

Welcome to BOPLA City!



BOCARD



A Phoenix Mecano Company

BOCARD



BOCARD – this is the new concept for applications in the field of measurement, control and automatic control technology. The enclosure is ideal for use in the field of mobile data processing.

The ABS design-oriented enclosure system is available in 5 basic sizes. For each size, 2 bases with different heights can be combined with different lid variants. This set of combinations coupled with the comprehensive range of accessories ensures that the enclosure is suitable for an extremely wide range of applications.

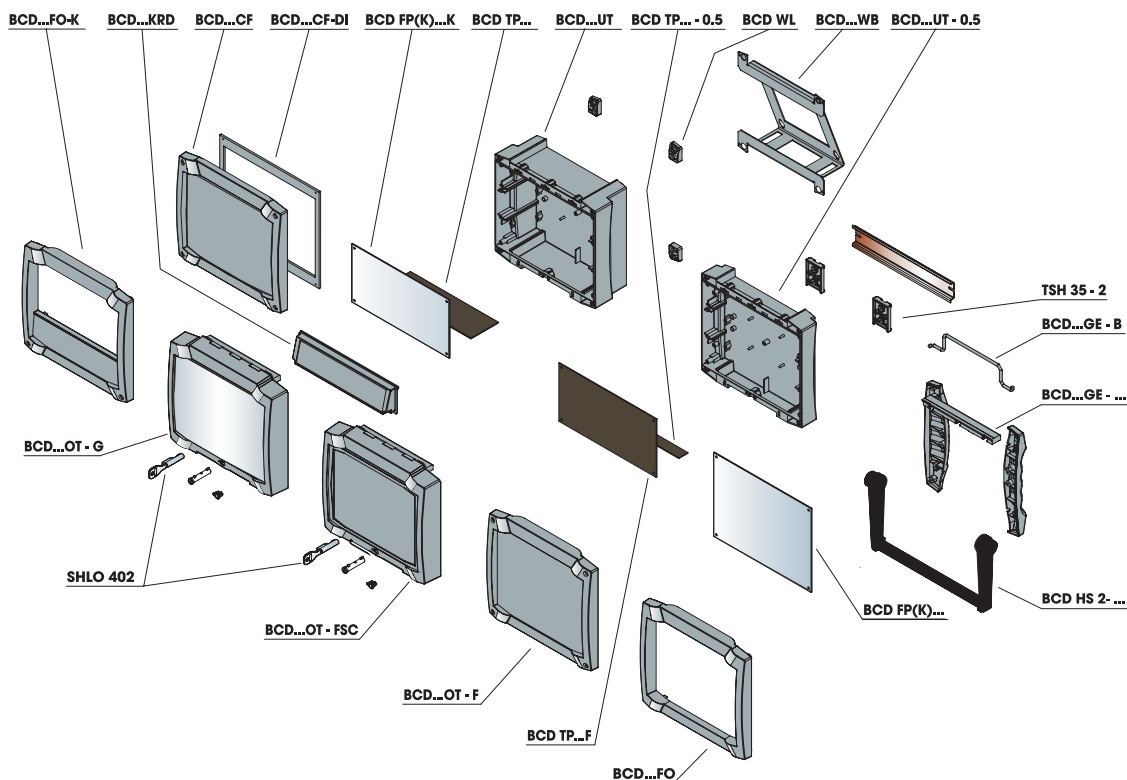
An additional important feature is the variable terminal compartment, which is an integral part of the design. The terminal compartment can be kept separate from the electronics compartment by means of partitions. High parts such as double-deck terminals can also be easily incorporated. A wide variety of accessories completes this range of products. The enclosures with a clear swivelling lid, membrane lid and hinged membrane lid provide ingress protection IP 65; all other types provide ingress protection IP 40.

Additional information on the entire BOCARD programme can be found in the "the red book" general catalogue starting on page 282.

Note

Starting in autumn 2007
BOCARD is available in 2 new sizes.
Information starting on page 6.

BOCARD overview:



Z-2602437

BOCARD's fields of application include the different sectors in water technology, such as swimming pool and water improvement technology. In the application shown here, the enclosures are used by manufacturers of water improvement plants in order to ensure that untreated water meets the requirements of industrial water.



1. Water technology

BOCARD is also used for control units – the illustration shows a control unit for fire doors. As soon as a smoke alarm has been activated, the fire door closes automatically. The enclosure's hinged, clear lid is fitted with a catch and provides protection against unintentional or deliberate operation of switches and keys. A lead seal can be fitted as an option.



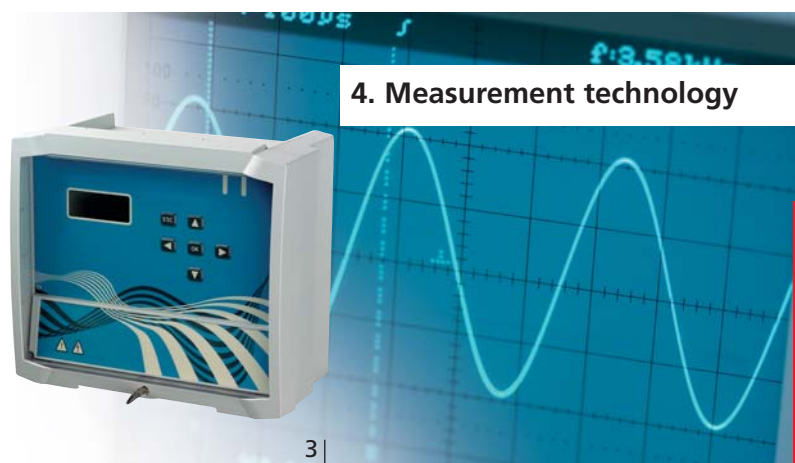
2. Fire protection

BOCARD is also used in the field of building protection. These units are used in multi-storey car parks as access control with an integrated intercom system. Such solutions are often achieved in connection with the BOCARD fitted front – this permits fast and easy fitting of the electronic unit to the wall.



3. Building protection

Measuring equipment is highly integrated electronically and requires many connections for the periphery. This is why the electronics should be separate from the connections. With BOCARD, the electronics can be kept apart from the terminal compartment by means of partitions – because the terminal compartment is integrated in the design, the enclosure continues to act as a single unit, and the electronics are in the best possible place.



4. Measurement technology

BOCARD applications

5. Logistics



BOCARD enclosures are used to optimise processes in the vehicle fleet management sector. When they are used as a data reading station, data are read and loaded from various storage media. The integrated display allows the read-in data to be visualised and evaluated immediately. Of course, BOCARD enclosures can be combined with a very wide range of membrane keypads, displays and touch screens.

6. Mobile control technology



BOCARD enclosures are often used for integrating mobile control units. To ensure good handling of the mobile control operating device, the enclosure is equipped with handle elements which guarantee ergonomic handling and are available as accessories. The enclosure can easily be used as a desktop unit with the help of the functional set-up bow, which can also be used to hang the unit on a machine.

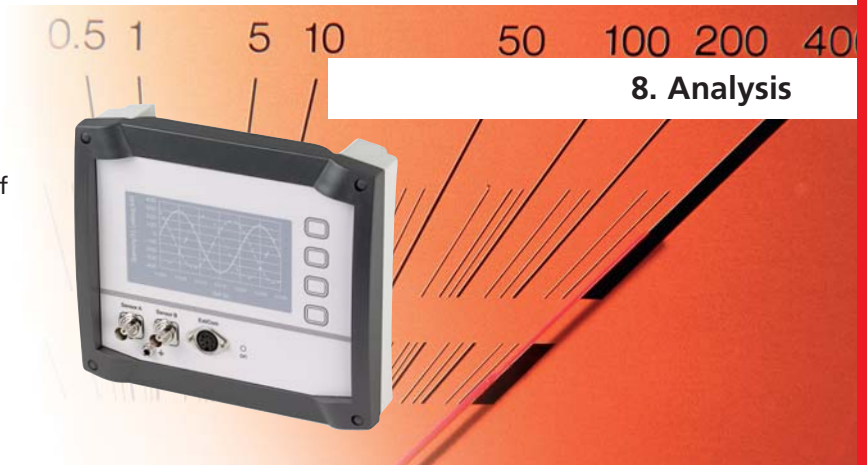


7. Building and installation technology



BOCARD can also be used in the domestic electrics sector, where it is often used as a sub-distributor unit. For this purpose, the enclosures are fitted with fuse and switch elements. In addition, the "top hat rail assembly" makes it easy to use the enclosure for light control, e.g. in stairwells. The DIN rails needed for such applications are included in the BOCARD accessory programme. When used for facility management, BOCARD's attractive and high-quality design is especially worth mentioning, because it stands out from other products available on the market. The range of colours means that the enclosure can be adapted to match the environment and situation which it is used in.

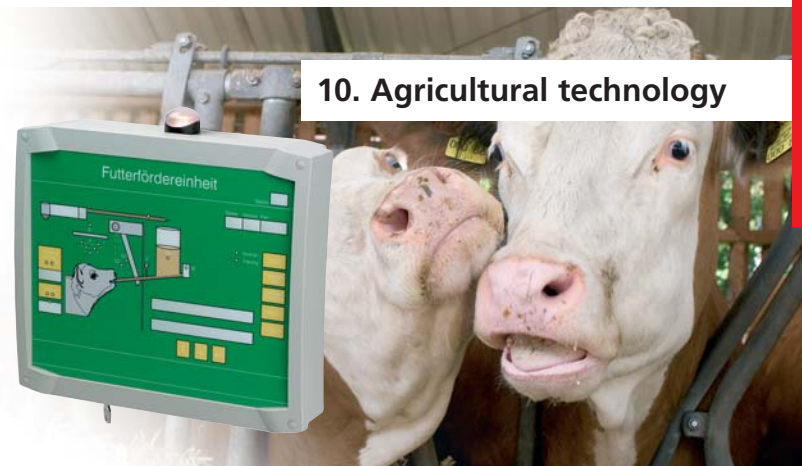
The analysis sector is extremely varied – and BOCARD offers a range of possibilities to match. This example shows a unit which is used for measurements, studies and the analysis of physical values. The 38 standard combinations in the BOCARD series of enclosures permit applications of all kinds and sizes, and the wide range of accessories complements these perfectly.



When fitted with an integrated card reader, BOCARD can be used to record times, as a door opener, or to control access to buildings. These are often used in companies as a terminal for recording personnel data. By using the wall mounting fastening angle, this series can easily be wall-mounted, as shown here. In addition, the accessory allows use as an angled desktop version.

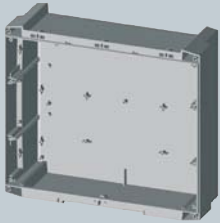


BOCARD is used for electronic feeding systems in the agricultural technology sector. As shown here, it is possible to optimise – and so reduce wastage of – feed quantities with the help of such equipment. The high level of IP protection provided by the BOCARD series of enclosures guarantees effective protection of the electronic components even in such a harsh environment.

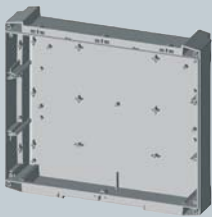




BOCARD BCD 310



The high base, available in light grey, can be combined with different front elements (see page 8). Additional accessories e.g. front panels, mounting panels or partitions can be found on our website at www.bopla.de. Ingress protection of IP 65 is achieved.



The flat base, available in light grey, can be combined with different front elements (see page 8). Additional accessories e.g. front panels, mounting panels or partitions can be found on our website at www.bopla.de. Ingress protection of IP 65 is achieved.

Base, high

Order designation

Model	Order no.	H	W	D	Designation
BCD 310 UT-7035	20310135	283	320	108	Base, high, light grey, sim. to RAL 7035

Scope of delivery:

1 base, high

Note:

The high base has the following features:

- PCB slots
- Fixing domes for PCBs, mounting plates and DIN rails
- Variable terminal compartment(s) can be sealed off by means of partitions
- Front panels, max. 3 mm thick, can be fitted
- No pre-punchings; smooth external surfaces for customers' individual design of the cable inlets and connections
- Depending on which side is used for installation, cable glands are partially covered
- Wall assembly via the integrated 4-point wall fixing system or with wall brackets (accessory)
- 2 different lids can be fitted: BCD 310 OT-G-..., BCD 310 OT-FSC-...

Base, flat

Order designation

Model	Order no.	H	W	D	Designation
BCD 310 UT-0,5-7035	20310235	283	320	74	Base, flat, light grey, sim. to RAL 7035

Scope of delivery:

1 base, flat

Note:

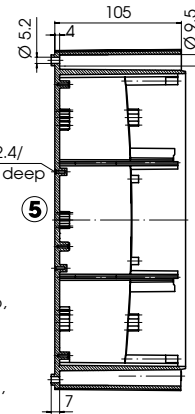
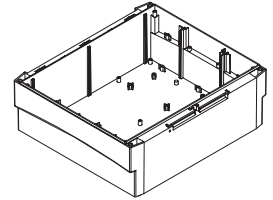
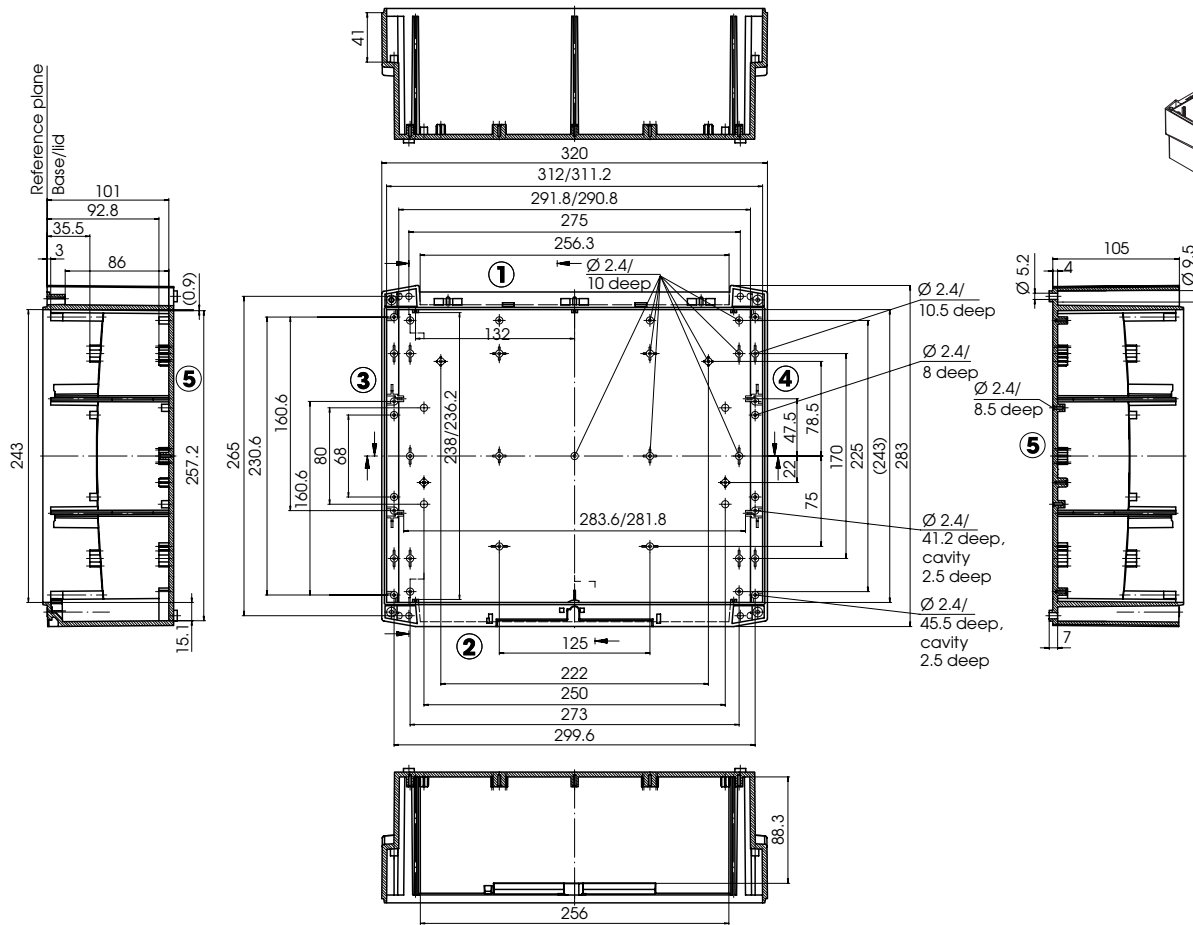
The flat base has the following features:

- PCB slots
- Fixing domes for PCBs, mounting plates and DIN rails
- Variable terminal compartment(s) can be sealed off by means of partitions
- Front panels, max. 3 mm thick, can be fitted
- No pre-punchings; smooth external surfaces for customers' individual design of the cable inlets and connections
- Depending on which side is used for installation, cable glands are partially covered
- Wall assembly via the integrated 4-point wall fixing system or with wall brackets (accessory)
- 2 different lids can be fitted: BCD 310 OT-G-..., BCD 310 OT-FSC-...



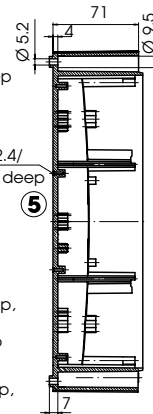
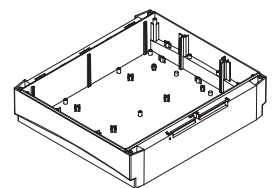
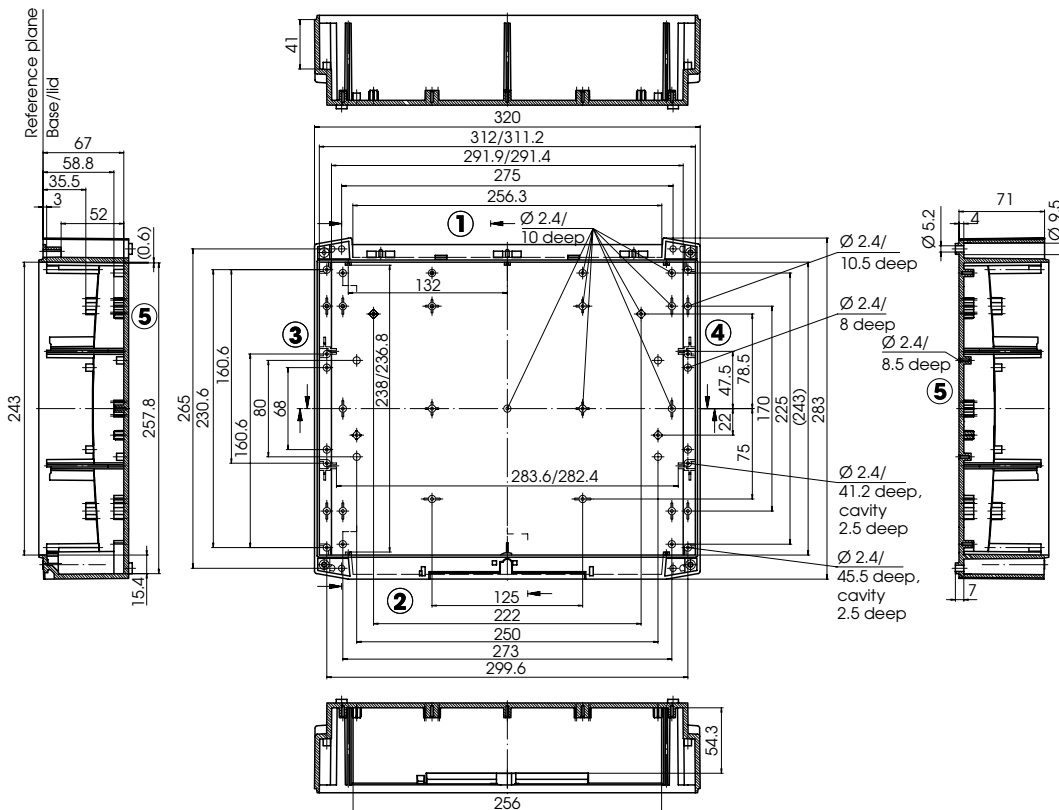
As an alternative to the individual BOCARD parts (size 310), complete sets of this size can be ordered. These include a high or flat base and the lids, hinged or membrane lid, hinged. Additional information on these enclosure types can be found on our website at www.bopla.de.

BCD 310 UT-7035



Z-2602789

BCD 310 UT-0,5-7035



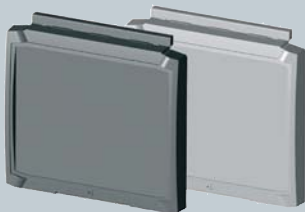
Z-2602790



BOCARD BCD 310



The BCD 310 OT-G-... consists of a clear lid with a frame in light grey or graphite grey which contains the hinge and the snap-lock mechanism. The BCD 310 OT-G-... can be opened to more than 180° and is protected against being dropped accidentally.



The BCD 310 OT-FSC-... consists of a membrane lid to hold front membranes of membrane keypads and which contains the hinge and the snap-lock mechanism. The BCD 310 OT-FSC-... can be opened to more than 180° and is protected against being dropped accidentally.



The terminal compartment lid is available in light grey or graphite grey and has an area recessed by 1.5 mm to hold front membranes or membrane keypads. The ingress protection of the enclosure is not affected by the terminal compartment lid, which is inside the seal section (integrated).

Clear lid, hinged

Order designation

Model	Order no.	H	W	D	Designation
BCD 310 OT-G-7035	20311035	289	324	37.2	Clear lid, hinged with snap lock, light grey, sim. to RAL 7035
BCD 310 OT-G-7024	20311024	289	324	37.2	Clear lid, hinged with snap lock, graphite grey, sim. to RAL 7024

Scope of delivery:

- 1 lid, hinged
- 1 catch
- 1 blind plug

Assembly note:

The OT-G hinge is latched onto the base.

To open: The catch is not necessary for manual opening. The blind plug can be inserted to improve the appearance. (catch and blind plug are included in the scope of delivery).

If the catch is used, after closing the enclosure can only be opened with a tool (slotted-head screwdriver). A cylinder lock (optional) can also be fitted to prevent unauthorised opening of the enclosure. For lock SHLO 402, see Accessories on page 319 of the "the red book" general catalogue.

Membrane lid, hinged

Order designation

Model	Order no.	H	W	D	Designation
BCD 310 OT-FSC-7035	20311535	289	324	37.2	Membrane lid, hinged with snap lock, light grey sim. to RAL 7035
BCD 310 OT-FSC-7024	20311524	289	324	37.2	Membrane lid, hinged with snap lock, graphite grey sim. to RAL 7024

Scope of delivery:

- 1 membrane lid
- 1 catch, 1 blind plug

Assembly note:

The OT-FSC-... latches onto the base. For additional information on mounting, see BCD 310 OT-G-...

Terminal compartment lid

Order designation

Model	Order no.	H	W	D	Designation
BCD 310 KRD-7035	20312035	72	311	20	Terminal compartment lid, light grey, sim. to RAL 7035
BCD 310 KRD-7024	20312024	72	311	20	Terminal compartment lid, graphite grey, sim. to RAL 7024

Scope of delivery:

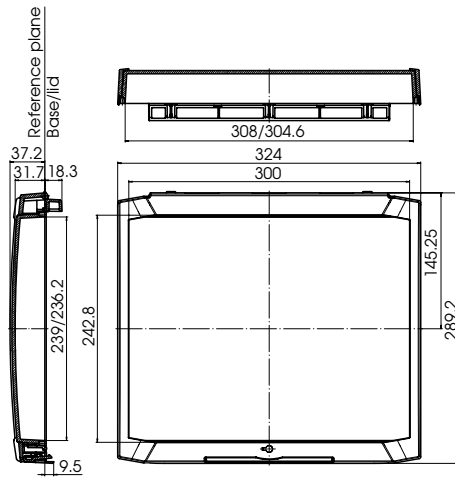
- 1 terminal compartment lid,
- 2 screws

Note:

The terminal compartment lid closes the terminal compartment after the base has been divided by means of partitions and front panels. Assembly is by means of hooking in and screwing (screws are included in the scope of delivery). The terminal compartment can be arranged on the hinged side or the locking side, as required. It is also possible to set up 2 terminal compartments.



Accessories which permit interesting applications for BOCARD can be found on the internet at www.bopla.de or in the "the red book" general catalogue starting on page 312. By using the BOCARD handle element, BOCARD can be used as a mobile control unit. The article is designed for use with BOCARD sizes 160, 200 and 250.



BCD lock plug
(included in scope
of delivery)

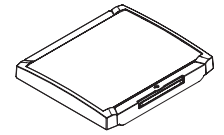


BCD catch
(included in scope
of delivery)

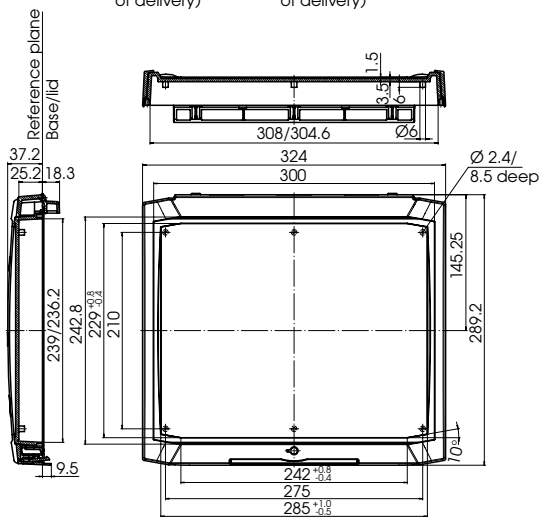


Lock SHLO402
(accessory)

BCD 310 OT-G...



Z-2602791



BCD lock plug
(included in scope
of delivery)

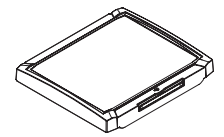


BCD catch
(included in scope
of delivery)

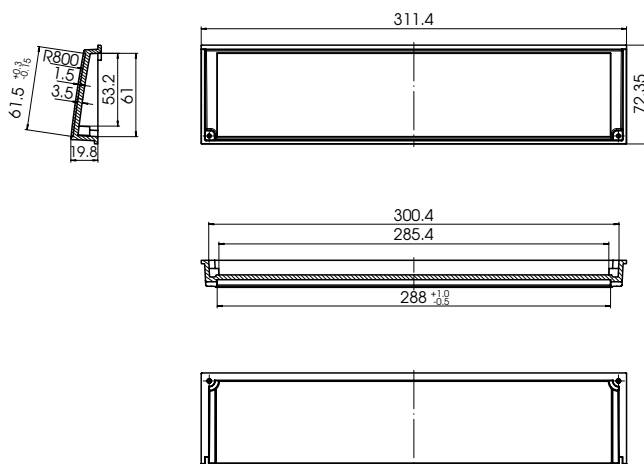


Lock SHLO402
(accessory)

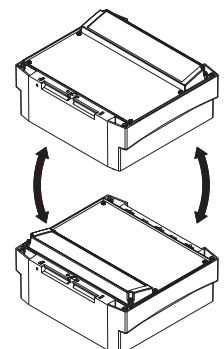
BCD 310 OT-FSC...



Z-2602792



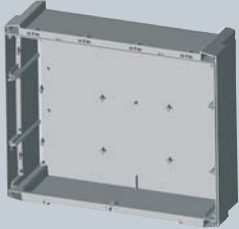
BCD 310 KR-D...



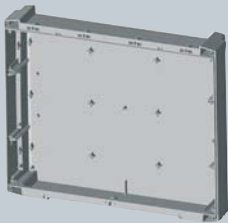
Z-2602793



BOCARD BCD 400



The high base, available in light grey, can be combined with different front elements (see page 12). Additional accessories e.g. front panels, mounting panels or partitions can be found on our website at www.bopla.de. Ingress protection of IP 65 is achieved.



The flat base, available in light grey, can be combined with different front elements (see page 12). Additional accessories e.g. front panels, mounting panels or partitions can be found on our website at www.bopla.de. Ingress protection of IP 65 is achieved.

Base, high

Order designation

Model	Order no.	H	W	D	Designation
BCD 400 UT-7035	20400135	338	400	123	Base, high, light grey, sim. to RAL 7035

Scope of delivery:

1 base, high

Note:

The high base has the following features:

- PCB slots
- Fixing domes for PCBs, mounting plates and DIN rails
- Variable terminal compartment(s) can be sealed off by means of partitions
- Front panels, max. 3 mm thick, can be fitted
- No pre-punchings; smooth external surfaces for customers' individual design of the cable inlets and connections
- Depending on which side is used for installation, cable glands are partially covered
- Wall assembly via the integrated 4-point wall fixing system or with wall brackets (accessory)
- 2 different lids can be fitted: BCD 400 OT-G-..., BCD 400 OT-FSC-...

Base, flat

Order designation

Model	Order no.	H	W	D	Designation
BCD 400 UT-0,5-7035	20400235	338	400	74.5	Base, flat, light grey, sim. to RAL 7035

Scope of delivery:

1 base, flat

Note:

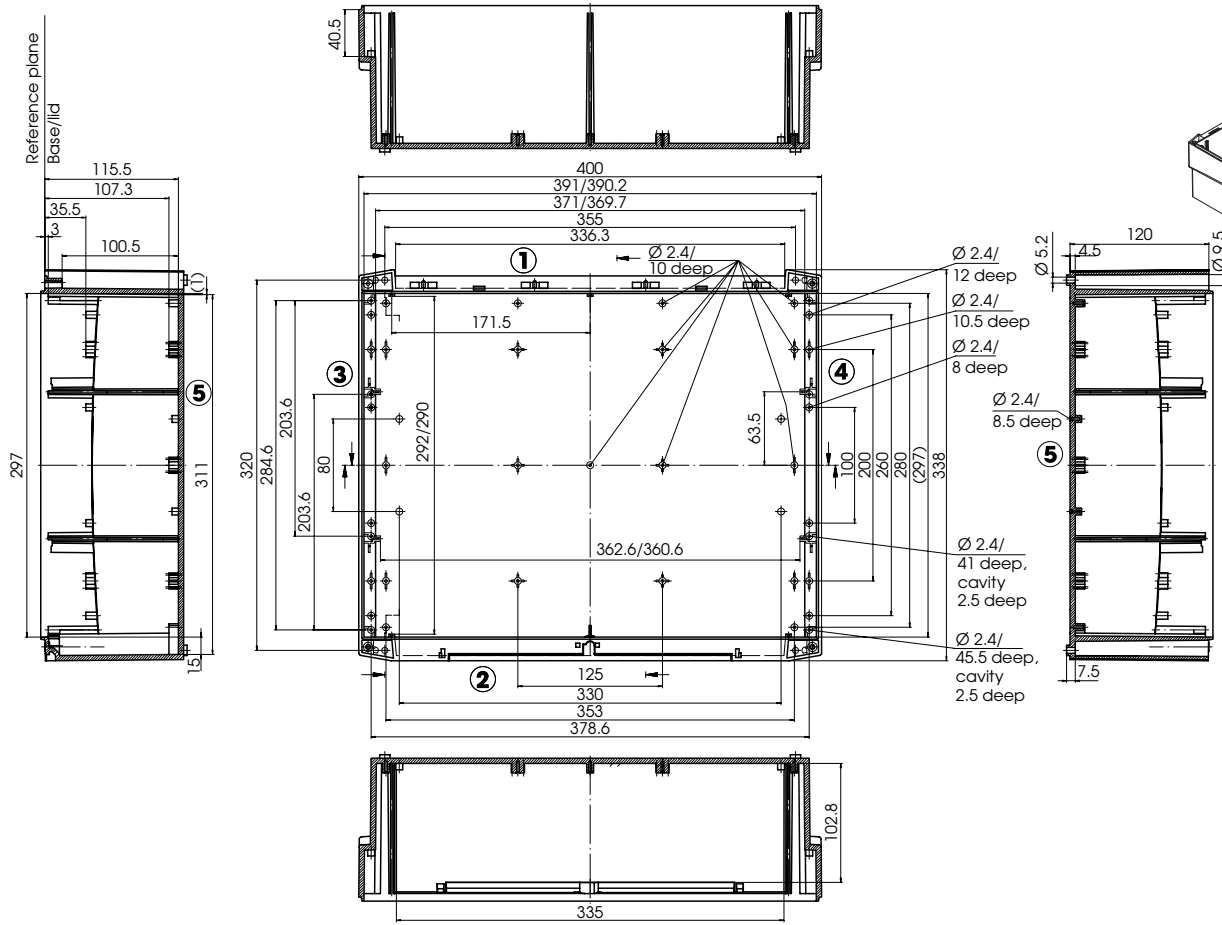
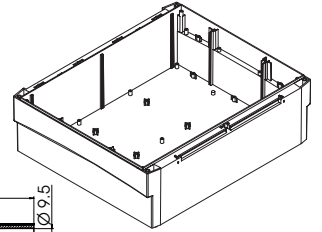
The flat base has the following features:

- PCB slots
- Fixing domes for PCBs, mounting plates and DIN rails
- Variable terminal compartment(s) can be sealed off by means of partitions
- Front panels, max. 3 mm thick, can be fitted
- No pre-punchings; smooth external surfaces for customers' individual design of the cable inlets and connections
- Depending on which side is used for installation, cable glands are partially covered
- Wall assembly via the integrated 4-point wall fixing system or with wall brackets (accessory)
- 2 different lids can be fitted: BCD 400 OT-G-..., BCD 400 OT-FSC-...



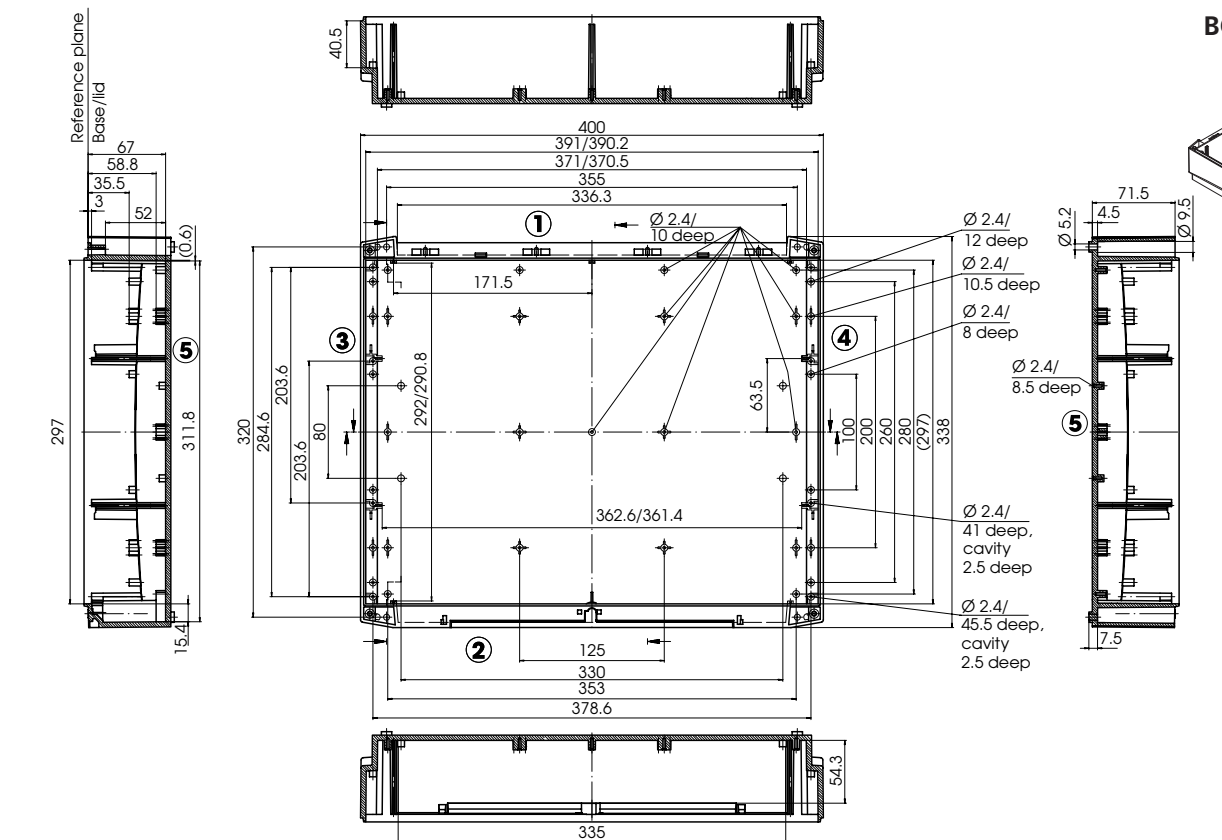
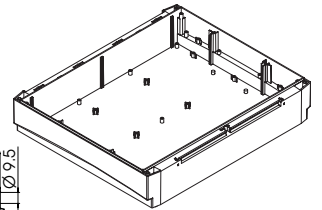
As an alternative to the individual BOCARD parts (size 400), complete sets of this size can be ordered. These include in each case a high or a flat base and the clear, hinged lids or hinged membrane lids. Additional information on these enclosure types can be found on our website at www.bopla.de.

BCD 400 UT-7035



Z-2602797

BCD 400 UT-0,5-7035



Z-2602798



BOCARD BCD 400



The BCD 400 OT-G-... consists of a clear lid with a frame in light grey or graphite grey which contains the hinge and the snap-lock mechanism. The BCD 400 OT-G-... can be opened to more than 180° and is protected against being dropped accidentally.



The BCD 400 OT-FSC-... consists of a membrane lid to hold front membranes of membrane keypads and which contains the hinge and the snap-lock mechanism. The BCD 400 OT-FSC-... can be opened to more than 180° and is protected against being dropped accidentally.



The terminal compartment lid is available in light grey or graphite grey and has an area recessed by 1.5 mm to hold front membranes or membrane keypads. The ingress protection of the enclosure is not affected by the terminal compartment lid, which is inside the seal section (integrated).

Clear lid, hinged

Order designation

Model	Order no.	H	W	D	Designation
BCD 400 OT-G-7035	20401035	344	404	37.5	Clear lid, hinged with snap lock, light grey, sim. to RAL 7035
BCD 400 OT-G-7024	20401024	344	404	37.5	Clear lid, hinged with snap lock, graphite grey, sim. to RAL 7024

Scope of delivery:

- 1 lid, hinged
- 1 catch
- 1 blind plug

Assembly note:

The OT-G hinge is latched onto the base.

To open: The catch is not necessary for manual opening. The blind plug can be inserted to improve the appearance. (catch and blind plug are included in the scope of delivery).

If the catch is used, after closing the enclosure can only be opened with a tool (slotted-head screwdriver). A cylinder lock (optional) can also be fitted to prevent unauthorised opening of the enclosure. For lock SHLO 402, see Accessories on page 319 of the "the red book" general catalogue.

Membrane lid, hinged

Order designation

Model	Order no.	H	W	D	Designation
BCD 400 OT-FSC-7035	20401535	344	404	37.5	Membrane lid, hinged with snap lock, light grey sim. to RAL 7035
BCD 400 OT-FSC-7024	20401524	344	404	37.5	Membrane lid, hinged with snap lock, graphite grey sim. to RAL 7024

Scope of delivery:

- 1 membrane lid
- 1 catch, 1 blind plug

Assembly note:

The OT-FSC-... latches onto the base. For additional information on mounting, see BCD 400 OT-G-...

Terminal compartment lid

Order designation

Model	Order no.	H	W	D	Designation
BCD 400 KRD-7035	20402035	83	390	20	Terminal compartment lid, light grey, sim. to RAL 7035
BCD 400 KRD-7024	20402024	83	390	20	Terminal compartment lid, graphite grey, sim. to RAL 7024

Scope of delivery:

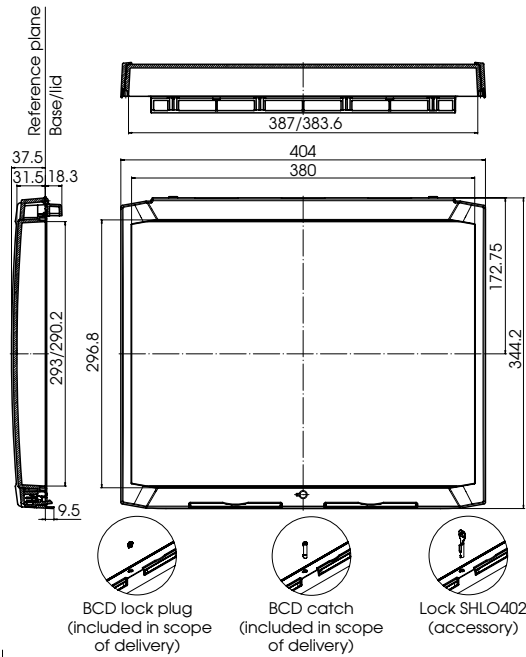
- 1 terminal compartment lid,
- 2 screws

Note:

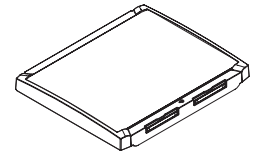
The terminal compartment lid closes the terminal compartment after the base has been divided by means of partitions and front panels. Assembly is by means of hooking in and screwing (screws are included in the scope of delivery). The terminal compartment can be arranged on the hinged side or the locking side, as required. It is also possible to set up 2 terminal compartments.



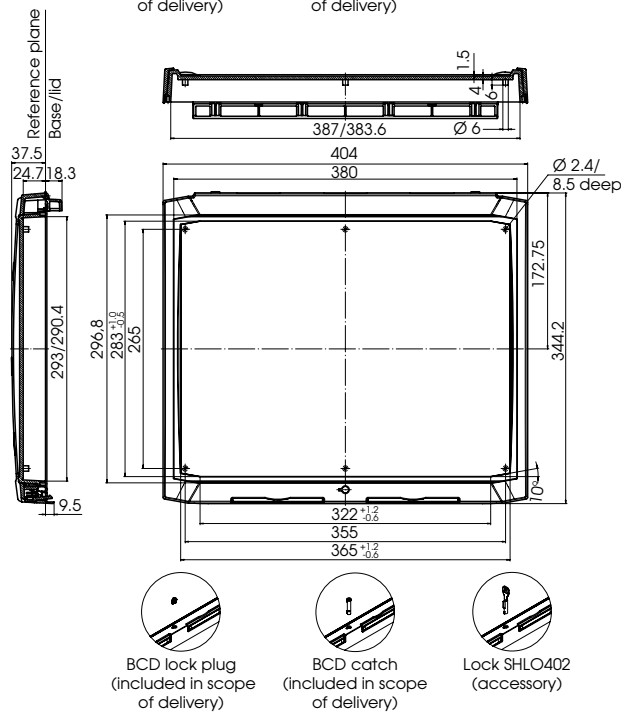
Accessories which permit interesting applications for BOCARD can be found on the internet at www.bopla.de or in the "the red book" general catalogue starting on page 312. By using the BOCARD wall mounting fastening angle, the enclosure can easily be fitted to a wall or alternatively used as a desktop enclosure. The article is designed for use with BOCARD sizes 160, 200 and 250.



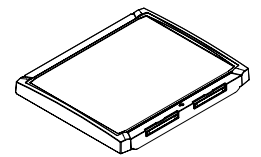
BCD 400 OT-G...



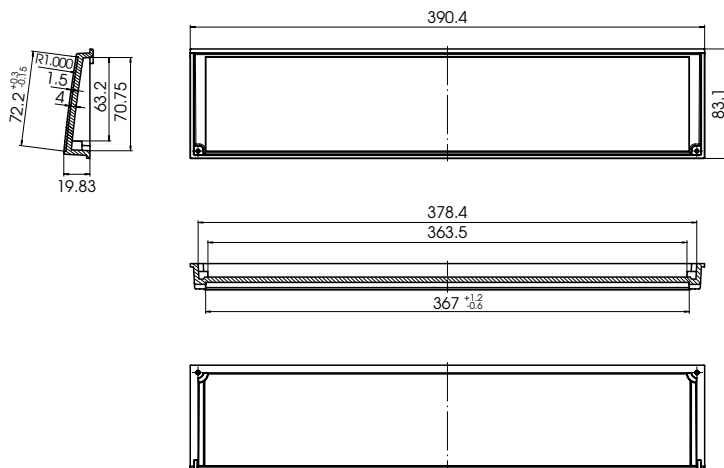
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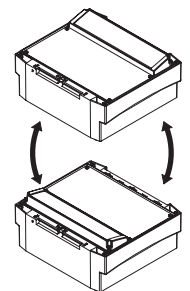
BCD 400 OT-FSC...



Z-2602800

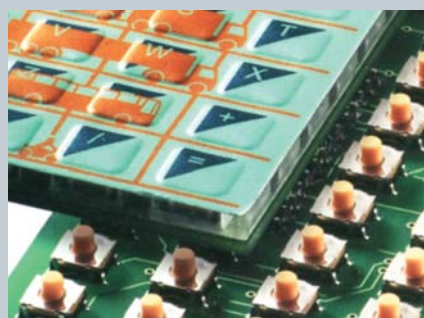


BCD 400 KRD...



Z-2602801

Membrane keypads



Customer-specific input systems

No matter what size, colour or design - our membrane keypads are manufactured to our customers' exact specifications. Matt, satin-frosted or lustrous front membrane? With or without a clear screen? With or without tactile action point? You choose and, depending on the model, it comes with a safety chamber for each individual snap dome. This prevents the metal domes from slipping, so improving quality considerably. By the way: we also develop and produce input units with short-stroke keys and corresponding front membranes.

Keypads with integrated electronics

The input unit (the membrane keypad or the short-stroke keys) and the matching electronics are on the same carrier — without any fault-prone and expensive plug-in connectors. Here, too, the customer decides whether the carrier is to consist of a single PCB (FR4 etc.) of different thicknesses or of a flexible membrane. One important advantage is that electronic modules can be SMD-inserted, soldered and plated-through without risk to the process as a whole. This means that they do not have to be glued in, as is usually the case with conductive silver applications. Even with maximum packing density, the modules easily adapt to the enclosure geometry.

ProfiLine technology

With ProfiLine, our latest membrane keypad, the user gets much more than a mere input element. Made of deep-drawn acrylic glass, the keys ensure enhanced tactile contact. Plus, there are no limits to individual key design.



Keypads for use in the dark

In the past, if you also wanted to use keypads in the dark, then you often had to accept a compromise. For example, LEDs only produce a point of light, and the well-known problems of using an integrated EL membrane (short operating life, low level of mechanical stability, high cost, EMC problems) mean that they are too complicated and unreliable in use. Our new back-lit Profiline technology offers an effective solution to this problem. The light passes through a hole in a special snap dome into the integrated acrylic inlay, where it is distributed as required. The optimised pressure point functions exactly as before, and the keys can even light up individually.

System solutions

Do you need a complete production run from one source? We are the professional partner you can rely on when it comes to developing system solutions. You, the customer, can take advantage of our many years of experience in designing and manufacturing enclosure systems, membrane keypads, electronic modules and all-in system solutions.



System solutions

Using only state-of-the-art production facilities and operating on the basis of highly-efficient teamwork, we process our enclosures according to the customer's exact specifications.

This service includes the usual mechanical processes such as drilling and milling. We also take care of (i) terminal insertion, (ii) equipment with Pg or metric cable glands, and (iii) assembly of all the electronic elements. Personalised printing and front membranes can be applied and fitted to the enclosure.

Service

Our highly-qualified and motivated employees are always ready to develop and produce electronic modules, terminals and systems which are tailored to meet your special requirements.

Production capability ranges from the insertion, soldering and testing of the PCBs through to the actual assembly of the modules. If required, we can also seal the PCBs and provide the appropriate ESD packaging for transport purposes.



Electronics

The modern systems of today require professional input devices at the all-important interface between human operator and machine.

Designing keypads which are both functional and attractive is what we do every day. Individual customised solutions are a special feature of our work. Any new developments introduced are all based on everyday practice and are the result of constructive and ongoing dialogue with our customers.



Keypads

Whether working on a standard solution or one specified by the customer, we develop the complete enclosure in full consultation with you, the customer.

BOPLA enclosures protect the valuable components against damage and, thanks to a neutral but aesthetically pleasing design, have an attractive and recognisable look.



Enclosures





Welcome to BOPLA City!



Bopla Gehäuse Systeme GmbH Borsigstraße 17-25 D-32257 Bünde
Tel.: +49 (0) 52 23/969-0 Fax: +49 (0) 52 23/969-100
info@bopla.de www.bopla.de