



Accessories for CC-Control Enclosures

Fitting any application

Profound Control



Configure your CC-3000 enclosure online at www.bernstein-ag.com

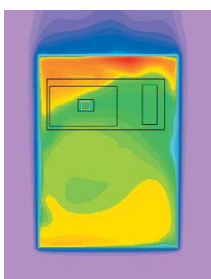
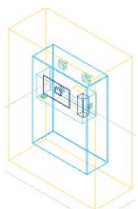
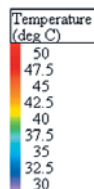
CC-3000 Lightweight Control Enclosure

The CC-3000 control enclosures from Bernstein provide a diversity of solutions to encapsulate control units as well as IPCs. Outstanding feature is thereby the passive heat dissipation along with complying with a high degree of protection and short delivery times.

- Modular aluminium enclosure concept for freely definable enclosure dimensions (recommended up to max. 600 x 600 x 255 mm W x H x D)
- Modern industrial design with similarity in style
- Delivery of customized sizes within 2 weeks possible
- Models with or without integrated handgrips
- 5 different front designs
- Different front plate built-in models (internal or external). Internal mounting supported by special 'quick installation'
- High efficient heat dissipation through single-walled profiles
- Standard degree of protection IP 65
- Internal grooves for easy mounting with spring nuts

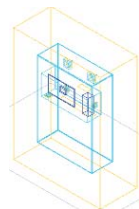
Enclosure concepts and its heat dissipation characteristics

Following simulation calculations about heat transfer are shown with reference to three different enclosure concepts. Basis of computation is an IPC encapsulated in a CC-4000 control enclosure and with 100 W heat dissipation.



Enclosure Concept 1 Average air temperature above the IPC: 48 °C

The IPC is mounted into a plain and closed CC-4000. The enclosure is circulated by air on every side. The dissipated heat is intensely concentrated in the area above the IPC because there the hot air of the IPC exits the enclosure.



Enclosure Concept 2 Average air temperature above the IPC: 45 °C

Type 1 is complemented with two inside fans, which blow the dissipated heat of the IPC cross to the back panel in order to support an even heat spread. In that way the inside temperature drops substantially. The temperature of the back panel rises slightly.



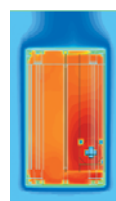
enclosure designs ...



CC-4000 Control Enclosure

The distinguished technical features of the CC-4000 control enclosures accomplish an easy and economic encapsulation especially for depth demanding industrial controls and operator panels. The CC-4000 enables an even more fine-staged heat dissipation due to its optional external finned profiles.

- Modular aluminium enclosure concept for freely definable enclosure dimensions (recommended up to max. 800 x 800 x 646 mm W x H x D)
- Modern industrial design with family similarity in style
- Direct mounting of market standard controls possible
- Different front plate fitting options
- Standard sizes for particular IPCs available
- High efficient heat dissipation due to single-walled profiles and higher flexibility in passive heat dissipation throughout optional external finned profiles
- Internally placed screw channels provide easy ways of mounting
- Standard degree of protection IP 65



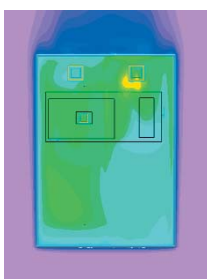
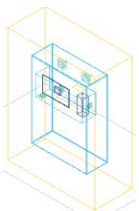
Temperature (0deg C) **Heat dissipation**

Temperature distributions. Cross sections to the left of the internal control unit fan.



Speed (m/s) **Vector depiction of the flow speeds**

The aluminum profiles in single-walled construction feature an excellent passive heat dissipation and comply with protection class IP 65. In a lot of applications active cooling devices can be done without in general. In cases increased requirements of heat dissipation the application of inside mounted and maintenance-free cooling fans is feasible.



Enclosure Concept 3 Average air temperature above the IPC: 43 °C

The back panel and the side profile with type 2 are carried out in finned version. The analysis shows an even better heat dissipation than compared with type 2. As against type 2 a measurable decline in temperature is evident.

**CD-ROM cover RAL 9006**

Aluminum interface cover, 177 x 119 x 8 mm, coated similar to RAL 9006, with quick-release lock, also available with twist lock
 Art. No.: 9806486000

**Floppy-cover RAL 9006**

120 x 92 x 8 mm
 Art. No.: 9806258000

**Front panel interfaces, metal**

Interface cover, single version, metal (plastic version available upon request), modular assembly, various snap-in inserts
 single version Art. No.: 9421283000

double version Art. No.: 9421306000

**Interface plug-ins**

2 x USB 2.0 style A with 0,7 m cable and plug
 Art. No.: 9421284000

USB 2.0 style A shielded
 Art. No.: 9421300000

grounding contact socket 250V
 Art. No.: 9421307000

1x Sub-D9 / 1xSub-D15, female connector/female connector
 Art. No.: 9421308000

1x Sub-D9 / 1xSub-D25, female connector/pin
 Art. No.: 9421310000

1x RJ45 / USB BF-A / Sub-D9
 Art. No.: 9421311000

blanking front panel flat
 Art. No.: 9421312000
 (more available upon request)

**Keyboard drawer**

With mounting bolt, without lock, IP 65 in closed condition, incl. german keyboard. Other languages and versions with lock are available
 483 x 89 x 155 mm (19"/2HE)
 Art. No.: 9806496000

**Keyboard plate**

Steel sheet coated similar RAL 9006. Processing of 2xM5 in the enclosure necessary. CC-4000 with 9806405000 requires no additional mechanical adaptation. Upon request also available in stainless steel.
 Art. No.: 9806175000

**Keyboard drawer RAL 9006**

Coated metal sheet similar RAL 9006, dimensions: 483 x 249 x 50 mm. IP 54 in open condition
 Art. No.: 9806488000



20° angled, 483 x 134 x 155 mm (19"/3HE)
 Art. No.: 9806497000

**Keyboard holder**

Individually placeable keyboard holder. Coated similar to RAL 9006. Can be stored underneath the enclosure when not in use. No mechanical adaptation of the enclosure necessary. CC-3000 without lower handle requires the adapter kit 9806489000)

straight Art. No.: 9806326000

30° Art. No.: 9806487000

Keyboard separate

84 short stroke keys, dimensions: 370 x 20 x 139 mm
 german Art. No.: 9286109000

us-english Art. No.: 9286110000

french Art. No.: 9286107000

**Integrated keyboard drawer**

We have the possibility to integrate our IP 65 keyboard drawer directly in to your customer's specific front panel, in a straight version or a 20° angled version. Please ask us about this.

**CC-handle**

Nature anodized, straight handle, aluminum
 length 140 mm Art. No.: 9808015000

length 200 mm Art. No.: 9808014900

length 350 mm Art. No.: 9808014600

**Corner-handle set**

2 pieces black plastic coated corner-handles
 Art. No.: 9806026000

**Command-handle**

Nature anodized, cranked command handle, aluminum, length 250 mm. The ergonomic design enables a very easy handling of the enclosure even with working gloves
 length 250 mm Art. No.: 9808015100

length 350 mm Art. No.: 9808015200

**Heat sink rear panel**

Manufactured according to your enclosure dimensions upon request

**Fan mounting bracket set**

2 pieces bracket for axial or radial fans, RAL 7035
 Art. No.: 9806491000

**Filter-fan set PF1000**

230 V filter-fan + exit filter 24 m³/h, IP 54, higher performance or 24 V devices available upon request
 Art. No.: 9806492000

**Inside-fan set**

24 V, 40 m³/h
 Higher performance or 230 V devices upon request
 Art. No.: 9806421000

**USB interface**

A simple USB Interface with an undetachable cover in IP 65. To be connected in a 22.5 mm plug hole in the enclosure or in the front plate.

Art. No.: 9421319000

RJ-45 interface

A simple RJ-45 Interface with an undetachable cover in IP 65. To be connected in a 22.5 mm plug hole in the enclosure or in the front plate.

Art. No.: 9806519000

Interface solutions - stay connected!

Laptops, programming devices, diagnosis devices, modems i.e. for service purpose can connect via interfaces to the fixtures in the enclosure. Simply open the clover and connect. The IP 65 degree of protection is maintained with closed cover.

**Clipboard**

For retention of e.g. manufacturing documents at the enclosure. Similar to RAL 9006 coated metal sheet. No mechanical adaptation of the enclosure necessary. (CC-3000 without lower handle requires the adapter kit 9806489000)

Art. No.: 9806388000

**Mouse pad**

Mouse pad, inclination adjustable with compartment for the mouse. Coated similar to RAL 9006. Enclosures with handles side require no mechanical adaptation

Art. No.: 9806480000

Adapter kit RAL 9006

For mounting the clipboard or keyboard holders on profiles without handles

Art. No.: 9806489000

Keyboard solutions - inputs at ease!

Input devices don't have to be in the way. Smart solutions for storage are available and feature user-friendly integration into the total enclosure design. And ergonomics are taken into account as well.

**Carrying-handle**

Black carry-handle for mobile use with small enclosures

Art. No.: 9806490000

Handle-solutions - handy!

For everybody who likes his enclosure a bit handier; Bernstein provides a variety of useful handles in its accessory programme.

**Air conditioning unit**

230 V, 320 W, L35L35,

270 x 520 x 110 mm, 13.3 kg

Art. No.: 9421279000

230 V, 400 W, L35L35

520 x 340 x 110 mm, 14.8 kg

Art. No.: 9421276000

Heat dissipation - cool box!

Heat dissipation is an important issue and we are able to provide solutions. Give us a call. We would like to advise you.

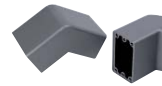
... with inte
system acco



egrated essories

Mounting solutions - docking mission possible!

If pendant, standing or mobile -
Bernstein provides the right accessory
for any application.



Console connector- set
Rigid elements to connect upper and
lower parts of a console, 2 pieces per
set, coated similar to RAL 9006
Art. No.: 9806493000



Desk-attachment single
To connect upper and lower parts of
a console with free adjustability
within 0-30°. Coated similar to RAL 7035
(Available also in RAL 9006 upon request)
Art. No.: 9808013100



**Coupling flange automotive
RAL 7035**
For easy „One-Man-Installation“ of the
control enclosure at a suspension arm
system. Coated similar to RAL 7035
Art. No.: 9806213000

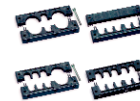


Suspension arm system covers
To cover non-used Bernstein-suspension
arm system adaptation at an enclosure.
Coated similar to RAL 9006
(Other RAL colors available upon request)
CS-80: flange size 80 mm
Art. No.: 9806499000

CS-SL/50/60: flange size 60 mm
Art. No.: 9806495000

Solutions around the cable - stay connected!

In many applications cables must be
fed into the enclosure. No matter if
solid wire or picked and packed
cable, we will assist you.



Cable duct profile
To feed cables into the enclosure
(mechanical adaptation necessary)
16/4 Art. No.: 9806501000

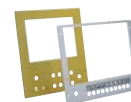
24/5 Art. No.: 9806502000

Front plate solutions - the front plate counts!

The front plate is the most impor-
tant part of the enclosure.
Everything must be perfect in style.
That's why you can rely on our service
and on our matching accessories.



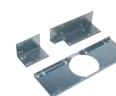
Clamp-Set (PC670/PC677)
Set of 6 clamps for direct mounting
Siemens PC 670/677
Art. No.: 9806324000



Front plate adaptation-service
We machine your front plates and back
plates. Engravings or various printing
processes are available upon request.
Just send us your technical drawing

Safety solutions - stay on the safe side!

Your safety means a lot to us.
That's why we keep all accessories
which safeguard your application.



**Corner stiffeners and suspension
arm system reinforcement**
Optional enclosure customization



Suspension arm system Coupling flange

To cover non-used Bernstein-coupling flange adaptations at an enclosure.
Coated similar RAL 9006 (Other RAL colors available upon request)
Art. No.: 9806512000



Desk stands

Simple plastic desk stands, enable the stands to incline
Art. No.: 9806014000



Desk stands (StopChoc)

Vibration absorbing desk stands for control enclosures, ideal for mobile applications close to machines or in case of sensitive electronic fixtures
Art. No.: 9806500000



Desk pedestal CC-3000

Free standing desk pedestal with straight pillar for connection with control enclosures. Coated similar RAL 7035
Art. No.: 1016509100



Desk pedestal CC-4000

Free standing desk pedestal with integrated desk attachment for free adjustable connection of CC-4000 and CC-3000 control enclosures (0 up to 30°) and keyboard enclosures (0 up to 20°).
Coated similar RAL 7035
Art. No.: 1016787000



Adjustable feet

Height adjustable feet (4 pieces) for free standing pedestals
Art. No.: 9808012900



Industrial rollers

Roller set includes 4 caster wheels for free standing pedestals.
Load per roller 50 kg
Art. No.: 9808012800



Instruments rollers

Roller set includes 2 caster wheels and 2 caster wheels with total-lock for free standing pedestals. Load per roller 70 kg
Art. No.: 9808015300



Wall joint

For wall mounting of control enclosures, set=2 pieces (rigid fixation requires 2 sets). Coated similar RAL 9006
Art. No.: 9806021000

Intermediate wall joint

For wall mounting of control enclosures or swiveling away from the wall. (This application requires 1x 980123000 and 1x 9806021000). Coated similar RAL 9006. Set=2 pieces
Art. No.: 9806123000



Wall flange

For rigid wall mounting of an enclosure
Art. No.: 9806017000



Cable bushing socket

Bushing or sealing sockets for cable duct profiles
3-4 mm
Art. No.: 9432613000

6-7 mm

Art. No.: 9432617000

Blind bushing socket

Art. No.: 9432614000

(more available upon request)



Cable glands

Metal or plastic cable glands are listed in the Bernstein main catalogue



Mounting rail-service

We cut off mounting rails for your enclosure upon request. TS32 / TS35 to pick up modular terminal blocks



Front plate mounting-Set

Set: 10 mounting elements
CC-3000 Art. No.: 9806508000

CC-4000 Art. No.: 9806509000



Mounting bracket

To fix mounting plates or other fixtures inside the enclosure
Art. No.: 9806008000



Front plate Sealing

2 m front plate sealing gasket
6 x 2 mm, grey
Art. No.: 9806373000



Spring nut-Set

Set = 10 pieces
M4 Art. No.: 9806006000

M6 Art. No.: 9806007000



19" Montage-Set

Art. No.: 9806112000

Mounting plates

Optional enclosure customization. State enclosure dimensions or enclosure part number



Door angle limitation

For door locking in open state and to limit door angle (approx.100°)
Art. No.: 9806503000

Grounding-Set, FP inside

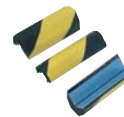
Additional grounding set to ground inside lying front plates
Art. No.: 9806505000



Grounding-Set, door and FP outside

Additional grounding set to ground outside lying front plates or doors
green/yellow Art. No.: 9806506000

copper strap Art. No.: 9806507000



Bumper in yellow/black

To safeguard edges and corners, foamed, self-adhesive
Art. No.: 9231731000

More safety and ergonomics by operating and controlling

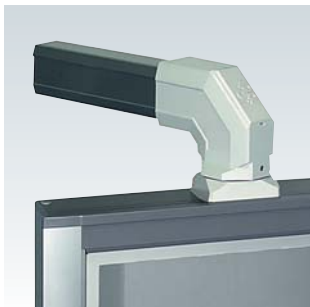
Control enclosures



■ CC-4000 Simatic



■ CC-4000 SL Simatic Panel



■ Suspension systems

Industrial Workstation



■ WS-6000

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