

Standard enclosures

Series CA (Aluminium)

CA enclosures from BERNSTEIN are made of aluminium alloys with copper, silicon, iron and manganese. These elements produce various different properties of the enclosure material. For example, by using copper, the strength is increased while silicon promotes corrosion resistance. Iron ensures a higher conductivity, which is a great advantage especially in the electrical sector.

Further positive properties of aluminium alloys are temperature resistance, good thermal conductivity, very good shielding properties and good coating possibilities.

The BERNSTEIN CA series enclosures are manufactured by die casting. As standard, the aluminium enclosures are powder-coated in RAL 7001 in our in-house powder coating plant. However, should a customer make a special request, the colours of the RAL table and powder coatings are available for applications with increased requirements.

BERNSTEIN CA enclosures are supplied with a polyurethane seal in the cover. Alternative seals are available for special applications in high temperature ranges and those involving chemical contact.

There are earthing screws in the cover and lower part to accommodate protective conductors.

The cover screws of the enclosures are made of stainless steel and cannot be lost thanks to a self-locking mechanism integrated in the cover.

The fixing bars or earthing sockets in the enclosure must be used for mounting and fastening built-in components.

Further versions of the BERNSTEIN CA enclosure are, for example, cULus- and Ex-U-certified enclosures.


Exe- and Exi-enclosures with ATEX/IECEx approval are also possible according to customer specifications.



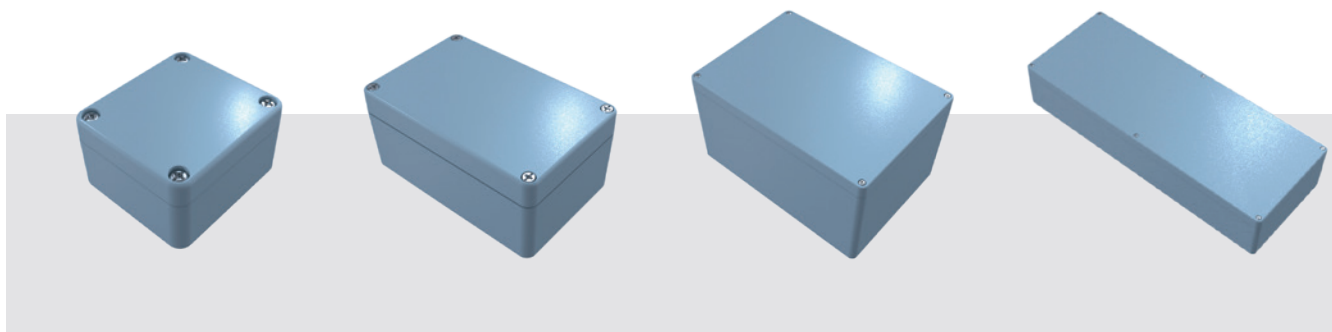
Series CA

Technical data

Standard delivery for the following applications


Specification	Value	according to standard	Note
Materials			
Enclosure	Die-cast aluminium		
Screws	A2		
Seal	PUR (Polyurethane)		Colour: black grey 2K polyurethane foam seal
Powder coating	RAL 7001		silver grey
Protection classes			
IP-Code	IP66/67	DIN EN 60529	
IK-Code	IK08	IEC 62262	
Electrical properties			
Protection class	I	EN 61140 / VDE 0140-1	⚡ Protection by protective conductor
Rated voltage	max. 1000 V (AC) max. 1500 V (DC)		
Chemical properties			
Corrosion resistance	Level A	DIN EN 62208/9.13.2.1	IEC 60068-2-30 and IEC 60068-2-11
Corrosion resistance	Level B	DIN EN 62208/9.13.2.2	IEC 60068-2-30 and IEC 60068-2-11
Toxic behaviour	Halogen free		
Further information			
Product standard	Yes	DIN EN 62208	Empty enclosure for low-voltage switchgear combinations
Conformities			
RoHs	conformal	Directive 2011/65/EU	
CE-label	conformal	EG-No. 765/2008	
Low Voltage Directive No.:	2014/35/EU		
Further versions (the following information is not a standard)			
Approvals			
	see table	UL508A / C22.2	Typ 1, 4, 4x, 12, 13
Enclosure incl. seals			
PUR-seal (standard)	-30°C to +80°C		with standard coating
CR-seal	-30°C to +80°C		with standard coating possible
Silicone foam seal	-60°C to +130°C		without standard coating possible
Silicone full seal	-60°C to +200°C		without standard coating possible
EPDM-seal	-35°C to +100°C		without standard coating possible
HF/EMC-seal	-55°C to +125°C		without standard coating possible

Detailed information on the respective data sheet



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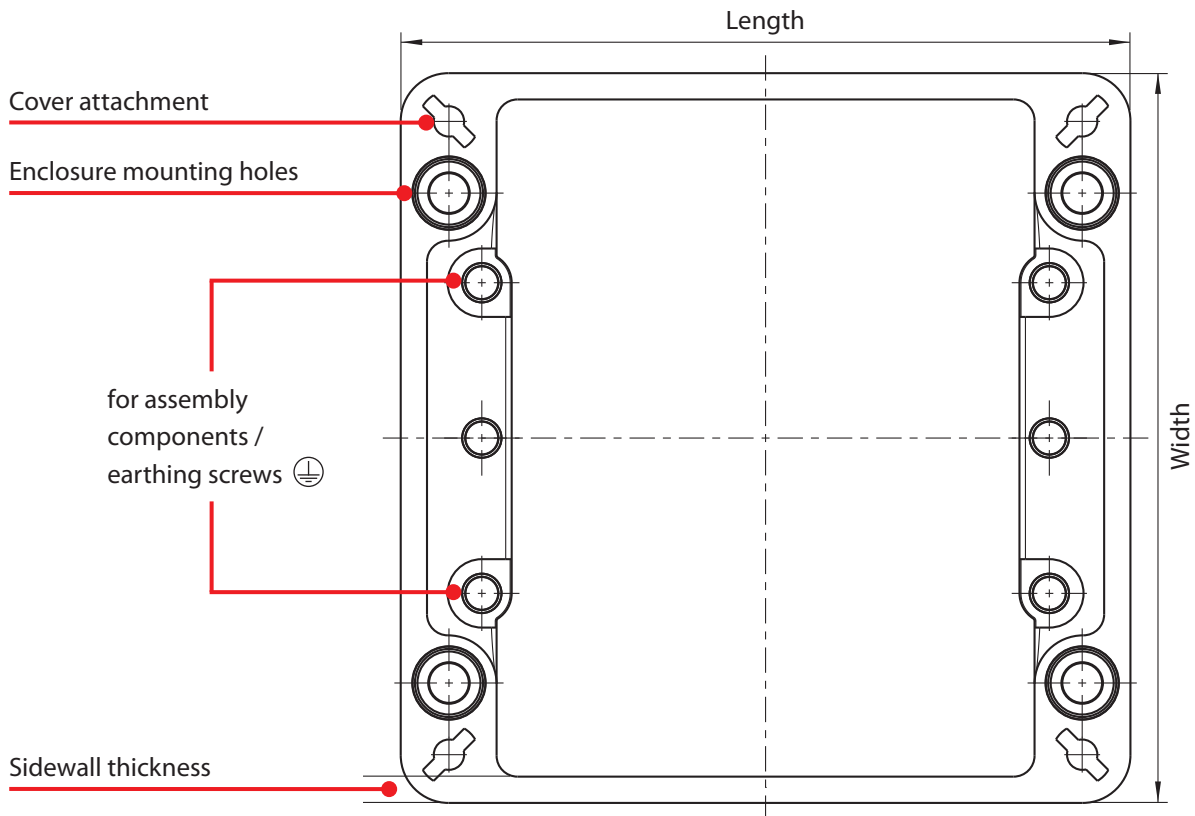
Technical dimensions

Enclosure category / Article number			External dimensions [mm]			approx. wall thicknesses [mm]			Number of cover screws
Standard version			Length	Width	Height incl. cover	Side walls min. dimension	Bottom wall	Cover wall	
CA-020	1020000000	1020004000	50	45	30	2.5	3	2	2
CA-060	1060000000	1060004000	58	64	36	3.5	3.5	3	4
CA-080	1080000000	1080004000	98	64	36	3.5	3.5	3	4
CA-100	1100000000	1100004000	150	64	36	3.5	3.5	3	4
CA-130	1130000000	1130004000	75	80	57	3.5	3.5	2.5	4
CA-140	1140000000	1140004000	75	80	57	3.5	3.5	2.5	4
CA-150	1150000000	1150004000	125	80	57	3.375	3.5	2.6	4
CA-160	1160000000	1160004000	125	80	57	3.375	3.5	2.6	4
CA-170	1170000000	1170004000	175	80	57	3.5	3.5	2.5	4
CA-180	1180000000	1180004000	175	80	57	3.5	3.5	2.5	4
CA-190	1190000000	1190004000	250	80	57	3.5	3.5	2.5	4
CA-210	1210000000	1210004000	122	122	80	4.4	4.1	3.7	4
CA-215	1210000050	1210004050	122	122	90	4.4	4.1	4	4
CA-220	1220000000	1220004000	122	122	80	4.4	4.1	3.7	4
CA-230	1230000000	1230004000	220	122	80	4.5	4	4	4
CA-235	1230000050	1230004050	220	122	90	4.5	4	4	4
CA-240	1240000000	1240004000	220	122	80	4.5	4	4	4
CA-250	1250000000	1250004000	360	122	80	4.4	4.1	3.7	4
CA-270	1270000000	1270004000	160	160	90	4.15	4.1	3.7	4
CA-280	1280000000	1280004000	160	160	90	4.15	4.1	3.7	4
CA-290	1290000000	1290004000	260	160	90	4.25	4	4	4
CA-300	1300000000	1300004000	260	160	90	4.25	4	4	4
CA-310	1310000000	1310004000	360	160	90	4.15	4.1	3.7	4
CA-330	1330000000	1330004000	560	160	90	4.1	4	4	6
CA-350	1350000000	1350004000	200	230	110	4.4	4.1	4.1	4
CA-360	1360000000	1360004000	200	230	180	4.4	4.5	3.7	4
CA-370	1370000000	1370004000	280	230	110	4.4	4.1	3.7	4
CA-380	1380000000	1380004000	330	230	110	4.4	4.1	3.7	4
CA-390	1390000000	1390004000	330	230	180	4.4	4.5	3.7	4
CA-400	1400000000	1400004000	400	230	110	4.4	4.1	3.7	4
CA-420	1420000000	1420004000	600	230	110	3.7	4	4	6
CA-450	1450000000	1450004000	402.5	310	110	5.1	5.4	3.7	4
CA-460	1460000000	1460004000	402.5	310	180	5.1	5.4	3.7	4
CA-470	1470000000	1470004000	600	310	110	5.5	6	4	6
CA-480	1480000000	1480004000	600	310	180	5.5	4	4	6

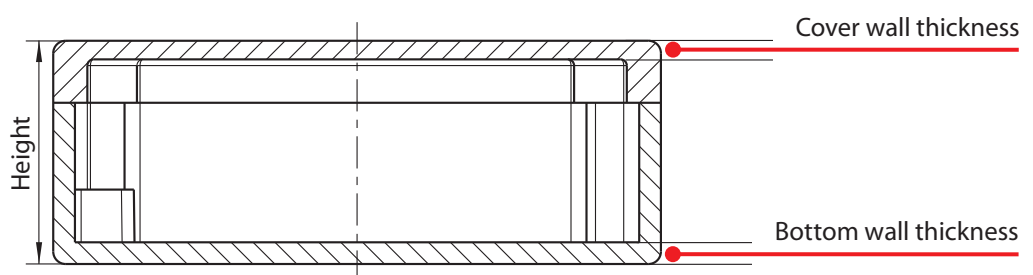
Series CA

Technical drawings

Top view



Side view



Detailed drawings of the individual enclosures can be found
at www.bernstein.eu/produkte/gehaeuseteknik