

Standard enclosures

Series CT (Polycarbonate and ABS)

The BERNSTEIN CT series enclosures are made of ABS and polycarbonate (PC), are thermoplastics and are manufactured by injection moulding. The plastic ABS is characterized by low weight, high impact strength, scratch resistance, chemical resistance and good insulation properties. Polycarbonate has higher strength, stiffness than ABS and good insulating properties. The enclosures of the CT series are particularly suitable for encapsulating electrical and electronic components as well as complete small controllers. All enclosures are also available with a transparent polycarbonate cover. As standard, the enclosures are supplied with a PUR seal in the cover to ensure compliance with the degree of protection.

The plastic enclosures at the bottom of the lower parts are equipped with fastening cams for fastening built-in components. With the enclosed self-tapping fixing screws, fixtures can be attached easily and flexibly.

As standard, the BERNSTEIN CT series enclosures are supplied with the quick-release fastener developed and patented by BERNSTEIN. The enclosed quick-release fastener can be simply pressed into the cover and it then holds itself in place. It is made of stainless steel.

BERNSTEIN plastic enclosures made of polycarbonate and ABS are manufactured in RAL 7035 (light grey) as standard. It is, of course, possible to colour the enclosures to customer specifications in the colours of the RAL table.



The polycarbonate enclosures from BERNSTEIN can be ordered in a cULus version.



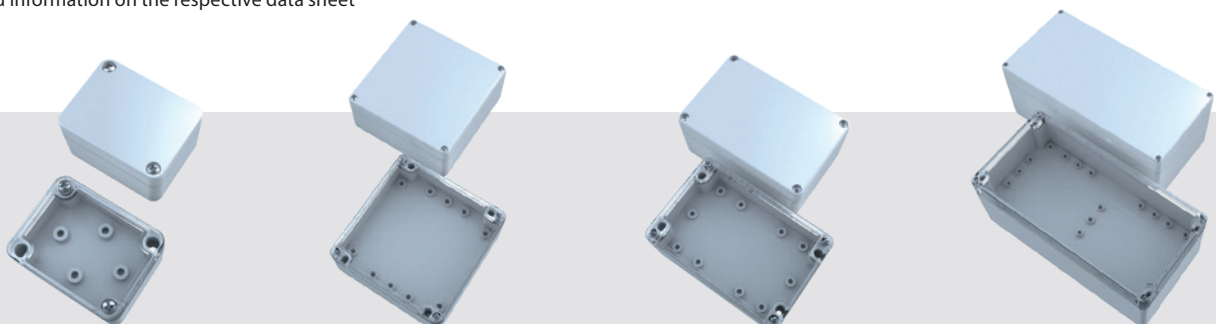
Series CT

Technical data

Standard delivery for the following applications



Specification	Value Polycarbonate	Value ABS	according to standard	Note
Materials				
Enclosure	Polycarbonate (PC)	ABS		similar to RAL 7035 light grey (optional transparent cover)
Quick-release fastener	A2	A2		
Seal	PUR (Polyurethane)	PUR (Polyurethane)		2K polyurethane foam seal CT 50/52 = EPDM-seal
Protection classes				
IP-Code	IP65	IP65	DIN EN 60529	CT 50/52
	IP66	IP66	DIN EN 60529	CT 54-91
IK-Code	IK06	IK06	IEC 62262	CT 50/52
	IK07	IK07	IEC 62262	CT 54-91
Electrical properties				
Protection class	II	II	EN 61140 / VDE 0140-1	 Protection by double or reinforced insulation
Rated voltage	max. 1000 V (AC)	max. 1000 V (AC)		maximum layout
Surface resistance	10 ¹⁵ Ohm	10 ¹³ Ohm	IEC 60093	transparent cover (PC) = 10 ¹⁶ Ohm
Dielectric strength	33 kV/mm	17 kV/mm	IEC 60243-1	transparent cover (PC) = 25 kV/mm
Chemical properties				
Toxic behaviour	Halogen free	Halogen free		
Thermal properties				
Flammability	V-2	HB	UL 94	Similar in content to EC60695-11-10 and EC60695-11-20
Glow wire test	960°C; 2 mm	650°C	IEC 60695-2-12	transparent cover (PC) = 850°C; 1-2 mm
Glow wire test	960°C; 1 mm	675°C	IEC 60695-2-12	transparent cover (PC) = 800°C; 3 mm
Further information				
Product standard	Yes	Yes	DIN EN 62208	Empty enclosure for low-voltage switchgear combinations
Conformities				
RoHs	conformal	conformal	Directive 2011/65/EU	
CE-Label	conformal	conformal	EG-No. 765/2008	
Low Voltage Directive No.:	2014/35/EU	2014/35/EU		
Further versions (the following information is not standard)				
Approvals				
	see table	—	UL508A / C22.2	Typ 1, 4, 4x indoor
Enclosure incl. seals				
PUR-Seal (Standard)	-40°C to +100°C	-40°C to +80°C		
CR-seal	-30°C to +80°C	-30°C to +80°C		
Silicone foam seal	-40°C to +100°C	-40°C to +80°C		
Silicone full seal	-40°C to +100°C	-40°C to +80°C		
EPDM-seal	-35°C to +100°C	-35°C to +80°C		
HF/EMC-seal	-40°C to +100°C	-40°C to +80°C		

Detailed information on the respective data sheet



Series CT (Polycarbonate and ABS)

Technical dimensions

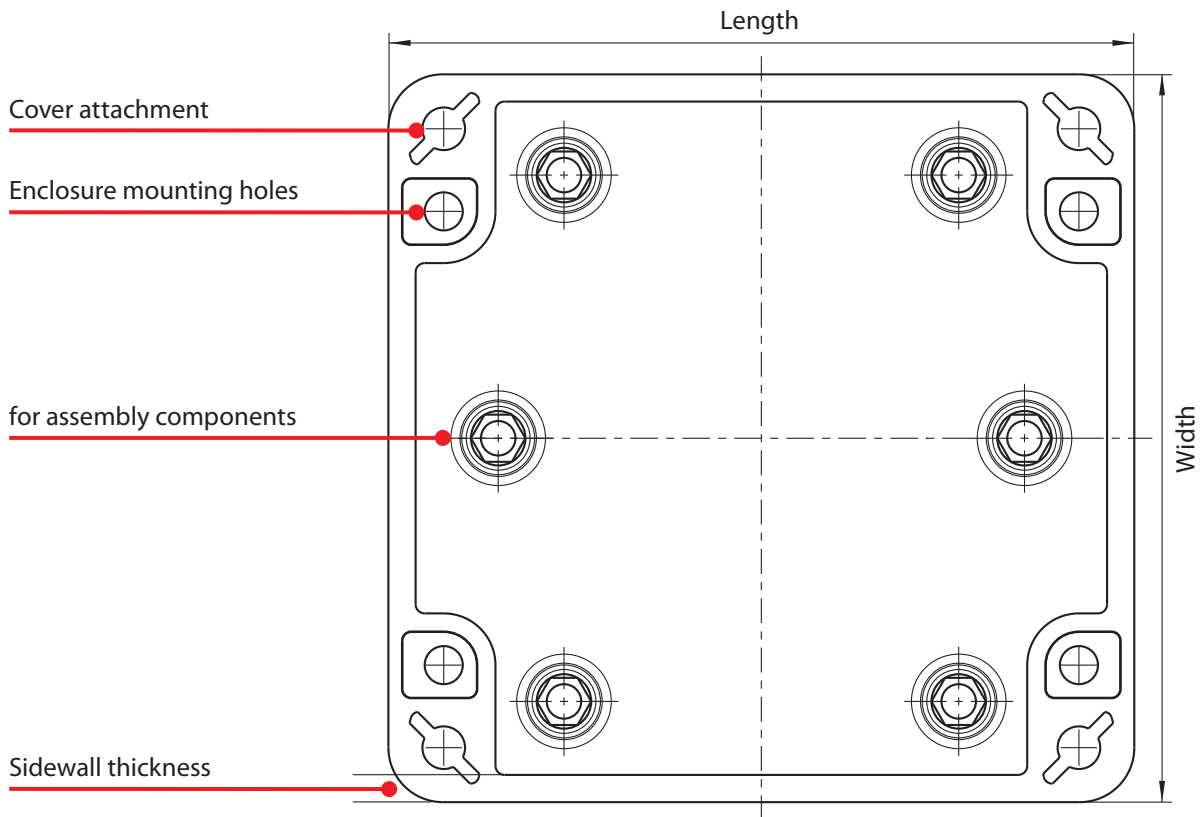
Enclosure category / Article number					External dimensions [mm]			approx. wall thicknesses [mm]			Number of cover screws
PC	PC + transp. cover PC	 PC	 PC + transp. cover PC	Length	Width	Height incl. cover	Side walls min. dimension	Bottom wall	Cover wall		
CT-501	2500000000	2501000000	2500004000	2501004000	52	50	35	2,5	2,25	2,25	2
CT-521	2520000000	2521000000	2520004000	2521004000	65	50	35	2,6	2,25	2,25	2
CT-541	2540000000	2541000000	2540004000	2541004000	82	80	55	3	3,5	3,5	4
CT-561	2560000000	2561000000	2560004000	2561004000	82	80	85	3	2,5	3,5	4
CT-581	2580000000	2581000000	2580004000	2581004000	120	80	55	3	3,5	3,5	4
CT-601	2600000000	2601000000	2600004000	2601004000	120	80	85	3	3,5	3,5	4
CT-621	2620000000	2621000000	2620004000	2621004000	160	80	55	3,1	3	3,5	4
CT-641	2640000000	2641000000	2640004000	2641004000	160	80	85	3,05	3	3,5	4
CT-661	2660000000	2661000000	2660004000	2661004000	122	120	55	3	3,5	3,5	4
CT-681	2680000000	2681000000	2680004000	2681004000	122	120	85	3	3,5	3,5	4
CT-721	2720000000	2721000000	2720004000	2721004000	160	120	90	3	3	2,5	4
CT-761	2760000000	2761000000	2760004000	2761004000	200	120	75	3	3,5	3,5	4
CT-781	2780000000	2781000000	2780004000	2781004000	200	120	90	3	3,5	2,5	4
CT-801	2800000000	2801000000	2800004000	2801004000	240	120	100	3	3,5	3,5	4
CT-821	2820000000	2821000000	2820004000	2821004000	200	150	75	3	3,5	3,5	4
CT-841	2840000000	2841000000	2840004000	2841004000	240	160	90	3,1	3,5	3,5	6
CT-861	2860000000	2861000000	2860004000	2861004000	240	160	120	3,1	3,5	3,5	6
CT-871	2870000000	2871000000	2870004000	2871004000	300	230	86	3	3	3	6
CT-881	2880000000	2881000000	2880004000	2881004000	360	200	150	4	3,5	3,5	6
CT-891	2890000000	2891000000	2890004000	2891004000	300	230	110	3	3	3	6
CT-901	2900000000	2901000000	2900004000	2901004000	250	160	90	3,1	3,5	3,5	6
CT-911	2910000000	2911000000	2910004000	2911004000	250	160	120	3,1	3,5	3,5	6

Enclosure category / Article number		External dimensions [mm]			approx. wall thicknesses [mm]			Number of cover screws	
ABS	ABS + transp. cover PC	Length	Width	Height incl. cover	Side walls min. dimension	Bottom wall	Cover wall		
CT-502	3500000000	3501000000	52	50	35	2,5	2,25	2,25	2
CT-522	3520000000	3521000000	65	50	35	2,6	2,25	2,25	2
CT-542	3540000000	3541000000	82	80	55	3	3,5	3,5	4
CT-562	3560000000	3561000000	82	80	85	3	2,5	3,5	4
CT-582	3580000000	3581000000	120	80	55	3	3,5	3,5	4
CT-602	3600000000	3601000000	120	80	85	3	3,5	3,5	4
CT-622	3620000000	3621000000	160	80	55	3,1	3	3,5	4
CT-642	3640000000	3641000000	160	80	85	3,05	3	3,5	4
CT-662	3660000000	3661000000	122	120	55	3	3,5	3,5	4
CT-682	3680000000	3681000000	122	120	85	3	3,5	3,5	4
CT-722	3720000000	3721000000	160	120	90	3	3	2,5	4
CT-762	3760000000	3761000000	200	120	75	3	3,5	3,5	4
CT-782	3780000000	3781000000	200	120	90	3	3,5	2,5	4
CT-802	3800000000	3801000000	240	120	100	3	3,5	3,5	4
CT-822	3820000000	3821000000	200	150	75	3	3,5	3,5	4
CT-842	3840000000	3841000000	240	160	90	3,1	3,5	3,5	6
CT-862	3860000000	3861000000	240	160	120	3,1	3,5	3,5	6
CT-872	3870000000	3871000000	300	230	86	3	3	3	6
CT-882	3880000000	3881000000	360	200	150	4	3,5	3,5	6
CT-892	3890000000	3891000000	300	230	110	3	3	3	6
CT-902	3900000000	3901000000	250	160	90	3,1	3,5	3,5	6
CT-912	3910000000	3911000000	250	160	120	3,1	3,5	3,5	6

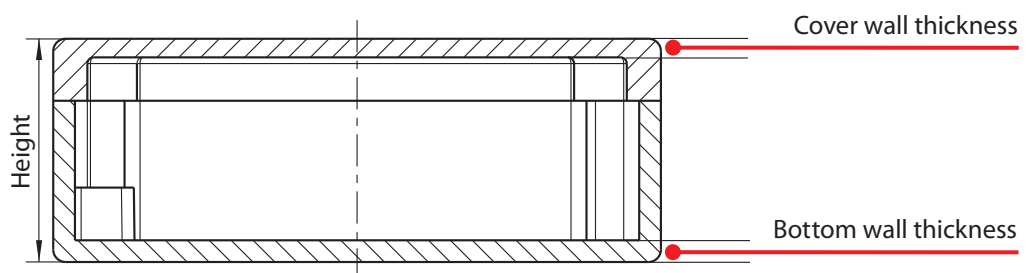
Series CT

Technical drawings

Top view



Side view



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