3p D	4p D
1	D	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	O1	■	■	■	■	■	■	■	■	■	■			■	■		
	T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
2	D	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	K1	■	■	■													
	K2		■	■	■					■	■	■	■				
	O1	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■
	O2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
3	D	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	K1	■	■	■													
	K2		■	■	■					■	■	■	■				
	O1	■	■	■	■	■	■	■	■	■	■	■		■	■	■	
	O2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
4	D	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	K1	■	■	■													
	K2		■	■	■					■	■	■	■				
	O1	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■
	O2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
5	D	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	K1	■	■	■													
	K2		■	■	■					■	■	■	■				
	O1	■	■	■	■	■	■	■	■	■	■	■		■	■	■	
	O2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
6	D	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	K1	■	■	■													
	K2		■	■	■					■	■	■	■				
	O1	■	■	■	■	■	■	■	■	■	■	■		■	■	■	■
	O2	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
	T	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■

Caption

- D, installation on DIN rail
- K1, installation with Tmax kit H = 150 (holes made)
- K2, installation with Tmax kit H = 300 (holes made)
- O1, installation on modular plate (1 module, H = 150 mm)
- O2, installation on modular plate (2 modules, H = 300 mm)
- T, installation on total base plate

General purpose enclosures technical details

Disposal instructions

Information about how to dispose of Gemini switchboards when they reach the end of their life

Instructions are given below about the procedures to adopt when disposing of Gemini switchboards at the end of their life cycle.

The text is drafted in the form of a table referring to Standard CEI 308-1 "Information table concerning the end of life of electric and electronic products and a compilation guide", 2002 -04, ed. 1, pamphlet number 308-1 6454.

Section I – Global product specification

Name	Type of product			External dimensions WxHxD (mm)
Size	With transparent door	With opaque door	Rated weight (kg)	
1	1SL0211A00	1SL0201A00	4,3	335x400x210
2	1SL0212A00	1SL0202A00	7,9	460x550x260
3	1SL0213A00	1SL0203A00	9,5	460x700x260
4	1SL0214A00	1SL0204A00	12,0	590x700x260
5	1SL0215A00	1SL0205A00	17,8	590x855x360
6	1SL0216A00	1SL0206A00	21,1	840x1005x360

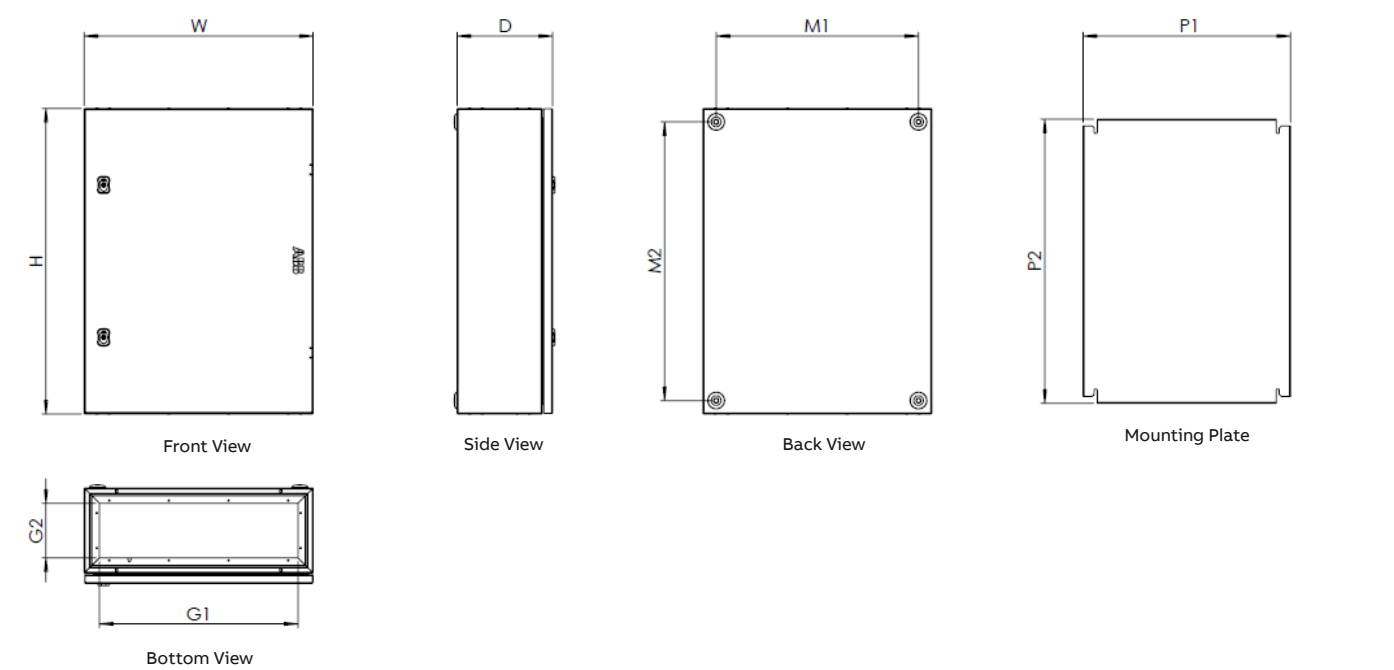
Section II – Global product table

General code: CER 17 02 03 plastic (more than 95% of the product's weight)

Part (P1, P2 ecc.)/ Component number	Diagram	Quantity % over total weight	Material description	Symbol	Dangerousness (Yes/No)	CER code
P1/BOX		~ 80%	Polypropylene	 >PP<	No	17 02 03
P2/ROOF			Polycarbonate	 >PP<	No	17 02 03
P3/DOOR		~ 20%	Steel	 >PC<	No	17 04 05
P4/ACCESSORIES		< 5%	Brass	-	No	17 04 01
P5/ACCESSORIES		< 5%	Polypropylene	-	No	17 02 03

SR Basic

Dimensions

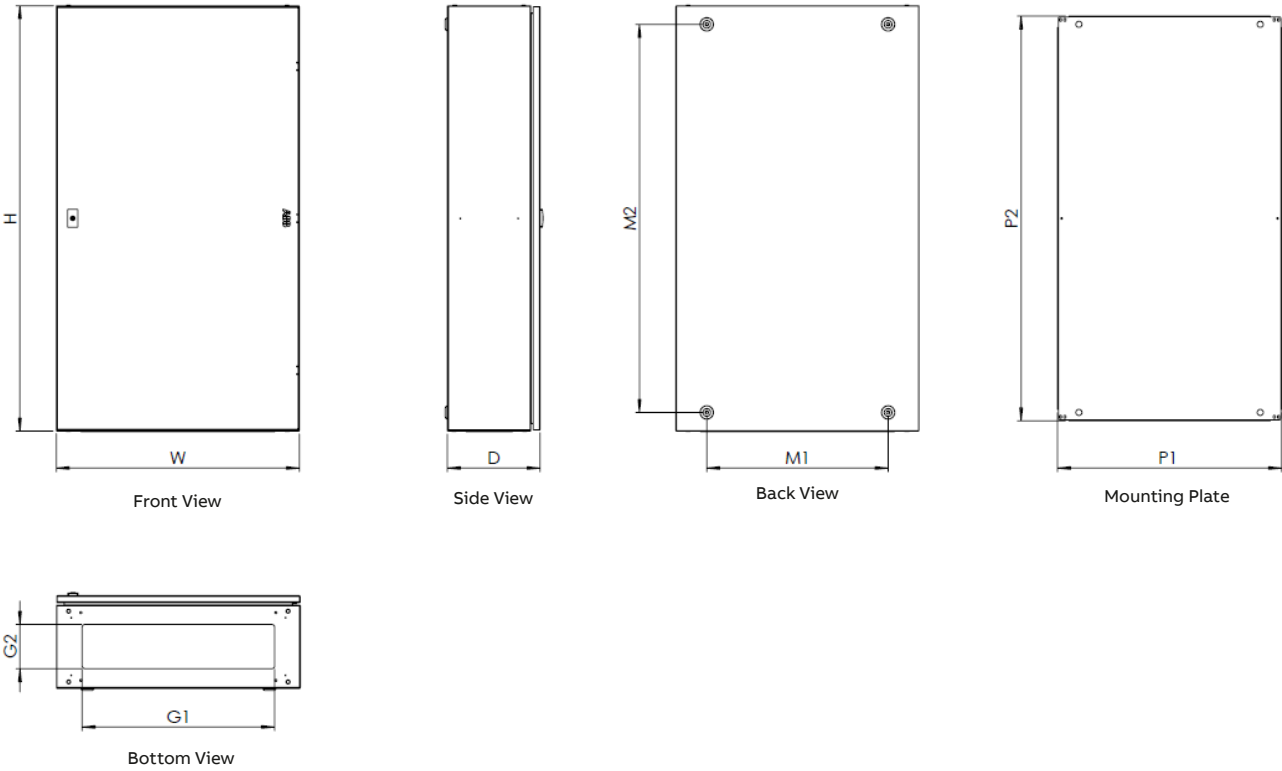


01 Wall Mounted

	Height	Width	Depth	M1	M2	G1	G2	P1	P2
	mm	mm	mm	mm	mm	mm	mm	mm	mm
SRB0302015	300	200	150	130	230	120	72	144	244
SRB0303015	300	300	150	230	230	220	72	244	244
SRB0403015	400	300	150	230	330	220	72	244	344
SRB0403020	400	300	200	230	330	220	122	244	344
SRB0504015	500	400	150	330	430	320	72	344	444
SRB0504020	500	400	200	330	430	320	122	344	444
SRB0604015	600	400	150	330	530	320	72	344	544
SRB0604020	600	400	200	330	530	320	122	344	544
SRB0604025	600	400	250	330	530	320	172	344	544
SRB0606025	600	600	250	530	530	520	172	544	544
SRB0705020	700	500	200	430	630	420	122	444	644
SRB0705025	700	500	250	430	630	420	172	444	644
SRB0806020	800	600	200	530	730	520	122	544	744
SRB0806025	800	600	250	530	730	520	172	544	744
SRB0806030	800	600	300	530	730	520	222	544	744
SRB0808030	800	800	300	730	730	720	222	744	744
SRB1006020	1000	600	200	530	930	520	122	544	944
SRB1006025	1000	600	250	530	930	520	172	544	944
SRB1006030	1000	600	300	530	930	520	222	544	944
SRB1008020	1000	800	200	730	930	720	122	744	944
SRB1008025	1000	800	250	730	930	720	172	744	944
SRB1008030	1000	800	300	730	930	720	222	744	944

General purpose enclosures technical details

SR Basic - Dimensions

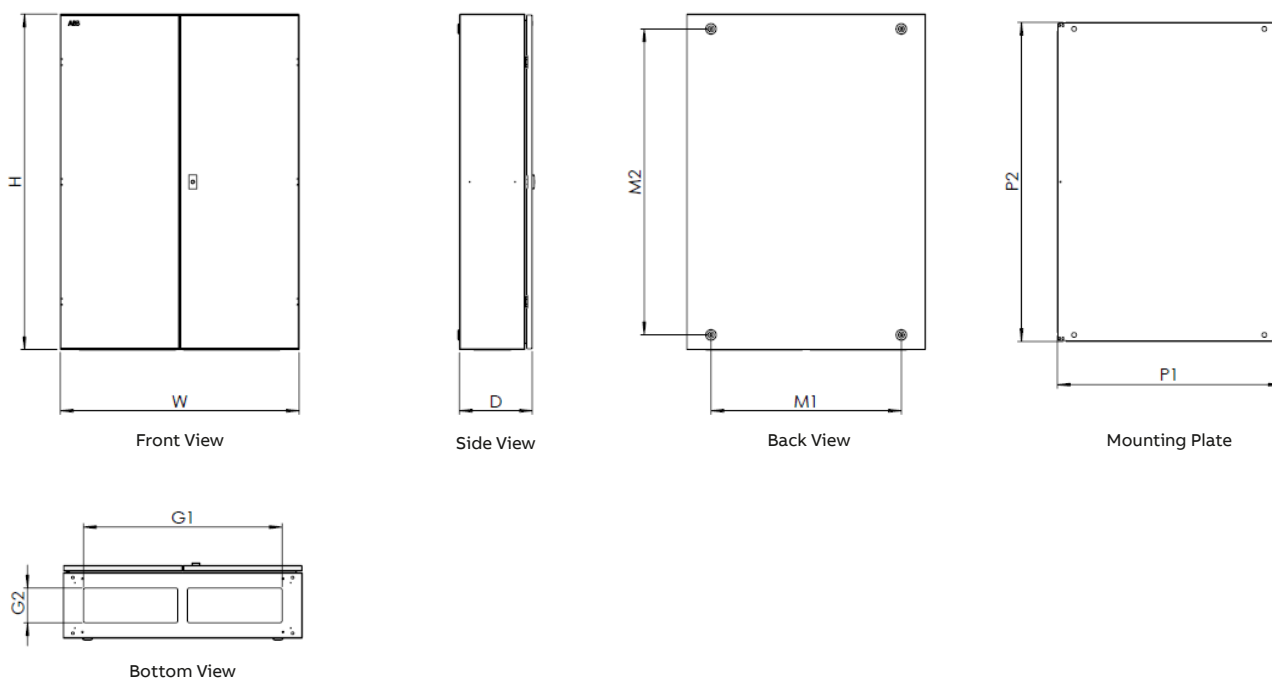


02 Floor Standing – Single Door

	Height mm	Width mm	Depth mm	M1 mm	M2 mm	G1 mm	G2 mm	P1 mm	P2 mm
SRB12006025	1200	600	250	397	1077	432	96	537	1132
SRB12006030	1200	600	300	397	1077	432	146	537	1132
SRB12008025	1200	800	250	597	1077	632	96	737	1132
SRB12008030	1200	800	300	597	1077	632	146	737	1132
SRB14008030	1400	800	300	597	1277	632	146	737	1332
SRB14008040	1400	800	400	597	1277	632	246	737	1332
SRB16008030	1600	800	300	597	1477	632	146	737	1532
SRB16008040	1600	800	400	597	1477	632	246	737	1532
SRB18008030	1800	800	300	597	1677	632	146	737	1732
SRB18008040	1800	800	400	597	1677	632	246	737	1732
SRB20008030	2000	800	300	597	1877	632	146	737	1932
SRB20008040	2000	800	400	597	1877	632	246	737	1932

General purpose enclosures technical details

SR Basic - Dimensions

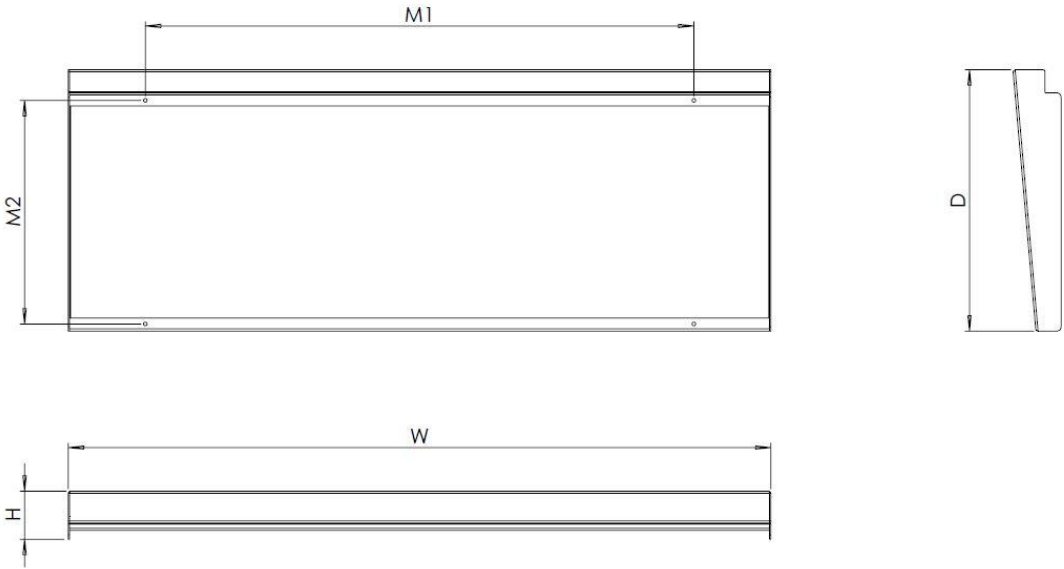


03 Floor Standing – Double Door

	Height mm	Width mm	Depth mm	M1 mm	M2 mm	G1 mm	G2 mm	P1 mm	P2 mm
SRB10010030	1000	1000	300	797	877	832	146	937	932
SRB12010030	1200	1000	300	797	1077	832	146	937	1132
SRB12010040	1200	1000	400	797	1077	832	246	937	1132
SRB14010030	1400	1000	300	797	1277	832	146	937	1332
SRB14010040	1400	1000	400	797	1277	832	246	937	1332
SRB16010030	1600	1000	300	797	1477	832	146	937	1532
SRB16010040	1600	1000	400	797	1477	832	246	937	1532
SRB18010030	1800	1000	300	797	1677	832	146	937	1732
SRB18010040	1800	1000	400	797	1677	832	246	937	1732
SRB20010030	2000	1000	300	797	1877	832	146	937	1932
SRB20010040	2000	1000	400	797	1877	832	246	937	1932
SRB18012030	1800	1200	300	997	1677	1032	146	1137	1732
SRB18012040	1800	1200	400	997	1677	1032	246	1137	1732
SRB20012030	2000	1200	300	997	1877	1032	146	1137	1932
SRB20012040	2000	1200	400	997	1877	1032	246	1137	1932

General purpose enclosures technical details

SR Basic - Dimensions

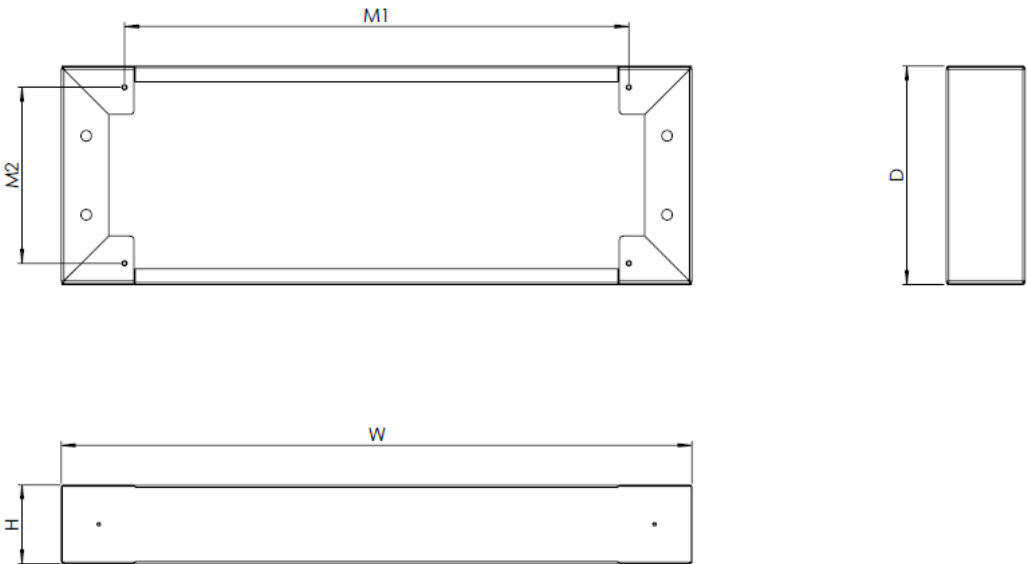


04 Accessories – Canopy

	Height mm	Width mm	Depth mm	M1 mm	M2 mm
SRBC02015	40	200	150	120	106
SRBC03015	40	300	150	140	106
SRBC03020	45	300	200	140	156
SRBC04015	40	400	150	230	106
SRBC04020	45	400	200	230	156
SRBC04025	50	400	250	230	206
SRBC05020	45	500	200	330	156
SRBC05025	50	500	250	330	206
SRBC06020	45	600	200	430	156
SRBC06025	50	600	250	430	206
SRBC06030	55	600	300	430	256
SRBC08020	45	800	200	630	156
SRBC08025	50	800	250	630	206
SRBC08030	55	800	300	630	256
SRBC08040	65	800	400	630	356
SRBC10030	65	1000	300	840	223
SRBC10040	75	1000	400	840	323
SRBC12030	65	1200	300	1040	223
SRBC12040	75	1200	400	1040	323

General purpose enclosures technical details

SR Basic - Dimensions



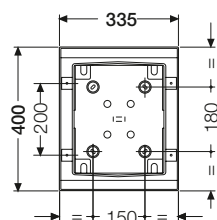
05 Accessories – Plinth

	Height mm	Width mm	Depth mm	M1 mm	M2 mm
SRBP1008030	100	800	300	640	223
SRBP1008040	100	800	400	640	323
SRBP1010030	100	1000	300	840	223
SRBP1010040	100	1000	400	840	323
SRBP1012030	100	1200	300	1040	223
SRBP1012040	100	1200	400	1040	323

General purpose enclosures technical details

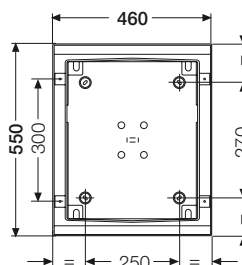
Overall dimensions – Basic configuration

Front view



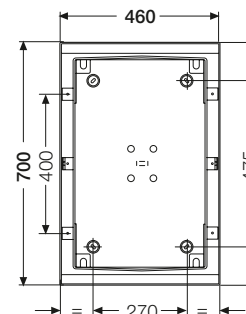
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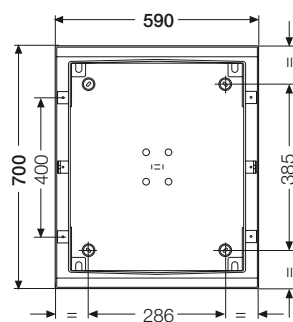
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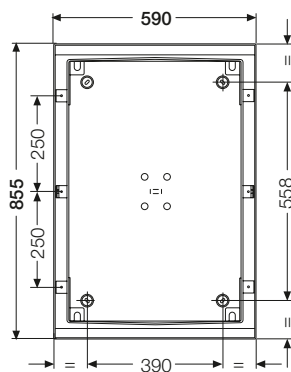
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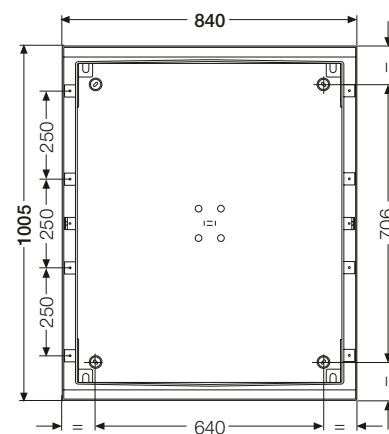
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Size 5

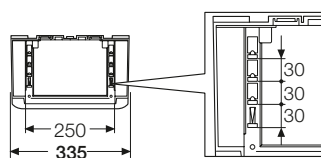
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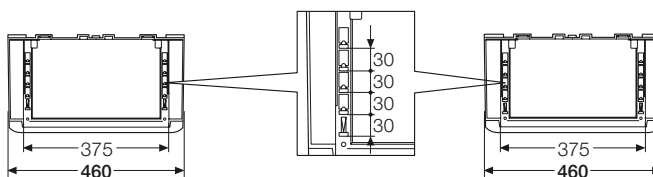
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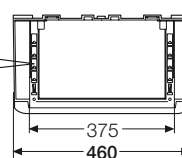
Top view



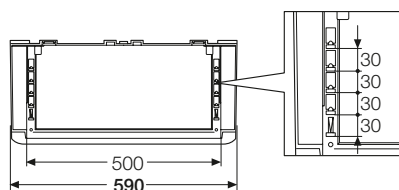
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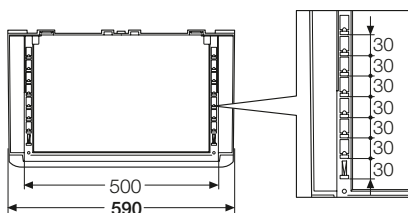
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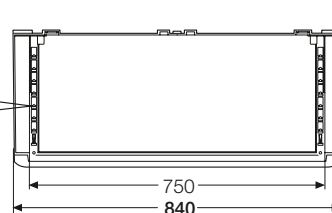
Size 3



Size 4



Size 5



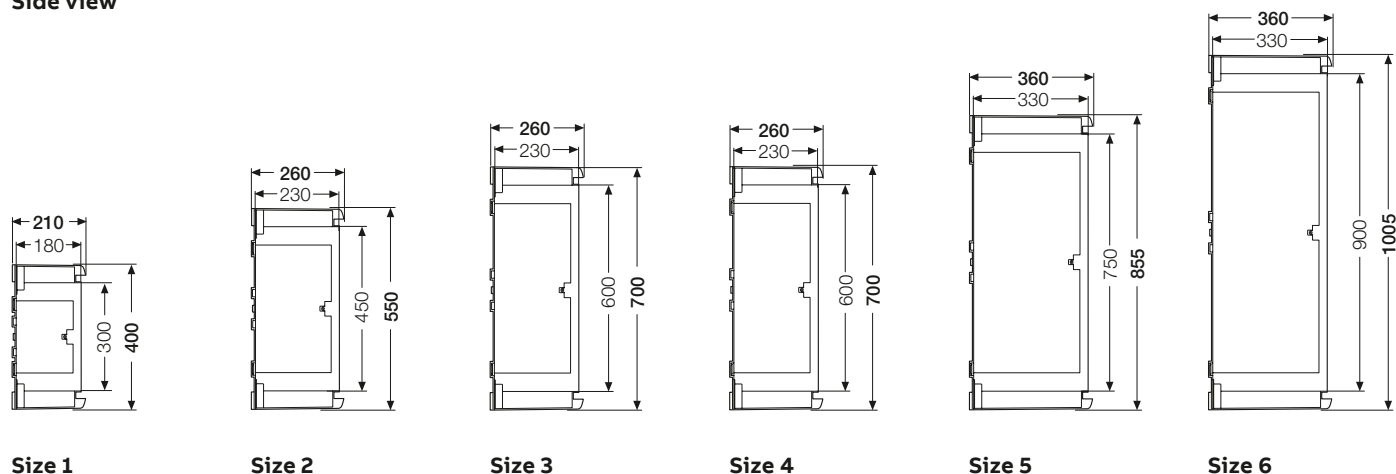
Size 6

Measurements are expressed in millimeters.

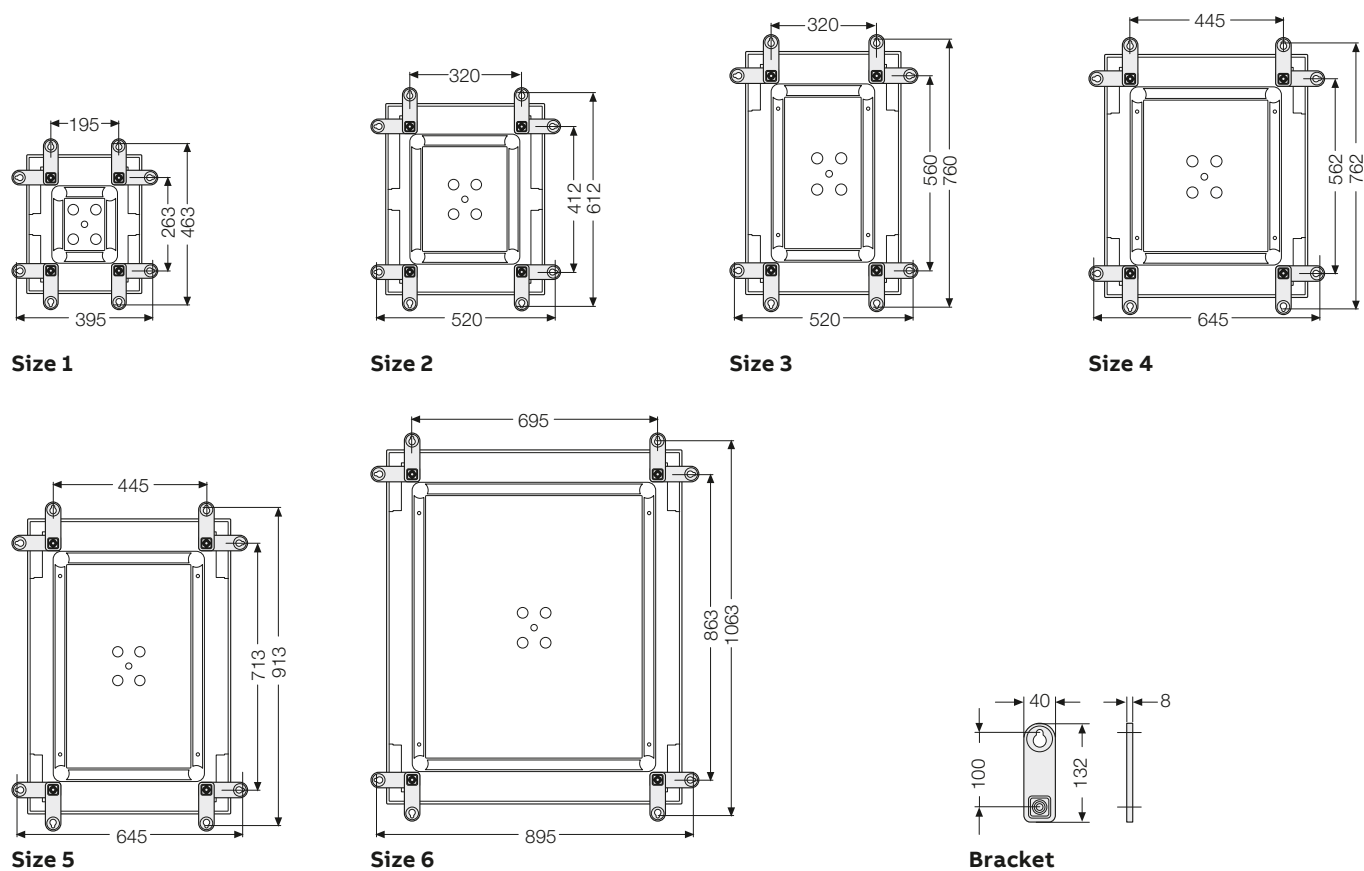
General purpose enclosures technical details

Overall dimensions – Basic configuration

Side view



Installation with plastic brackets

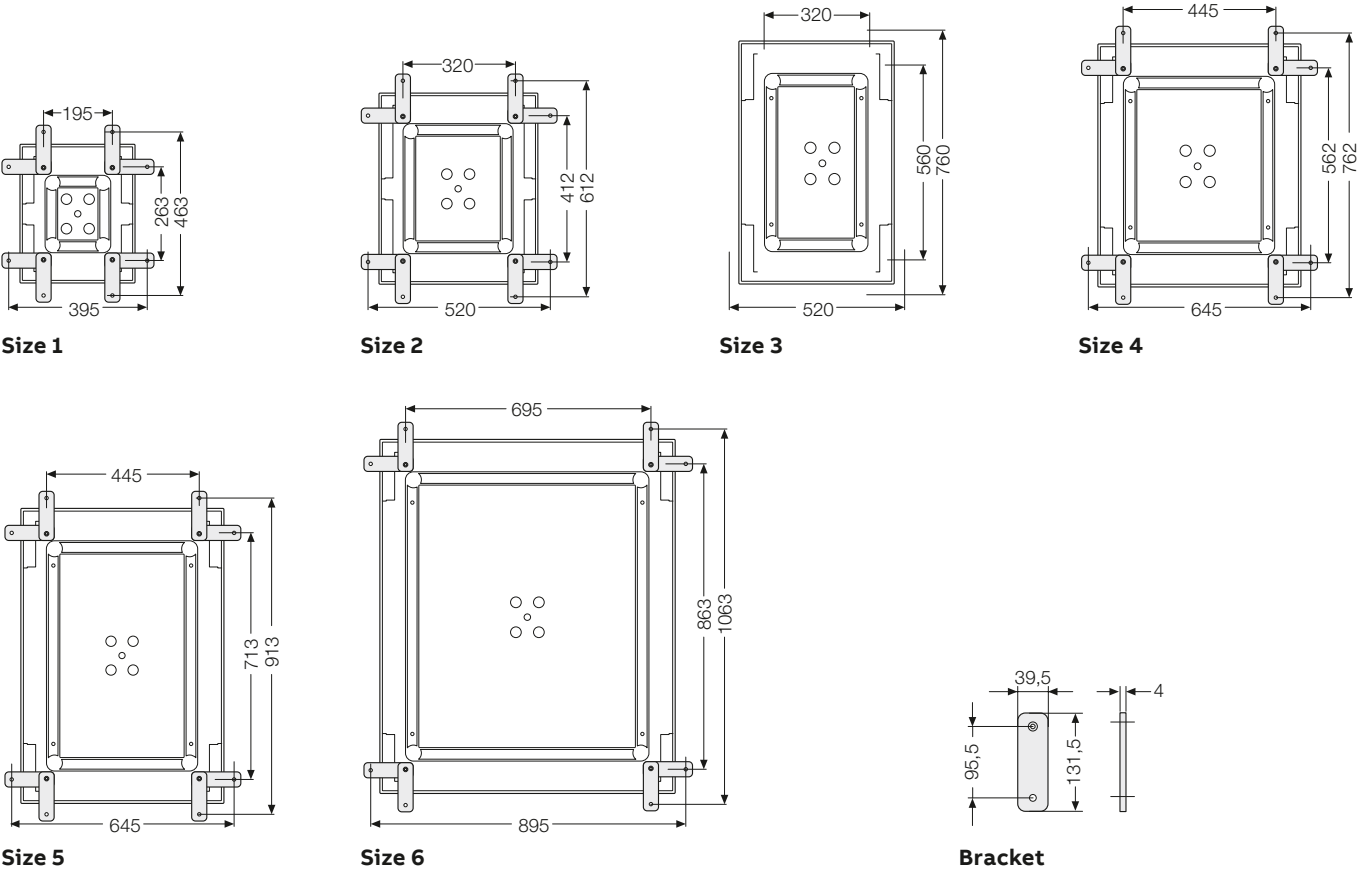


Measurements are expressed in millimeters.

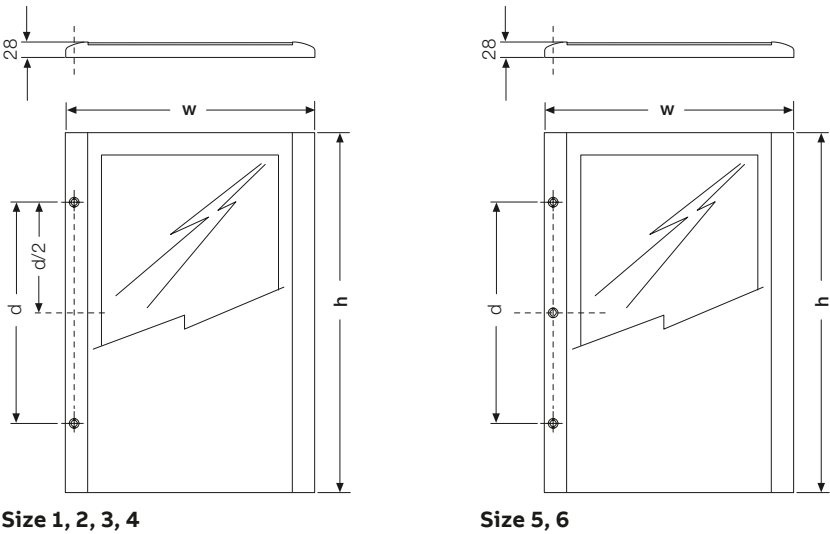
General purpose enclosures technical details

Overall dimensions – Basic configuration

Installation with stainless steel brackets



External opaque and transparent doors



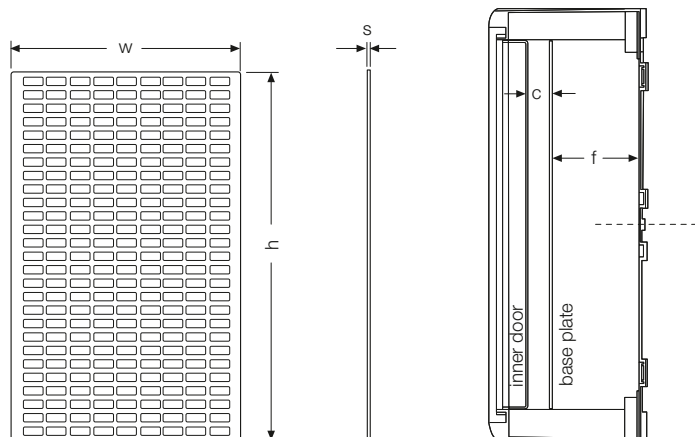
Size	w	h	Locks	d = lock distance
1	325	349	2	200
2	450	499	2	300
3	450	649	2	400
4	575	649	2	400
5	575	799	3	500
6	825	949	3	750

General purpose enclosures technical details

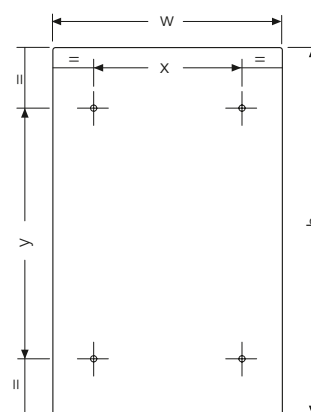
Overall dimensions – Components for automation applications

Base plate

Metal, drilled



Metal, blank and insulating



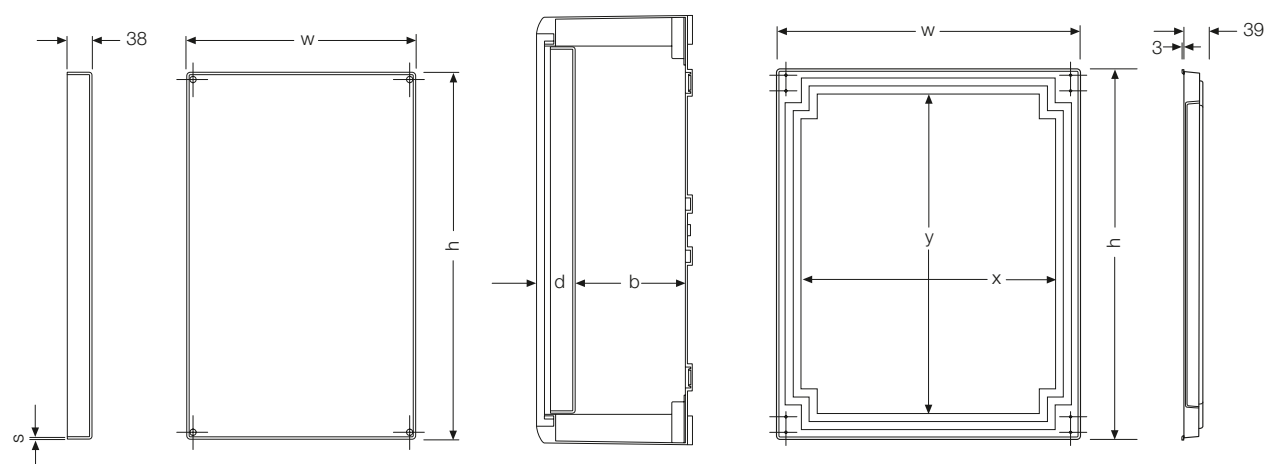
Size	w	h	Metal, blank and drilled		Insulating		f = base distance		c = distance inner door		Distance of the plate from the inner door
			s	s	MIN.	MAX.	MIN.	MAX.	MIN.	MAX.	
1	235	285	2	5	16,3	91	33,5	110	-	-	-
2	360	435	2	5	36,4	140	33,5	139	152,4	152,4	152,4
3	360	585	2	5	36,4	140	33,5	139	152,4	152,4	152,4
4	485	585	2	5	36,4	140	33,5	139	152,4	152,4	152,4
5	485	735	2	5	47	244	33,5	228	252,0	252,0	252,0
6	735	885	2	5	47	244	33,5	228	252,0	252,0	252,0

Drilling for base mounting with code 1SL0383A00

Size	x	y
1	-	-
2	337	248
3	337	398
4	462	398
5	462	548
6	711	698

The distance of the plate from the base and inner door depends on the installation point selected for mounting the plate on the box.

Inner doors



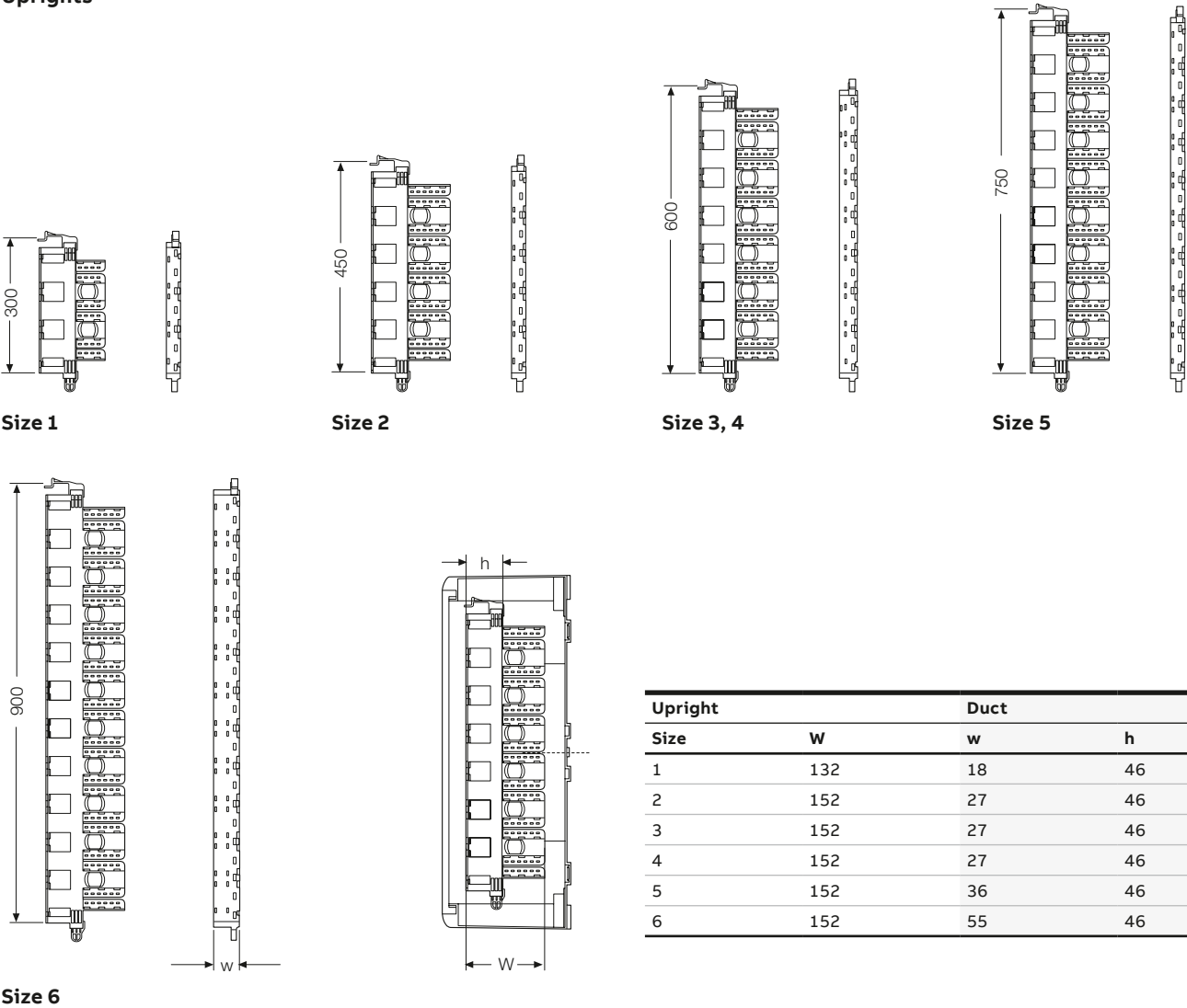
Size	w	h	s	Inner door distance		x	y
				d = door	b = base		
1	250	300	3	63	128	245	295
2	375	450	4	63	177	365	435
3	375	600	4	63	177	215	435
4	500	600	4	63	177	340	440
5	500	750	4	63	277	340	590
6	750	900	4	63	277	585	735

Measurements are expressed in millimeters.

General purpose enclosures technical details

Overall dimensions – Components for distribution and mixed applications

Uprights

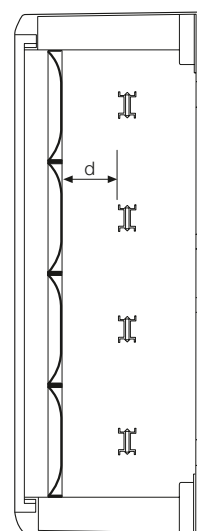
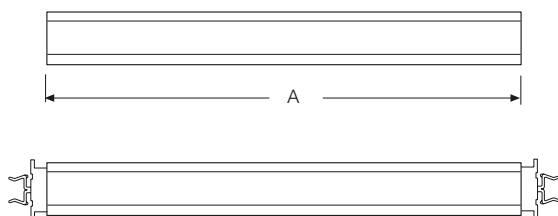
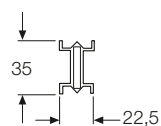


Upright		Duct	
Size	W	w	h
1	132	18	46
2	152	27	46
3	152	27	46
4	152	27	46
5	152	36	46
6	152	55	46

General purpose enclosures technical details

Overall dimensions – Components for distribution and mixed applications

DIN rails

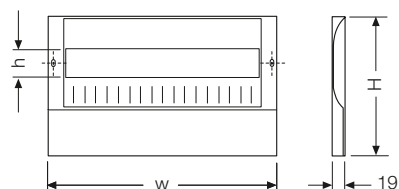


Size	A	d = distance between panel with holes/DIN rail					
		pos. 1	pos. 2	pos. 3	pos. 4	pos. 5	pos. 6
1	210	51	63,5	76	88,5	-	-
2	318	51	63,5	76	88,5	101	113,5
3	318	51	63,5	76	88,5	101	113,5
4	443	51	63,5	76	88,5	101	113,5
5	443	51	63,5	76	88,5	101	113,5
6	663	51	63,5	76	88,5	101	113,5

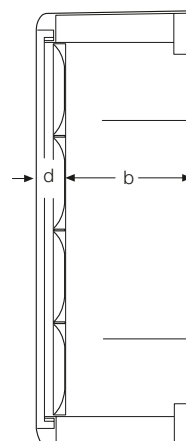
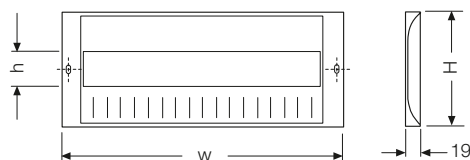
The distances of the DIN rail from the Panel depend on depth adjustment made through rail mountings.

Drilled panels

1 + 1/2 module



1 module



Drilled panel	1 mod.		1+1/2 mod.		Window	Panel distance		
Size	w	H	w	H	h	module	d = door	b = base
1	250	150	-	-	46	12	44	145
2	375	150	375	225	46	18	44	197
3	375	150	375	225	46	18	44	197
4	500	150	500	225	46	24	44	197
5	500	150	500	225	46	24	44	297
6	750	150	750	225	46	36	44	297

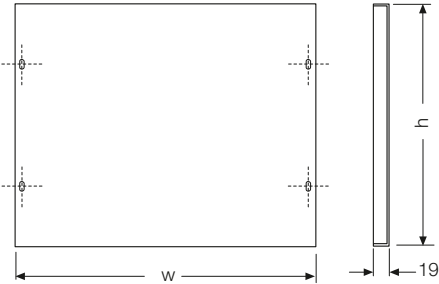
Measurements are expressed in millimeters.

General purpose enclosures technical details

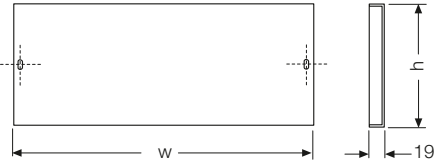
Overall dimensions – Components for distribution and mixed applications

Blank panels

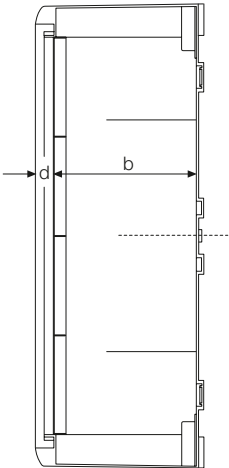
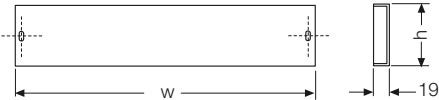
Blank panel 2 modules



Blank panel 1 module



Blank panel 1/2 module



Size	1/2 mod.		1 mod.		2 mod.		Panel distance	
	w	h	w	h	w	h	d = door	b = base
1	250	75	250	150	250	300	26,5	162
2	375	75	375	150	375	300	26,5	214
3	375	75	375	150	375	300	26,5	214
4	500	75	500	150	500	300	26,5	214
5	500	75	500	150	500	300	26,5	314
6	750	75	750	150	750	300	26,5	314

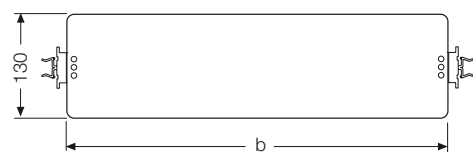
General purpose enclosures technical details

Overall dimensions – Components for distribution and mixed applications

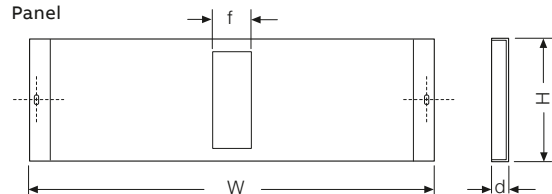
Kit for Tmax

Kit H 150

Plate

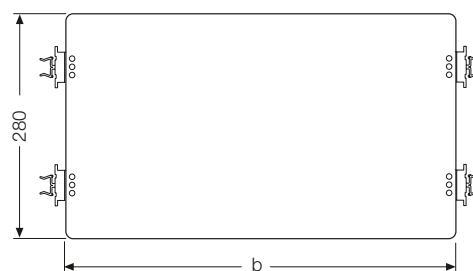


Panel

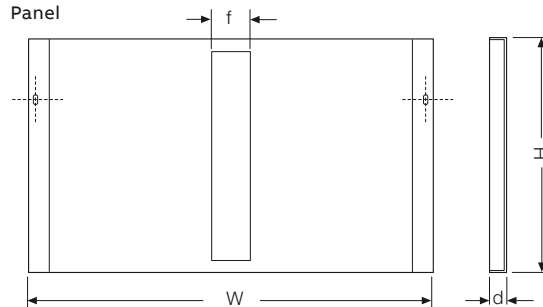


Kit H 300

Plate



Panel



kit for Tmax H 150 (available for sizes 2-6)

Size	W	H	d	f	b
2	375	150	19	46	318
3	375	150	19	46	318
4	500	150	19	46	443
5	500	150	19	46	443
6	750	150	19	46	663

kit for Tmax H 300 (available for sizes 2-6)

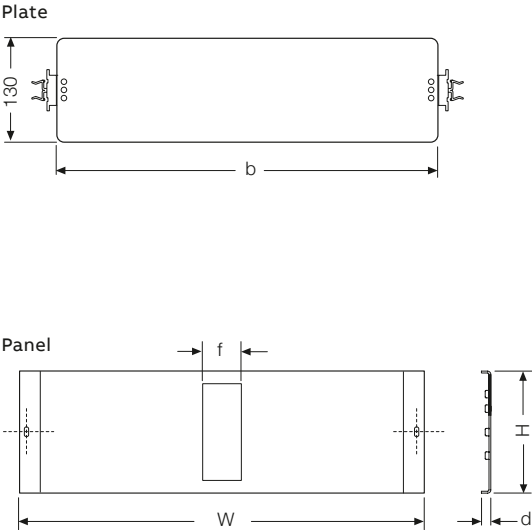
Size	W	H	d	f	b
2	375	300	19	46	318
3	375	300	19	46	318
4	500	300	19	46	443
5	500	300	19	46	443
6	750	300	19	46	663

General purpose enclosures technical details

Overall dimensions – Components for distribution and mixed applications

Kit for Tmax XT

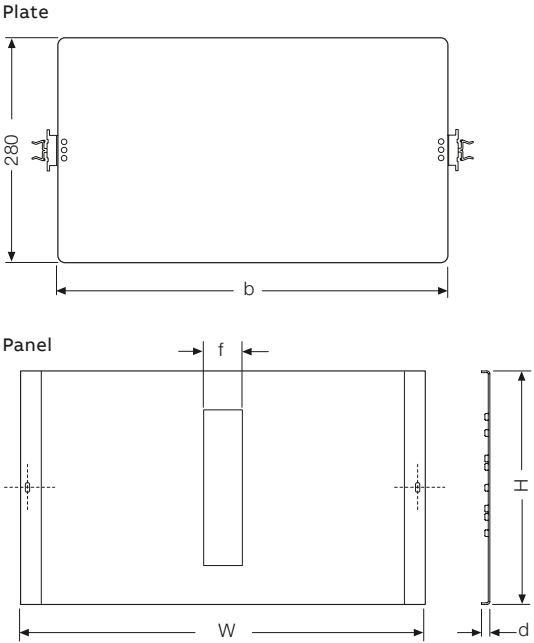
Kit H 150



kit for Tmax XT H 150 (available for sizes 2-6)

Size	W	H	d	f	b
2	375	150	10	46	318
3	375	150	10	46	318
4	500	150	10	46	443
5	500	150	10	46	443
6	750	150	10	46	663

Kit H 300



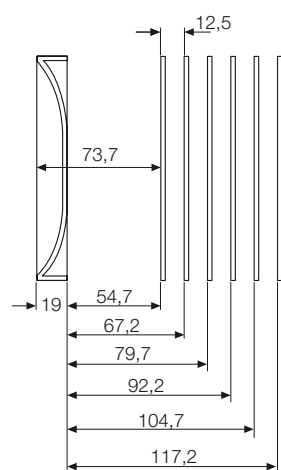
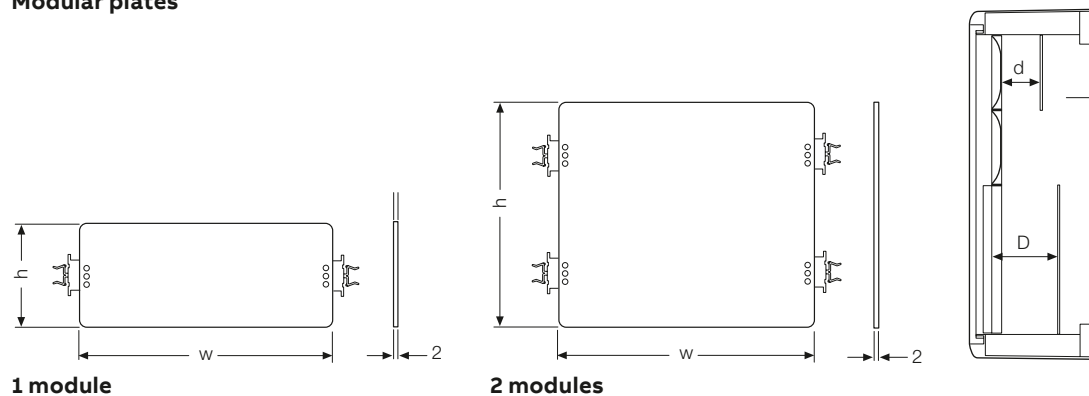
kit for Tmax XT H 300 (available for sizes 2-6)

Size	W	H	d	f	b
2	375	300	10	46	318
3	375	300	10	46	318
4	500	300	10	46	443
5	500	300	10	46	443
6	750	300	10	46	663

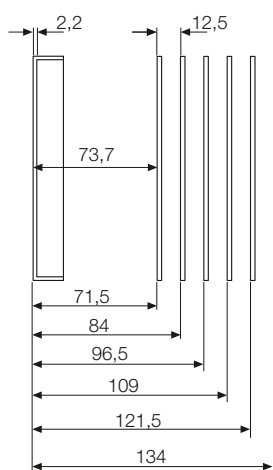
General purpose enclosures technical details

Overall dimensions – Components for distribution and mixed applications

Modular plates



Drilled panel



Blank panel

Size	1 module		2 modules	
	w	h	w	h
1	210	130	-	-
2	318	130	318	280
3	318	130	318	280
4	443	130	443	280
5	443	130	443	280
6	663	130	663	280

D = distance blank panel/plate						
pos. 1	pos. 2	pos. 3	pos. 4	pos. 5	pos. 6	
71,5	84	96,5	109	-	-	
71,5	84	96,5	109	121,5	134	
71,5	84	96,5	109	121,5	134	
71,5	84	96,5	109	121,5	134	
71,5	84	96,5	109	121,5	134	
71,5	84	96,5	109	121,5	134	

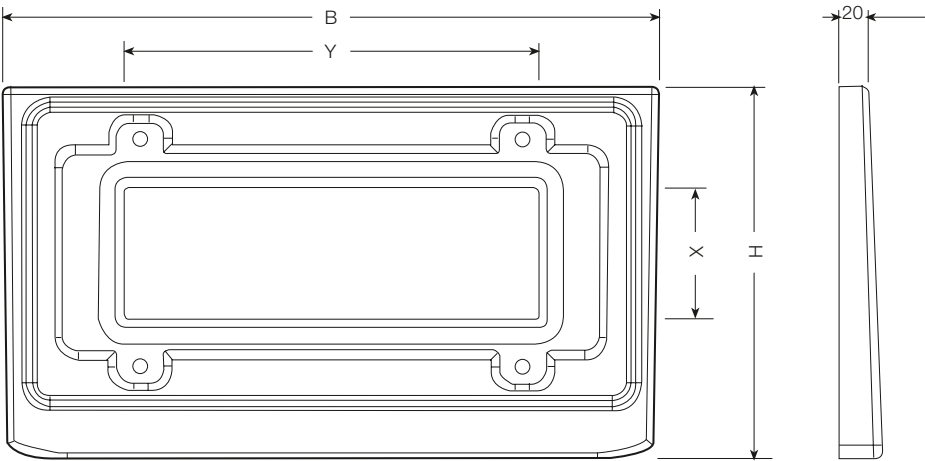
d = distance drilled panel/plate						
pos. 1	pos. 2	pos. 3	pos. 4	pos. 5	pos. 6	
54,7	67,2	79,7	92,2	-	-	
54,7	67,2	79,7	92,2	104,7	117,2	
54,7	67,2	79,7	92,2	104,7	117,2	
54,7	67,2	79,7	92,2	104,7	117,2	
54,7	67,2	79,7	92,2	104,7	117,2	
54,7	67,2	79,7	92,2	104,7	117,2	
54,7	67,2	79,7	92,2	104,7	117,2	

The distance of the panels from the modular plates depends on the depth at which the DIN rail is regulated by using fixing devices.

General purpose enclosures technical details

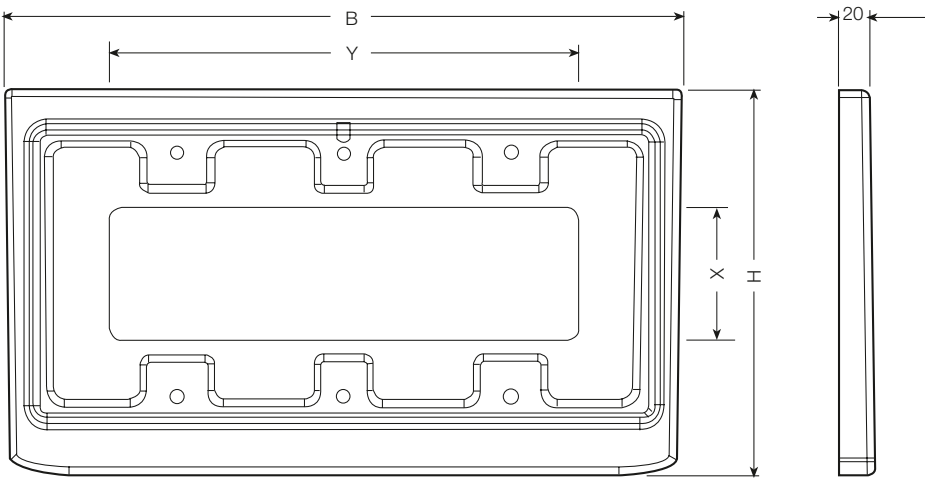
Overall dimensions – Components for distribution and mixed applications

Coupling kit



Size	B	H	X	Y
1	-	-	-	-
2	455	258	90	286
3	455	258	90	286
4	583	260	90	412
5	583	360	190	412
6	834	360	190	662

Bottom base H 30

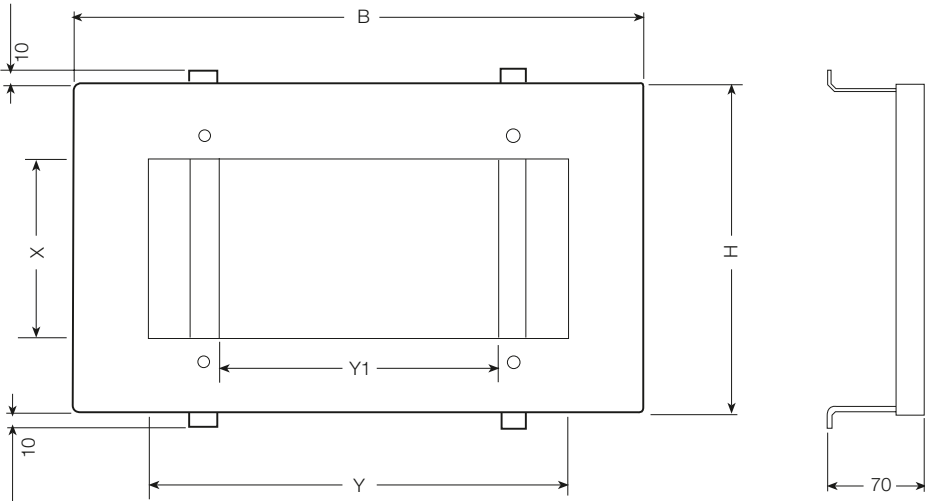


Size	B	H	X	Y
1	-	-	-	-
2	458	260	91	316
3	458	260	91	316
4	583	260	91	440
5	590	366	164	400
6	840	366	164	640

General purpose enclosures technical details

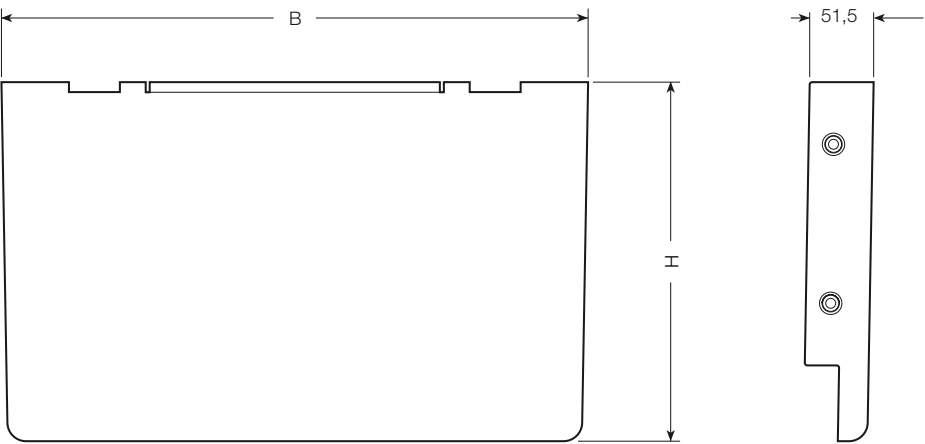
Overall dimensions – Components for distribution and mixed applications

Fixed frame



Size	B	H	X	Y	Y1
1	-	-	-	-	-
2	415	240	130	305	205
3	415	240	130	305	205
4	540	240	130	430	330
5	584	330	210	480	280
6	834	330	210	730	530

Integral cover



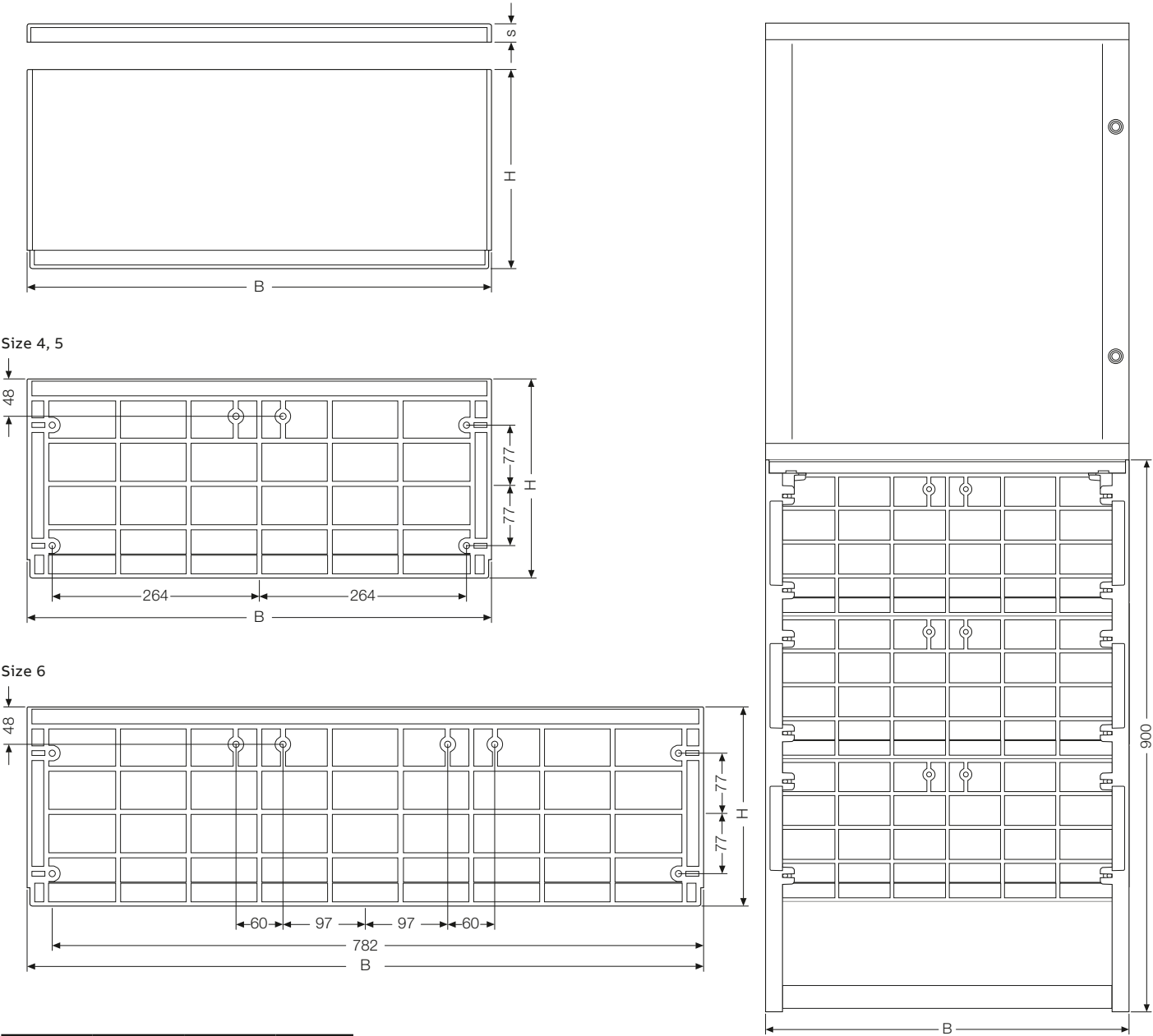
Size	B	H
1	347	238
2	472	289
3	472	289
4	600	289
5	604	390
6	854	390

General purpose enclosures technical details

Overall dimensions – Components for distribution and mixed applications

Pedestal

Front view

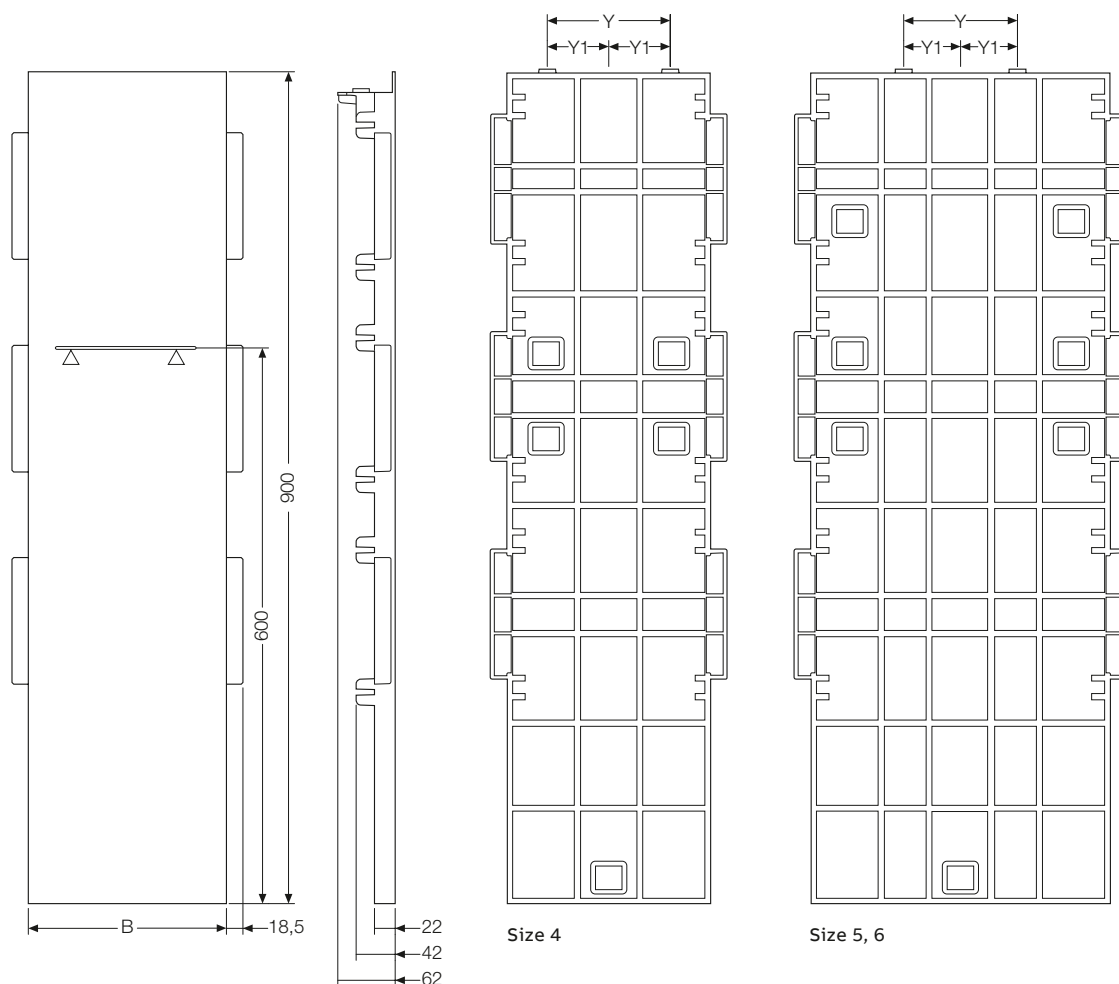


Size	B	H	s
4	592	254	28
5	592	254	28
6	846	254	28

General purpose enclosures technical details

Overall dimensions – Components for distribution and mixed applications

Side view

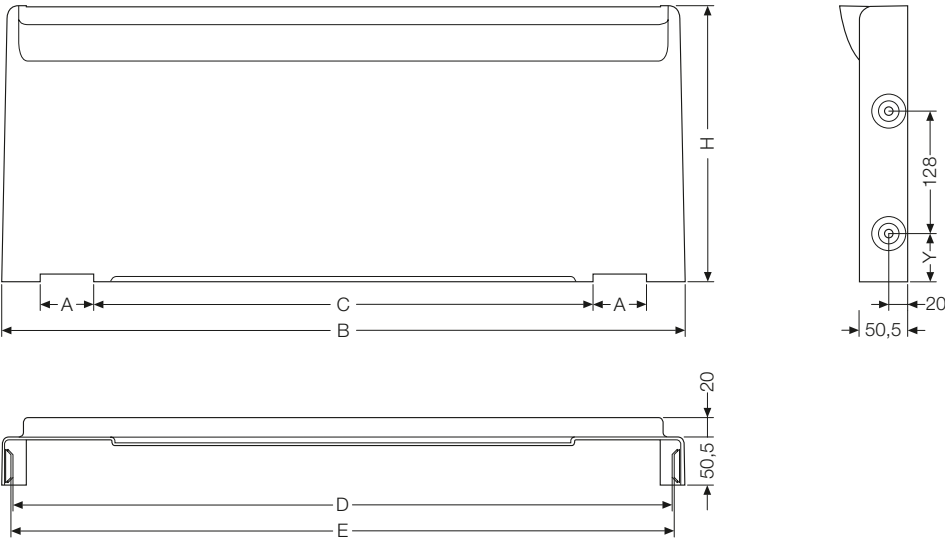


Size	B	Y	Y1
4	213	130	65
5	313	120	60
6	313	120	60

General purpose enclosures technical details

Overall dimensions – Components for distribution and mixed applications

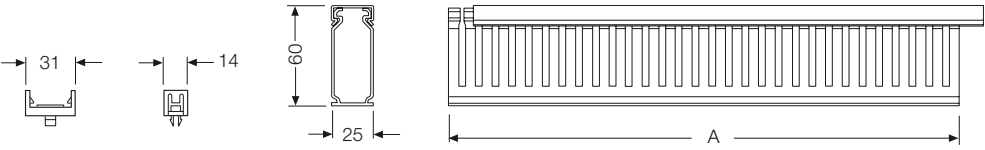
Horizontal Gemini kit



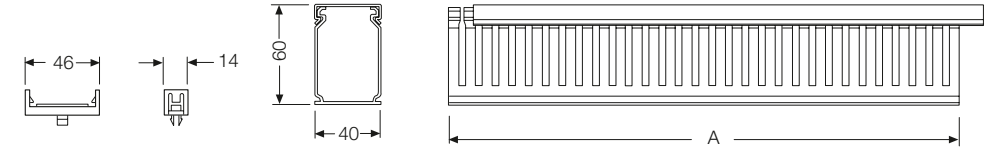
Size	A	B	C	H	Y	D	E
3	56	715,6	523	288	51	692	696
4	56	715,6	523	288	51	692	696
5	60	870	660	388	151	844	848
6	60	1021	810	388	153	994	998

Wiring kit

Duct 25x60 mm



Duct 40x60 mm

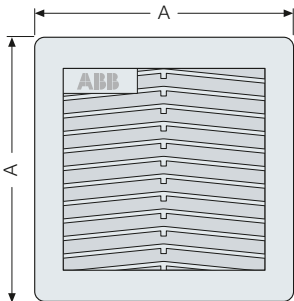


Size	A
1	210
2	318
3	318
4	443
5	443
6	663

General purpose enclosures technical details

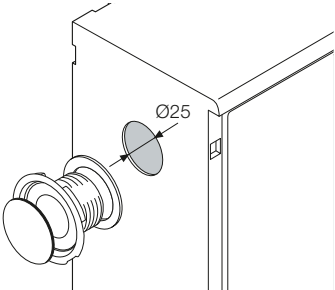
Overall dimensions – Components for distribution and mixed applications

Ventilation kit

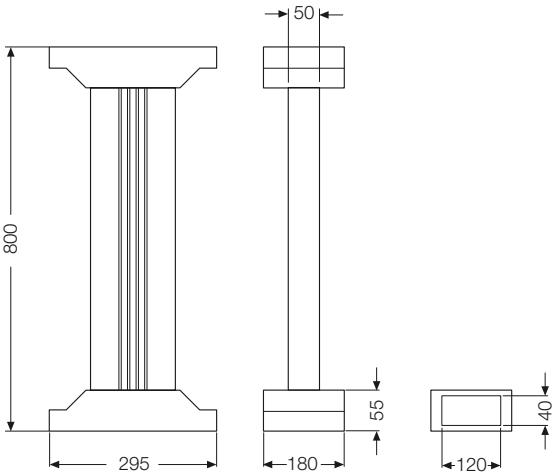


Code	A
EN0105K	105
EN0150K	150
EN0204K	204

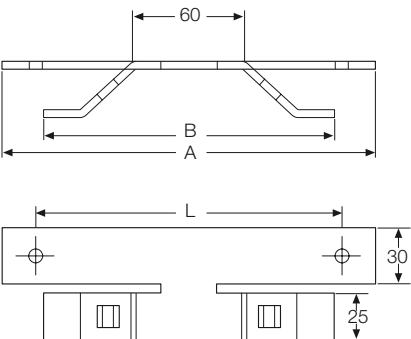
Anti-condensation kit



Floor pedestals



Pole installation kit



Size	A	B	L
1	232	206	196
2	358	332	320
3	358	332	320
4	483	457	447
5	483	457	447
6	733	707	697

Note: minimum pole section = 150 mm



Notes

A series of horizontal lines for taking notes.