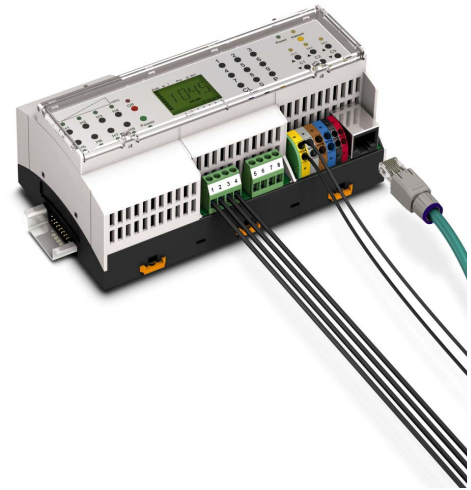


# BC...

## Installation component housing of the BC... series



Data sheet  
102981\_en\_04

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### 1 Description

The installation component housings of the **BC...** series are suitable for use in common installation distributor boxes and comply with the standard DIN 43880.

The component housings are available in five different **design widths**, from the width of one horizontal pitch (1TE = 17.8 mm) up to nine horizontal pitches (9TE = 161.6 mm).

Starting with the design width 2TE (35.6 mm), the installation space for PCB connection technology is available in two different installation depths:

- The connection technology for BC...U11 has 11 mm of space. This is ideal for the use of connection technology with small pitch dimensions (e.g. COMBICON compact)
- The installation space for connection technology with BC...U22 has been maximized to 22 mm of space. For instance, double-level connection terminal blocks or RJ45 connectors can be mounted.

With **BC 161,6 modular**, the side panels in each of the six segments on each side of the housing can be arranged in three different positions. When the side panel is located at the innermost position, the installation space for connection technology is maximized to 22 mm. The installation space for connection technology is 11 mm for the middle side panel position. When the side panel is located at the outermost position, the installation space for connection technology is closed off.

The **PCBs** can be installed parallel or perpendicular to the DIN rail starting at 2TE. The perpendicular PCBs can, however, be aligned either parallel or transverse to the DIN rail. In all cases the PCBs can be snapped in at different locations.

The **cover** is available in two versions:

- Transparent, hinged and can be sealed
- In the same light gray color as the housing, permanently snapped onto the upper housing part

The component housings are mounted on an NS 35 DIN rail. Optionally, a 16-pos. **DIN rail connector** can be inserted in the DIN rail. This serves to establish automatic contact from device to device. With the bus connector, data and energy transmission can be serial or parallel (4 x power, 2 x serial, 10 x parallel). Individual devices can be easily plugged in or unplugged without breaking up the group of modules.



The 3D housing data can be found at [phoenixcontact.net/products](http://phoenixcontact.net/products).



Make sure you always use the latest documentation.  
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This data sheet is valid for all products listed on the following page:

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## 2 Overview of BC Products

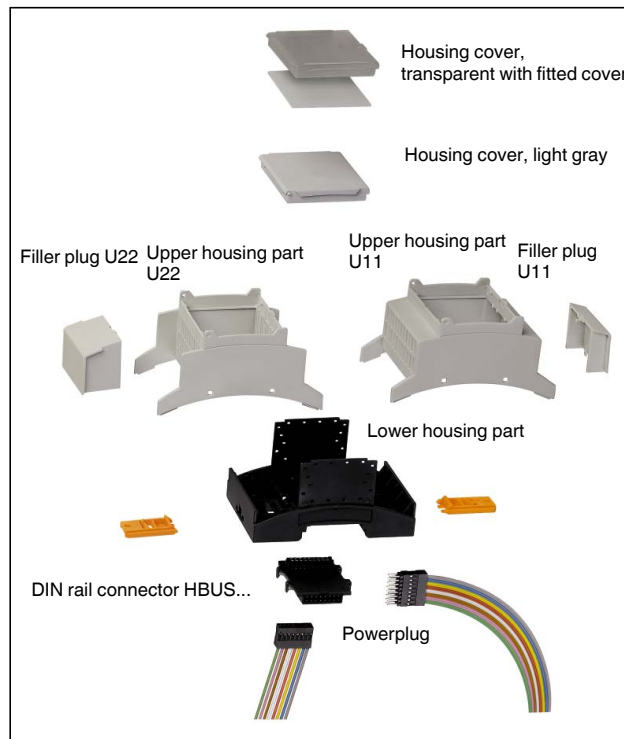


Figure 1 Overview

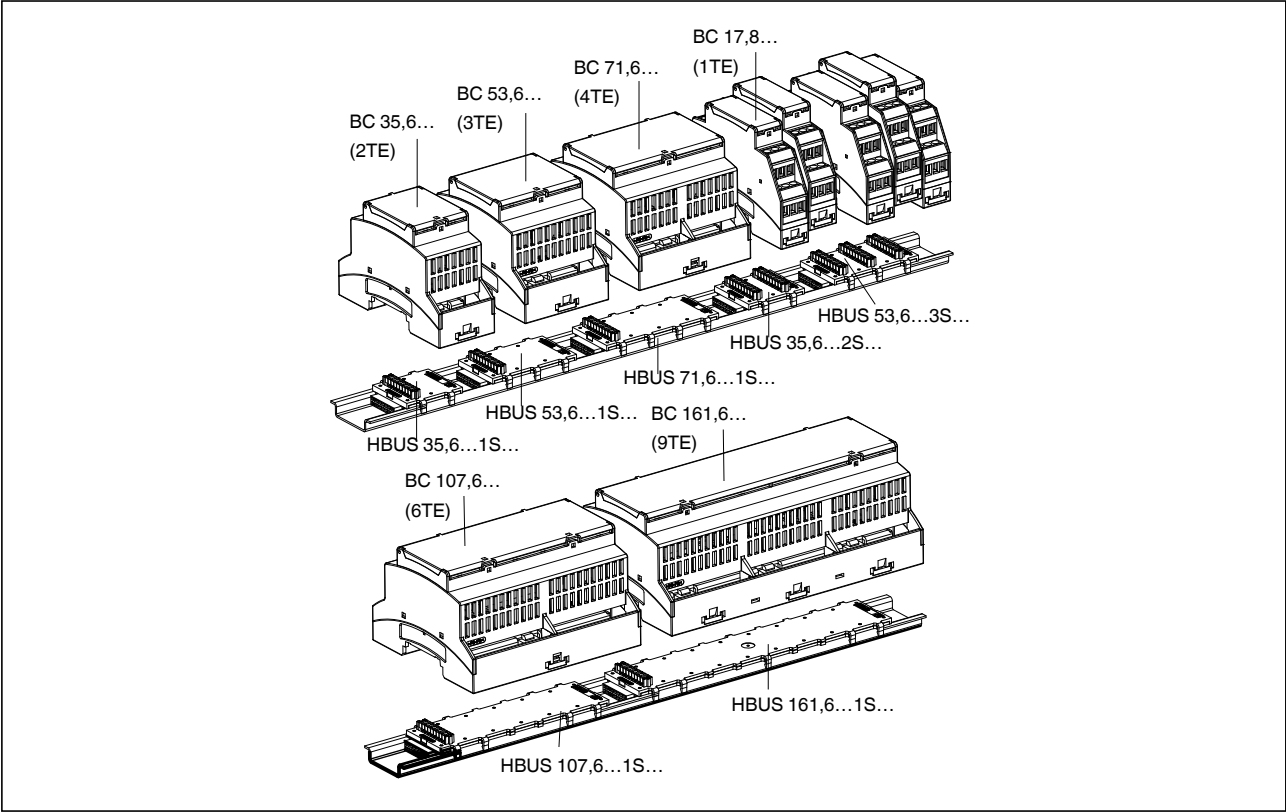


Figure 2 Overview of design widths with corresponding DIN rail connector HBUS

### 3 Ordering data

#### 3.1 Ordering data (1TE to 9TE)

##### Design width 17.8 mm (1TE)

| Description                                                                                                         | Type                   | Order No. | Pcs. / Pkt. |
|---------------------------------------------------------------------------------------------------------------------|------------------------|-----------|-------------|
| <b>Lower housing part</b>                                                                                           | BC 17,8 UT HBUS BK     | 2896241   | 10          |
| <b>Upper housing part</b> , for horizontal PCB connection with 3.5 mm or 5 mm pitch                                 | BC 17,8 OTU MKDSO KMGY | 2279732   | 10          |
| <b>Housing cover</b> , permanently snapped onto the upper housing part, in the same light gray color as the housing | BC 17,8 DKL R KMGY     | 2896144   | 10          |
| <b>Housing cover</b> , hinged, can be sealed, transparent, including fitted cover                                   | BC 17,8 DKL S TRANS    | 2896102   | 10          |

##### Accessories

|                                                                                                                              |              |                         |         |    |
|------------------------------------------------------------------------------------------------------------------------------|--------------|-------------------------|---------|----|
| <b>PCB terminal block</b> , for soldering onto PCB, 3.5 mm pitch, number of positions: 4                                     | Left         | MKDSO 1,5/ 4-L-3,5 KMGY | 2278432 | 50 |
|                                                                                                                              | Right        | MKDSO 1,5/ 4-R-3,5 KMGY | 2278429 | 50 |
| <b>PCB terminal block</b> , for soldering onto PCB, 5 mm pitch, number of positions: 3                                       | Left         | MKDSO 2,5/3-L KMGY      | 2854102 | 50 |
|                                                                                                                              | Right        | MKDSO 2,5/3-R KMGY      | 2854092 | 50 |
| <b>DIN rail connector</b> , 16-pos., 18-pos. slots to the PCB                                                                | 2 Slots      | HBUS 35,6-16P-2S BK     | 2896319 | 10 |
|                                                                                                                              | 3 Slots      | HBUS 53,6-16P-3S BK     | 2896322 | 10 |
| <b>Power plug</b> for DIN rail connector, with 16 free cable ends with a cross section of 0.25 mm <sup>2</sup> , 500 mm long | Socket strip | BL2-2,54/16-ST          | 2896335 | 50 |
|                                                                                                                              | Pin strip    | SL2-2,54/16-ST          | 2896348 | 50 |
| <b>Cover cap set</b> , 3-piece, for protecting empty DIN rail connectors                                                     |              | HBUS-B SET BK           | 2278173 | 10 |
| <b>Filler plug</b> for empty terminal space                                                                                  |              | ME 17,5 OTU-MKDSO KMGY  | 2854115 | 50 |

##### Design width 35.6 mm (2TE)

| Description                                                                                                         | Type                | Order No. | Pcs. / Pkt. |
|---------------------------------------------------------------------------------------------------------------------|---------------------|-----------|-------------|
| <b>Lower housing part</b>                                                                                           | BC 35,6 UT HBUS BK  | 2896254   | 10          |
| <b>Upper housing part</b> , with vents, terminal installation depth 11.1 mm                                         | BC 35,6 OT U11 KMGY | 2896034   | 10          |
| <b>Upper housing part</b> , with vents, terminal installation depth 22.35 mm                                        | BC 35,6 OT U22 KMGY | 2896047   | 10          |
| <b>Housing cover</b> , permanently snapped onto the upper housing part, in the same light gray color as the housing | BC 35,6 DKL R KMGY  | 2896157   | 10          |
| <b>Housing cover</b> , hinged, can be sealed, transparent, including fitted cover                                   | BC 35,6 DKL S TRANS | 2896115   | 10          |

##### Accessories

|                                                                                                                              |              |                     |         |    |
|------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------|---------|----|
| <b>DIN rail connector</b> , 16-pos., 18-pos. slot to the PCB                                                                 | 1 Slot       | HBUS 35,6-16P-1S BK | 2896283 | 10 |
| <b>Power plug</b> for DIN rail connector, with 16 free cable ends with a cross section of 0.25 mm <sup>2</sup> , 500 mm long | Socket strip | BL2-2,54/16-ST      | 2896335 | 50 |
|                                                                                                                              | Pin strip    | SL2-2,54/16-ST      | 2896348 | 50 |
| <b>Cover cap set</b> , 3-piece, for protecting empty DIN rail connectors                                                     |              | HBUS-B SET BK       | 2278173 | 10 |
| <b>Filler plug</b> for empty terminal space, 17.6 mm design width, for terminal installation depth                           | 11 mm        | BC 17,6 BS U11 KMGY | 2896186 | 50 |
|                                                                                                                              | 22 mm        | BC 17,6 BS U22 KMGY | 2896199 | 50 |
| <b>Filler plug</b> for empty terminal space, 35.6 mm design width, for terminal installation depth                           | 11 mm        | BC 35,6 BS U11 KMGY | 2896209 | 50 |
|                                                                                                                              | 22 mm        | BC 35,6 BS U22 KMGY | 2896212 | 50 |

### Design width 53.6 mm (3TE)

| Description                                                                                                         | Type                | Order No. | Pcs. / Pkt. |
|---------------------------------------------------------------------------------------------------------------------|---------------------|-----------|-------------|
| <b>Lower housing part</b>                                                                                           | BC 53,6 UT HBUS BK  | 2896403   | 10          |
| <b>Upper housing part</b> , with vents, terminal installation depth 11.1 mm                                         | BC 53,6 OT U11 KMGY | 2896416   | 10          |
| <b>Upper housing part</b> , with vents, terminal installation depth 22.35 mm                                        | BC 53,6 OT U22 KMGY | 2896429   | 10          |
| <b>Housing cover</b> , permanently snapped onto the upper housing part, in the same light gray color as the housing | BC 53,6 DKL R KMGY  | 2896432   | 10          |
| <b>Housing cover</b> , hinged, can be sealed, transparent, including fitted cover                                   | BC 53,6 DKL S TRANS | 2896445   | 10          |

### Accessories

|                                                                                                                              |              |                     |         |    |
|------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------|---------|----|
| <b>DIN rail connector</b> , 16-pos., 18-pos. slot to the PCB                                                                 | 1 Slot       | HBUS 53,6-16P-1S BK | 2896458 | 10 |
| <b>Power plug</b> for DIN rail connector, with 16 free cable ends with a cross section of 0.25 mm <sup>2</sup> , 500 mm long | Socket strip | BL2-2,54/16-ST      | 2896335 | 50 |
|                                                                                                                              | Pin strip    | SL2-2,54/16-ST      | 2896348 | 50 |
| <b>Cover cap set</b> , 3-piece, for protecting empty DIN rail connectors                                                     |              | HBUS-B SET BK       | 2278173 | 10 |
| <b>Filler plug</b> for empty terminal space, 17.6 mm design width, for terminal installation depth                           | 11 mm        | BC 17,6 BS U11 KMGY | 2896186 | 50 |
|                                                                                                                              | 22 mm        | BC 17,6 BS U22 KMGY | 2896199 | 50 |
| <b>Filler plug</b> for empty terminal space, 35.6 mm design width, for terminal installation depth                           | 11 mm        | BC 35,6 BS U11 KMGY | 2896209 | 50 |
|                                                                                                                              | 22 mm        | BC 35,6 BS U22 KMGY | 2896212 | 50 |
| <b>Filler plug</b> for empty terminal space, 53.6 mm design width, for terminal installation depth                           | 11 mm        | BC 53,6 BS U11 KMGY | 2896225 | 50 |
|                                                                                                                              | 22 mm        | BC 53,6 BS U22 KMGY | 2896238 | 50 |

### Design width 71.6 mm (4TE)

| Description                                                                                                         | Type                | Order No. | Pcs. / Pkt. |
|---------------------------------------------------------------------------------------------------------------------|---------------------|-----------|-------------|
| <b>Lower housing part</b>                                                                                           | BC 71,6 UT HBUS BK  | 2896267   | 10          |
| <b>Upper housing part</b> , with vents, terminal installation depth 11.1 mm                                         | BC 71,6 OT U11 KMGY | 2896050   | 10          |
| <b>Upper housing part</b> , with vents, terminal installation depth 22.35 mm                                        | BC 71,6 OT U22 KMGY | 2896063   | 10          |
| <b>Housing cover</b> , permanently snapped onto the upper housing part, in the same light gray color as the housing | BC 71,6 DKL R KMGY  | 2896160   | 10          |
| <b>Housing cover</b> , hinged, can be sealed, transparent, including fitted cover                                   | BC 71,6 DKL S TRANS | 2896128   | 10          |

### Accessories

|                                                                                                                              |              |                     |         |    |
|------------------------------------------------------------------------------------------------------------------------------|--------------|---------------------|---------|----|
| <b>DIN rail connector</b> , 16-pos., 18-pos. slot to the PCB                                                                 | 1 Slot       | HBUS 71,6-16P-1S BK | 2896296 | 10 |
| <b>Power plug</b> for DIN rail connector, with 16 free cable ends with a cross section of 0.25 mm <sup>2</sup> , 500 mm long | Socket strip | BL2-2,54/16-ST      | 2896335 | 50 |
|                                                                                                                              | Pin strip    | SL2-2,54/16-ST      | 2896348 | 50 |
| <b>Cover cap set</b> , 3-piece, for protecting empty DIN rail connectors                                                     |              | HBUS-B SET BK       | 2278173 | 10 |
| <b>Filler plug</b> for empty terminal space, 17.6 mm design width, for terminal installation depth                           | 11 mm        | BC 17,6 BS U11 KMGY | 2896186 | 50 |
|                                                                                                                              | 22 mm        | BC 17,6 BS U22 KMGY | 2896199 | 50 |
| <b>Filler plug</b> for empty terminal space, 35.6 mm design width, for terminal installation depth                           | 11 mm        | BC 35,6 BS U11 KMGY | 2896209 | 50 |
|                                                                                                                              | 22 mm        | BC 35,6 BS U22 KMGY | 2896212 | 50 |

### Design width 107.6 mm (6TE)

| Description                                                                                                         | Type                 | Order No. | Pcs. / Pkt. |
|---------------------------------------------------------------------------------------------------------------------|----------------------|-----------|-------------|
| <b>Lower housing part</b>                                                                                           | BC 107,6 UT HBUS BK  | 2896270   | 10          |
| <b>Upper housing part</b> , with vents, terminal installation depth 11.1 mm                                         | BC 107,6 OT U11 KMGY | 2896076   | 10          |
| <b>Upper housing part</b> , with vents, terminal installation depth 22.35 mm                                        | BC 107,6 OT U22 KMGY | 2896089   | 10          |
| <b>Housing cover</b> , permanently snapped onto the upper housing part, in the same light gray color as the housing | BC 107,6 DKL R KMGY  | 2896173   | 10          |
| <b>Housing cover</b> , hinged, can be sealed, transparent, including fitted cover                                   | BC 107,6 DKL S TRANS | 2896131   | 10          |

### Accessories

|                                                                                                                              |              |                      |         |    |
|------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------|---------|----|
| <b>DIN rail connector</b> , 16-pos., 18-pos. slot to the PCB                                                                 | 1 Slot       | HBUS 107,6-16P-1S BK | 2896306 | 10 |
| <b>Power plug</b> for DIN rail connector, with 16 free cable ends with a cross section of 0.25 mm <sup>2</sup> , 500 mm long | Socket strip | BL2-2,54/16-ST       | 2896335 | 50 |
|                                                                                                                              | Pin strip    | SL2-2,54/16-ST       | 2896348 | 50 |
| <b>Cover cap set</b> , 3-piece, for protecting empty DIN rail connectors                                                     |              | HBUS-B SET BK        | 2278173 | 10 |
| <b>Filler plug</b> for empty terminal space, 17.6 mm design width, for terminal installation depth                           | 11 mm        | BC 17,6 BS U11 KMGY  | 2896186 | 50 |
|                                                                                                                              | 22 mm        | BC 17,6 BS U22 KMGY  | 2896199 | 50 |
| <b>Filler plug</b> for empty terminal space, 35.6 mm design width, for terminal installation depth                           | 11 mm        | BC 35,6 BS U11 KMGY  | 2896209 | 50 |
|                                                                                                                              | 22 mm        | BC 35,6 BS U22 KMGY  | 2896212 | 50 |
| <b>Filler plug</b> for empty terminal space, 53.6 mm design width, for terminal installation depth                           | 11 mm        | BC 53,6 BS U11 KMGY  | 2896225 | 50 |
|                                                                                                                              | 22 mm        | BC 53,6 BS U22 KMGY  | 2896238 | 50 |

### Design width 161.6 mm (9TE)

| Description                                                                                                         | Type                 | Order No. | Pcs. / Pkt. |
|---------------------------------------------------------------------------------------------------------------------|----------------------|-----------|-------------|
| <b>Lower housing part</b>                                                                                           | BC 161,6 UT HBUS BK  | 2278500   | 10          |
| <b>Upper housing part</b> , with vents, terminal installation depth 11.1 mm                                         | BC 161,6 OT U11 KMGY | 2278513   | 10          |
| <b>Upper housing part</b> , with vents, terminal installation depth 22.35 mm                                        | BC 161,6 OT U22 KMGY | 2278526   | 10          |
| <b>Housing cover</b> , permanently snapped onto the upper housing part, in the same light gray color as the housing | BC 161,6 DKL R KMGY  | 2278539   | 10          |
| <b>Housing cover</b> , hinged, can be sealed, transparent, including fitted cover                                   | BC 161,6 DKL S TRANS | 2278542   | 10          |

### Accessories

|                                                                                                                              |              |                      |         |    |
|------------------------------------------------------------------------------------------------------------------------------|--------------|----------------------|---------|----|
| <b>DIN rail connector</b> , 16-pos., 18-pos. slot to the PCB                                                                 | 1 Slot       | HBUS 161,6-16P-1S BK | 2278555 | 10 |
| <b>Power plug</b> for DIN rail connector, with 16 free cable ends with a cross section of 0.25 mm <sup>2</sup> , 500 mm long | Socket strip | BL2-2,54/16-ST       | 2896335 | 50 |
|                                                                                                                              | Pin strip    | SL2-2,54/16-ST       | 2896348 | 50 |
| <b>Cover cap set</b> , 3-piece, for protecting empty DIN rail connectors                                                     |              | HBUS-B SET BK        | 2278173 | 10 |
| <b>Filler plug</b> for empty terminal space, 17.6 mm design width, for terminal installation depth                           | 11 mm        | BC 17,6 BS U11 KMGY  | 2896186 | 50 |
|                                                                                                                              | 22 mm        | BC 17,6 BS U22 KMGY  | 2896199 | 50 |
| <b>Filler plug</b> for empty terminal space, 35.6 mm design width, for terminal installation depth                           | 11 mm        | BC 35,6 BS U11 KMGY  | 2896209 | 50 |
|                                                                                                                              | 22 mm        | BC 35,6 BS U22 KMGY  | 2896212 | 50 |
| <b>Filler plug</b> for empty terminal space, 53.6 mm design width, for terminal installation depth                           | 11 mm        | BC 53,6 BS U11 KMGY  | 2896225 | 50 |
|                                                                                                                              | 22 mm        | BC 53,6 BS U22 KMGY  | 2896238 | 50 |

### 3.2 Order key for BC 161,6 modular – upper part

With BC 161,6 modular, the side panel for each segment on each side of the housing can be arranged in three different positions.

- When the side panel is located at the innermost position, the installation space for connection technology is maximized to 22 mm (see Figure 3, pos. 1 and 2).
- In the middle side panel position there is 11 mm of space on the outside for the connection technology (see Figure 3, pos. 3 and 4).
- The maximum mounting surface for the PCB is available when the side panel of the upper housing part is flush with the outside edge of the lower housing part (see Figure 3, pos. 5 and 6)

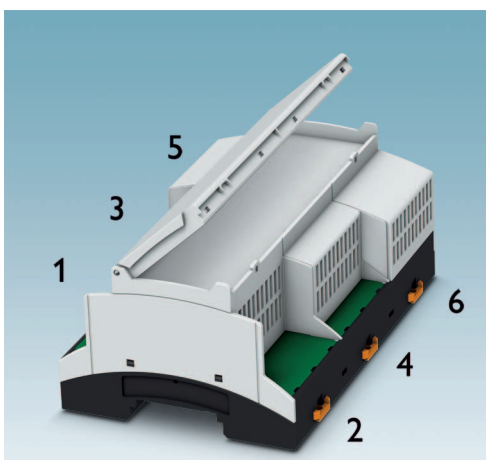


Figure 3 Positions for order key

|                                                               |              | Location    |    |                           |    |    |         |
|---------------------------------------------------------------|--------------|-------------|----|---------------------------|----|----|---------|
| xxxxxxx                                                       | /BC 161,6 OT | /1          | /2 | /3                        | /4 | /5 | /6/KMGY |
| No. is assigned by Phoenix Contact after receipt of the order |              | Side panel  |    | Housing color: light gray |    |    |         |
|                                                               |              | 0 = outside |    |                           |    |    |         |
|                                                               |              | 1 = middle  |    |                           |    |    |         |
|                                                               |              | 2 = inside  |    |                           |    |    |         |

Example for Figure 3:

BC 161,6 OT 221100 KMGY

Side panel

- Locations 1 and 2: inside
- Locations 3 and 4: middle
- Locations 5 and 6: outside

### Ordering data for example configurations

#### Ordering data for upper part of BC 161,6 modular

| Description                                                                                                                           | Type                       | Order No. | Pcs./Pkt. |
|---------------------------------------------------------------------------------------------------------------------------------------|----------------------------|-----------|-----------|
| <b>Upper housing part</b> , with vents,<br>1 x terminal installation depth of 22 mm at pos. 5, all other terminal spaces closed       | BC 161,6 OT<br>000020 KMGY | 2201450   | 10        |
| <b>Upper housing part</b> , with vents,<br>1 x terminal installation depth of 22 mm at pos. 3, all other terminal spaces closed       | BC 161,6 OT<br>002000 KMGY | 2201451   | 10        |
| <b>Upper housing part</b> , with vents,<br>2 x terminal installation depth of 22 mm at pos. 5 and 6, all other terminal spaces closed | BC 161,6 OT<br>000022 KMGY | 2201454   | 10        |

The corresponding lower housing part and the accessories can be found in the ordering data for design width 161.6 mm (9TE) (see page 6).

### 3.3 Selecting the right connection technology

| Module               | BC<br>17,8 | BC 35,6 |     | BC 53,6 |     | BC 71,6 |     | BC 107,6 |     | BC 161,6 |     |
|----------------------|------------|---------|-----|---------|-----|---------|-----|----------|-----|----------|-----|
|                      |            | U11     | U22 | U11     | U22 | U11     | U22 | U11      | U22 | U11      | U22 |
| MKDSO 1,5/4-L-3,5    | X          | -       | -   | -       | -   | -       | -   | -        | -   | -        | -   |
| MKDSO 1,5/4-R-3,5    | X          | -       | -   | -       | -   | -       | -   | -        | -   | -        | -   |
| MKDSO 2,5/3-L        | X          | -       | -   | -       | -   | -       | -   | -        | -   | -        | -   |
| MKDSO 2,5/3-R        | X          | -       | -   | -       | -   | -       | -   | -        | -   | -        | -   |
| MKDS 1,5/... HT      | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| MKDSN 2,5/... HT     | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| MKDS 3/... HT        | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| MKDS 1,5/...         | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| MKDSP 1,5/...        | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| MKDSN 2,5/...        | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| MKDS 3/...           | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| MKDSP 3/...          | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| MKKDSH 3/...         | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| GMKDS 1,5/...        | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| GMKDS 3/...          | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| GMKDSP 3/...         | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| SPTA 1/...-3,5       | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| SPTA 1/...-5,0       | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| MKKDS 1,5/...        | -          | -       | X   | -       | X   | -       | X   | -        | X   | -        | X   |
| MKKDS 3/...          | -          | -       | X   | -       | X   | -       | X   | -        | X   | -        | X   |
| MKKDSG 3/...         | -          | -       | X   | -       | X   | -       | X   | -        | X   | -        | X   |
| ZFKKDS 1,5C-5,0      | -          | -       | X   | -       | X   | -       | X   | -        | X   | -        | X   |
| FK-MPT 0,5/...-3,5-H | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| FK-MPT 0,5/...ST-3,5 | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| PTSA 0,5/...-2,5-Z   | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| PTSA 0,5/...-2,5-F   | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| PTSA 1,5/...-3,5-Z   | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| PTSA 1,5/...-3,5-F   | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| PTS 1,5/...-5,0-H    | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| PT 1,5/...-5,0-H     | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| PT 1,5/...-PH-5,0    | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| PT 1,5/...-5,0-H     | -          | X       | X   | X       | -   | X       | X   | X        | X   | X        | X   |
| PT 2,5/4-7,5-H       | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| PTDA 1,5/...-PH-3,5  | -          | -       | X   | -       | X   | -       | X   | -        | X   | -        | X   |
| PTDA 1,5/...-PH-5,0  | -          | -       | X   | -       | X   | -       | X   | -        | X   | -        | X   |
| PT 2,5/...-PVH-5,0   | -          | -       | X   | -       | X   | -       | X   | -        | X   | -        | X   |
| PST 1,3/...-LH-5,0   | -          | -       | X   | -       | X   | -       | X   | -        | X   | -        | X   |
| PST 1,3/...-LV-5,0   | -          | -       | X   | -       | X   | -       | X   | -        | X   | -        | X   |
| PST 1,0/...-3,5      | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| PST 1,3/...-5,0      | -          | X       | X   | X       | X   | X       | X   | X        | X   | X        | X   |
| VS-08-BU-RJ45...     | -          | -       | X   | -       | X   | -       | X   | -        | X   | -        | X   |

## 4 Technical data

### Electrical data

Power dissipation  $P_V$  at 20°C in the horizontal mounting position, aligned with-out distance

|          |         |
|----------|---------|
| BC 17,8  | 2.95 W  |
| BC 35,6  | 4.78 W  |
| BC 53,6  | 7.21 W  |
| BC 71,6  | 11.95 W |
| BC 107,6 | 13.08 W |
| BC 161,6 | 16.95 W |

DIN rail connector HBUS

60 V

DIN rail connector HBUS, current carrying capacity for each contact

3 A, maximum total current 25 A

### Housing version

|                                         |               |
|-----------------------------------------|---------------|
| Insulation material                     | Polycarbonate |
| Inflammability class according to UL 94 | V0            |
| Color of lower housing part             | Black         |
| Color of upper housing part             | Light gray    |

5 Housing dimensions

5.1 Dimensions of housing

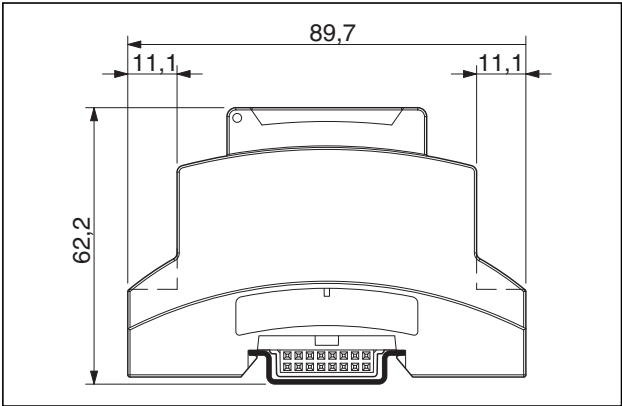


Figure 4 BC...U11, side view

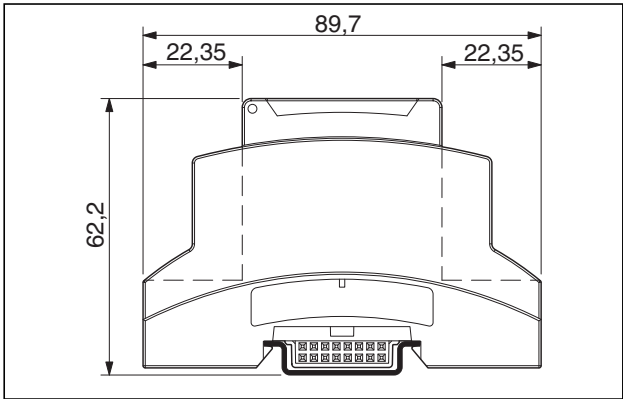


Figure 5 BC...U22, side view

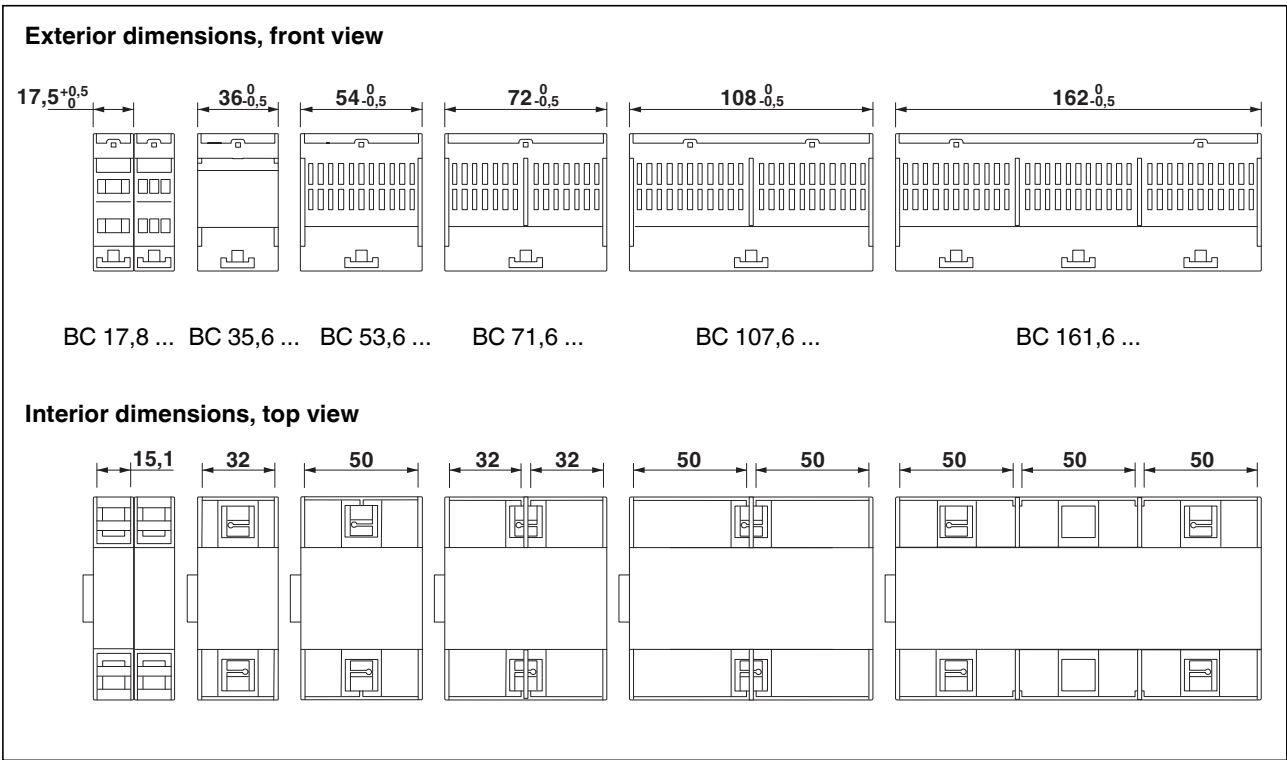


Figure 6 Exterior and interior dimensions

Dimensions and tolerances acc. to DIN 43880

## 5.2 Dimensions of DIN rail connector

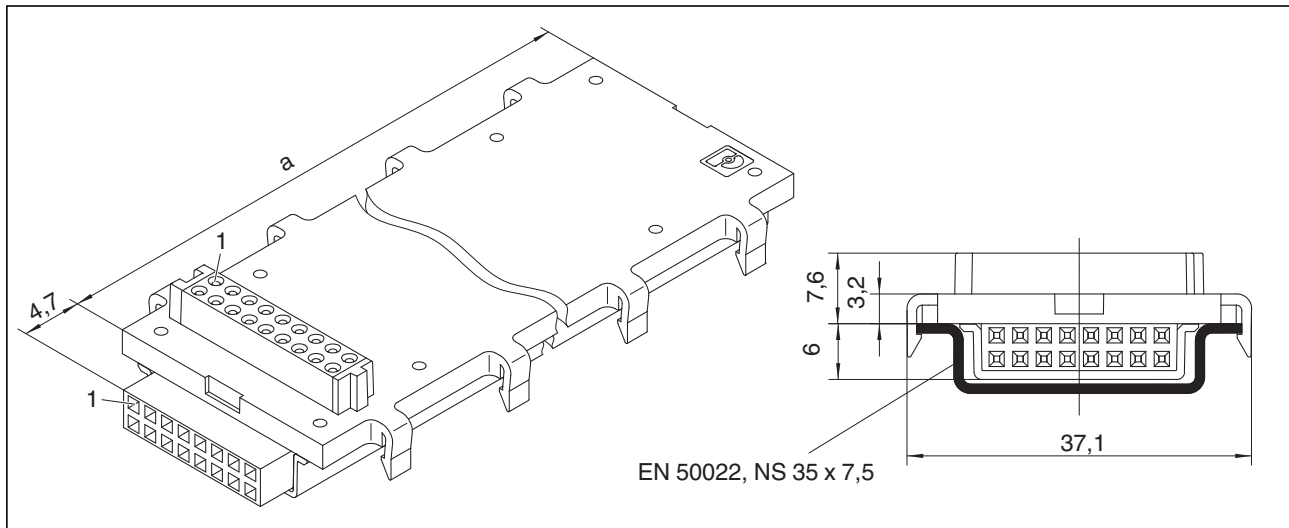


Figure 7 Dimensions of DIN rail connector HBUS and DIN rail NS 35

### Dimensions for a

|                      |          |
|----------------------|----------|
| HBUS 35,6-16P-1S BK  | 35.6 mm  |
| HBUS 35,6-16P-2S BK  | 35.6 mm  |
| HBUS 53,6-16P-1S BK  | 53.6 mm  |
| HBUS 53,6-16P-3S BK  | 53.6 mm  |
| HBUS 71,6-16P-1S BK  | 71.6 mm  |
| HBUS 161,6-16P-1S BK | 161.6 mm |

6 PCB arrangement for BC 17,8 (1TE)

6.1 PCB dimensions

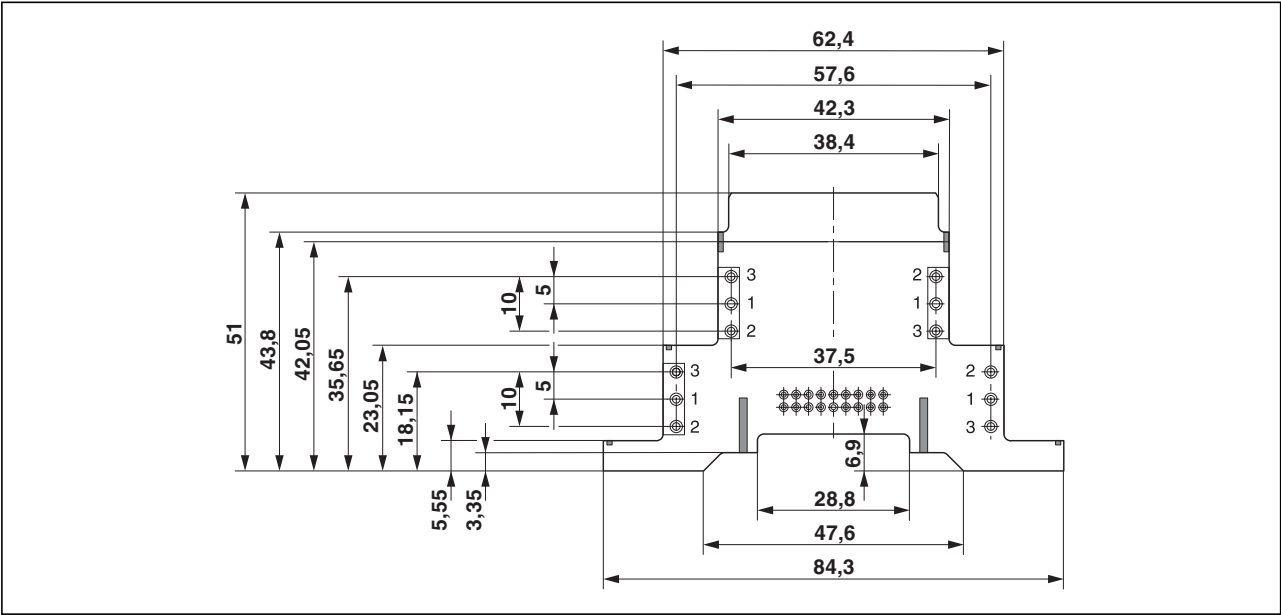


Figure 8 Upper side – mounting side of BC 17,8

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>PCB thickness</b>                                                                | Maximum 1.5 mm                                |
|  | Locked area, no components at these positions |

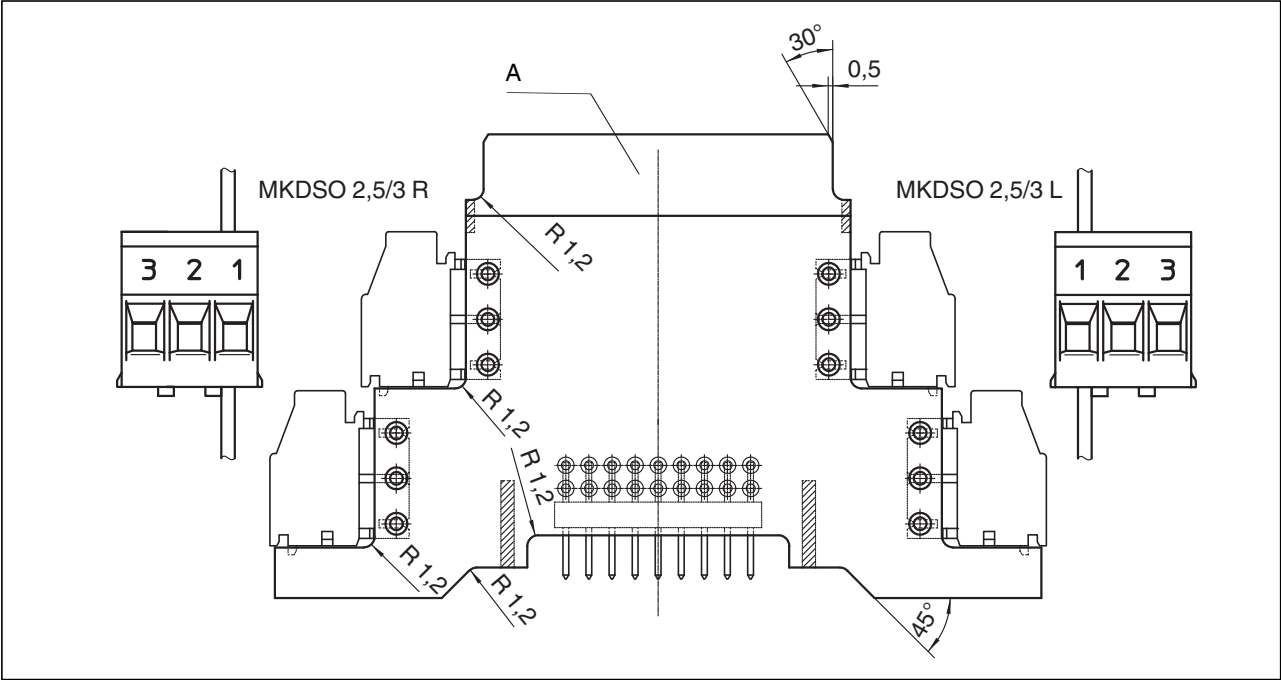


Figure 9 Lower side – soldering side of BC 17,8

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>A</b>                                                                            | PCB surface, when no fitted cover is used     |
| <b>PCB thickness</b>                                                                | Maximum 1.5 mm                                |
|  | Locked area, no components at these positions |

## 6.2 Inner dimensions

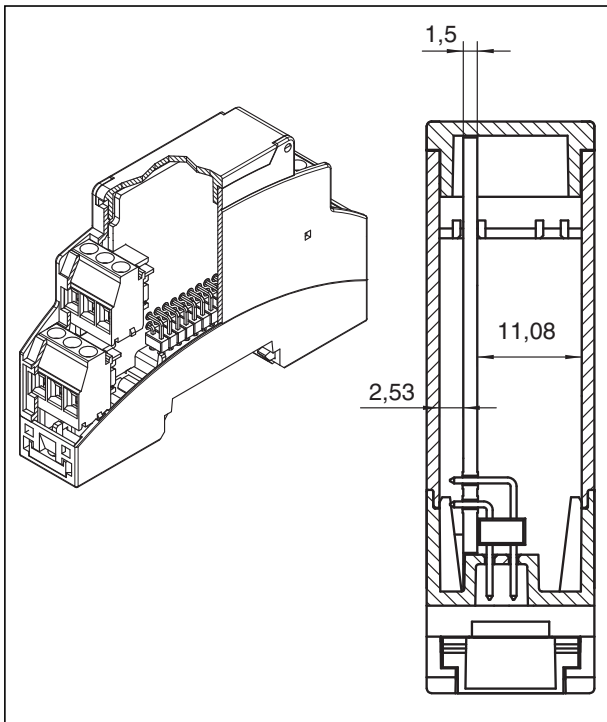


Figure 10 Inner dimensions BC 17,8

### 6.3 Circuit diagram of DIN rail connector with 2 and 3 slots

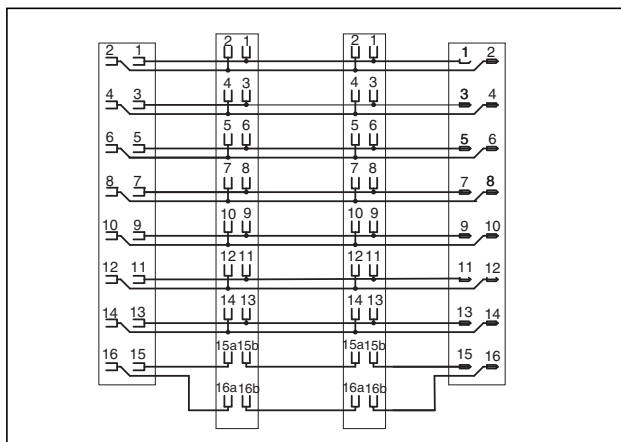


Figure 11 Circuit diagram HBUS 35,6-16P-2S BK

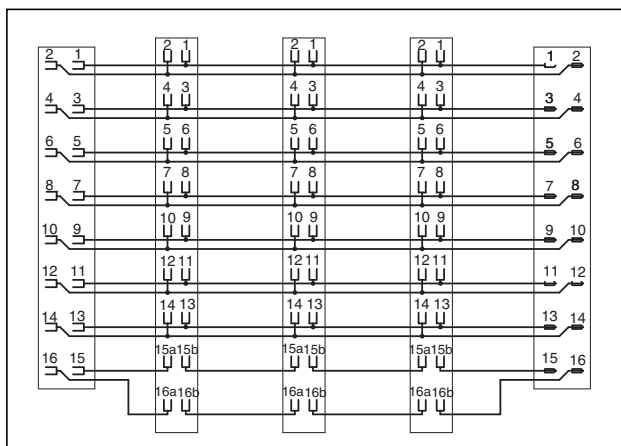


Figure 12 Circuit diagram for HBUS 53,6-16P-3S BK

#### Contacts

Contact 1 ... 4 Power  
Contact 5 ... 16 Signal

#### Air and creepage distances

|                              |              |
|------------------------------|--------------|
| ... to the DIN rail          | min. 0.23 mm |
| ... between one another      | min. 0.13 mm |
| ... between power and signal | min. 0.8 mm  |

#### Current carrying capacity for each contact

3 A, maximum total current 25 A

### 6.4 Dimensional drawing of connector for DIN rail connector

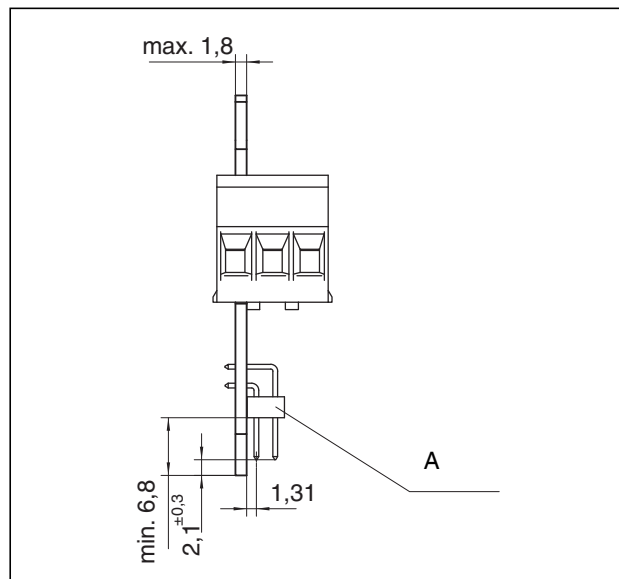


Figure 13 Dimensional drawing of connector on perpendicular PCB (in BC 17,8) for contacting in the DIN rail connector

**A** Pin strip, max. 2 x 9-pos.  
□ 0.63 x 0.63 mm or ø 0.7 – 0.8 mm  
2.54 mm pitch  
Gold-plated surface

## 7 PCB arrangement for BC 2TE – 9TE

### 7.1 Plug-in positions for horizontal PCBs

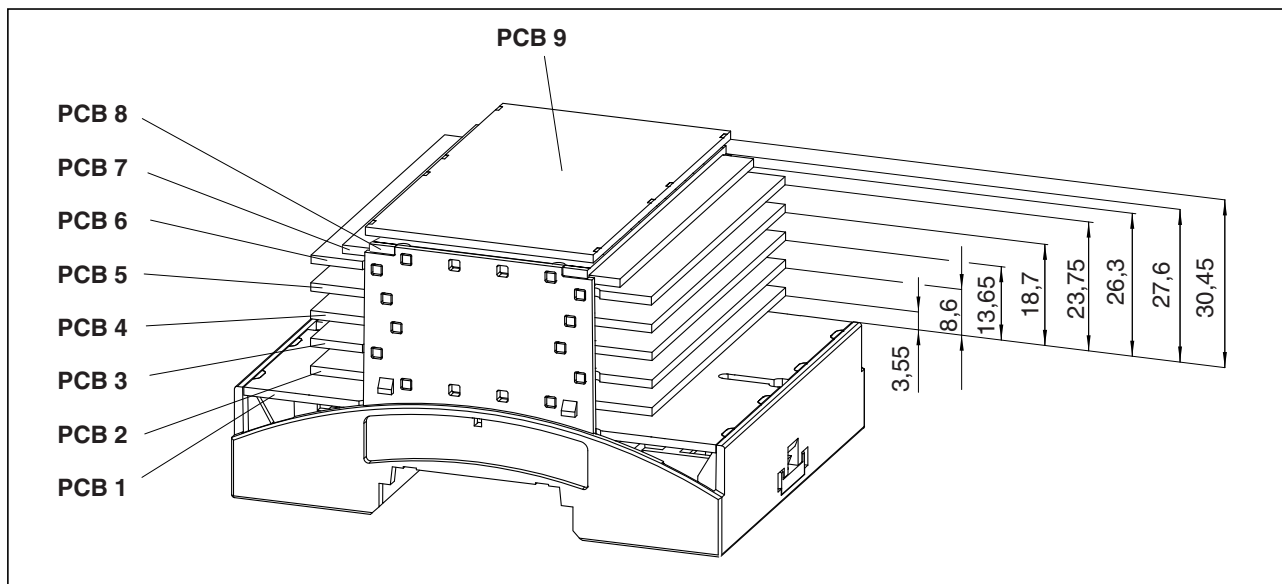


Figure 14 Overview of the PCB plug-in positions

#### PCB thickness

|           |                   |
|-----------|-------------------|
| PCB 1     | 1.5 mm ... 1.8 mm |
| PCB 2 – 8 | Maximum 1.8 mm    |
| PCB 9     | Maximum 1.8 mm    |

A circuit board at PCB 9 is only possible when a fitted cover is not used. The fitted cover is supplied as standard with the transparent cover.

7.2     Circuit board dimensions for PCB 1, horizontal

Circuit board dimensions for PCB 1, horizontal (BC 35,6...)

An overview of the arrangement of the horizontal circuit boards PCB 1 – 9 can be found on page 16.

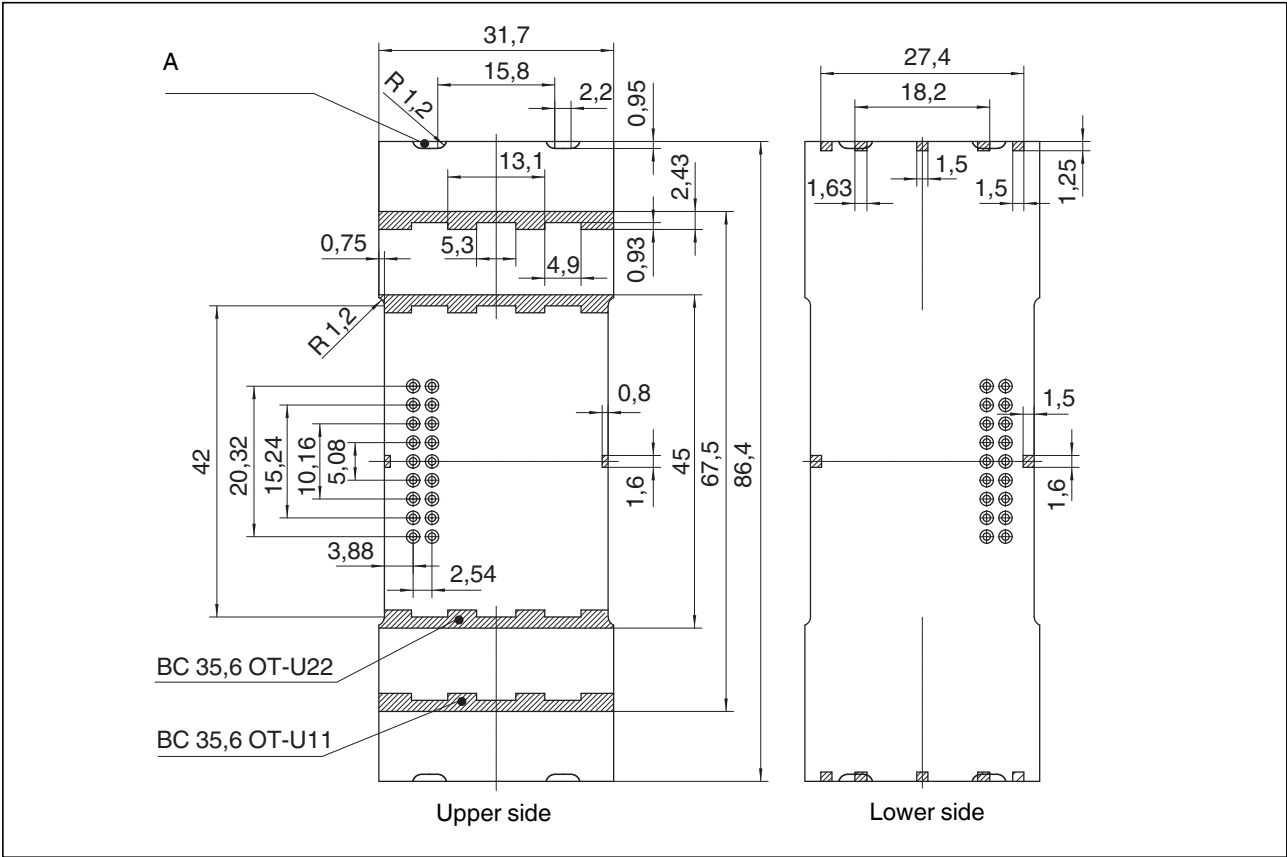


Figure 15   Dimensions of PCB 1 (BC 35,6)

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>A</b>                                                                            | Contour for filler plug                       |
| <b>PCB thickness</b>                                                                | Maximum 1.8 mm                                |
|  | Locked area, no components at these positions |

Circuit board dimensions for PCB 1, horizontal (BC 53,6...)

An overview of the arrangement of the horizontal circuit boards PCB 1 – 9 can be found on page 16.

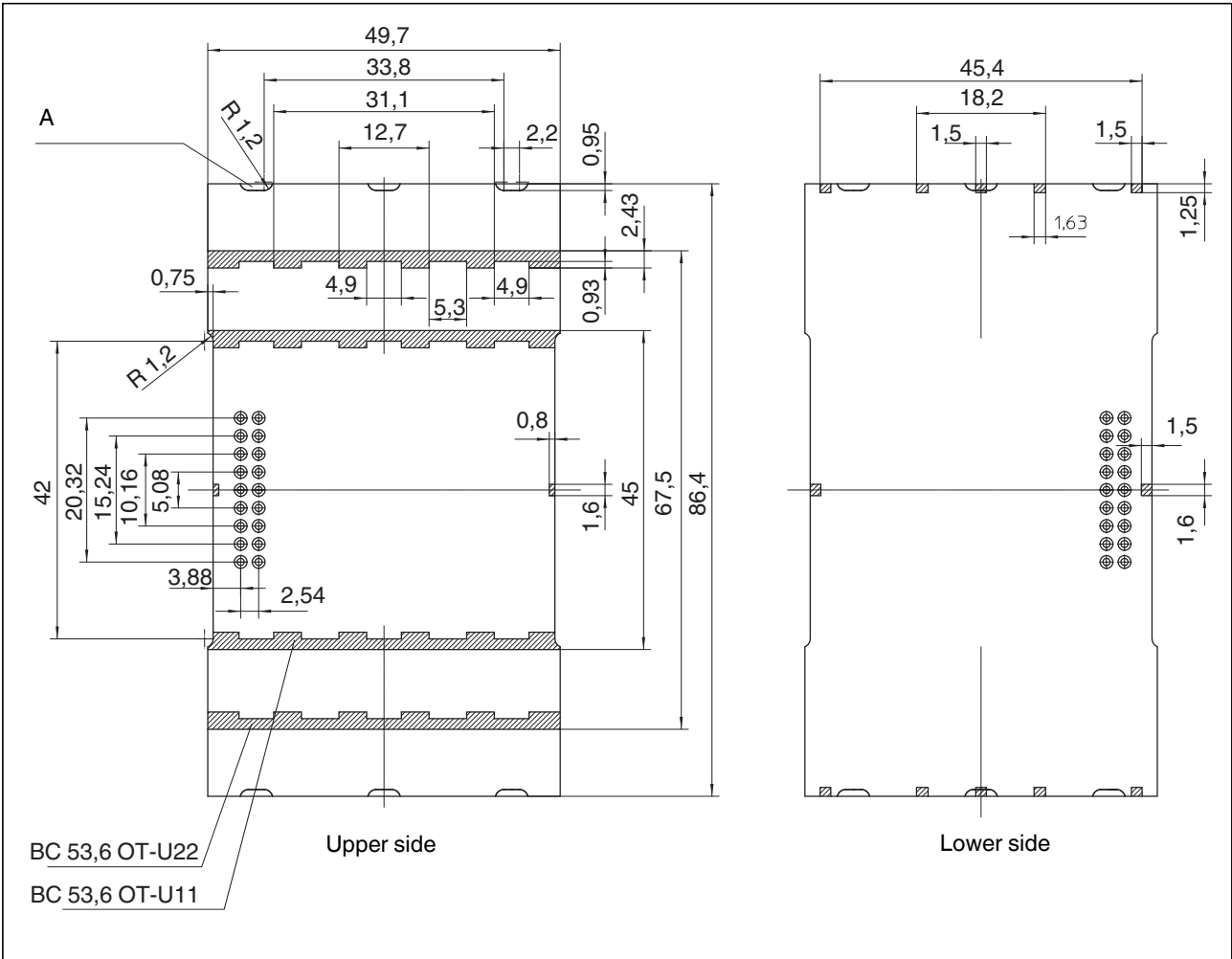


Figure 16 Dimensions of PCB 1 (BC 53,6)

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>A</b>                                                                            | Contour for filler plug                       |
| <b>PCB thickness</b>                                                                | Maximum 1.8 mm                                |
|  | Locked area, no components at these positions |



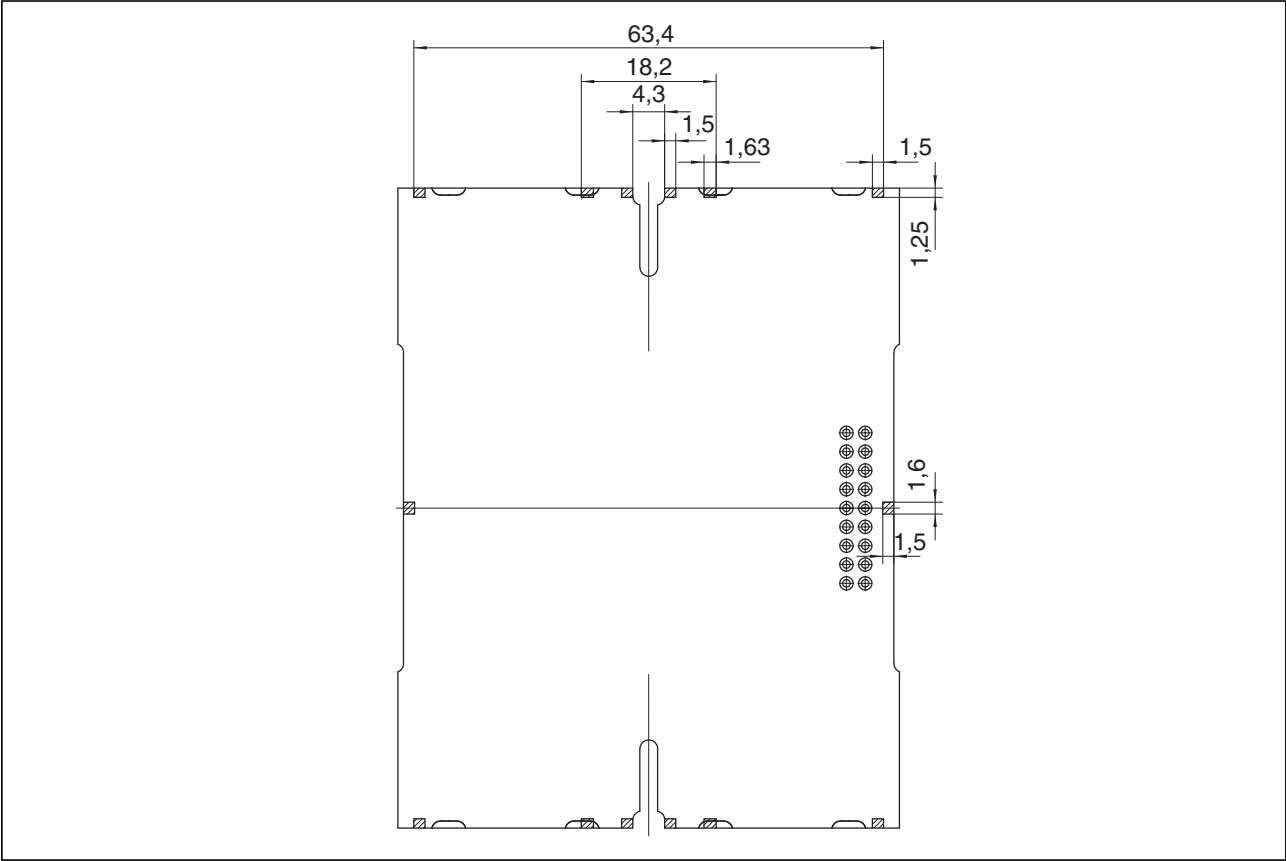


Figure 18 Dimensions of PCB 1 (BC 71,6) – lower side

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>PCB thickness</b>                                                                | Maximum 1.8 mm                                |
|  | Locked area, no components at these positions |

Circuit board dimensions for PCB 1, horizontal (BC 107,6...)

An overview of the arrangement of the horizontal circuit boards PCB 1 – 9 can be found on page 16.

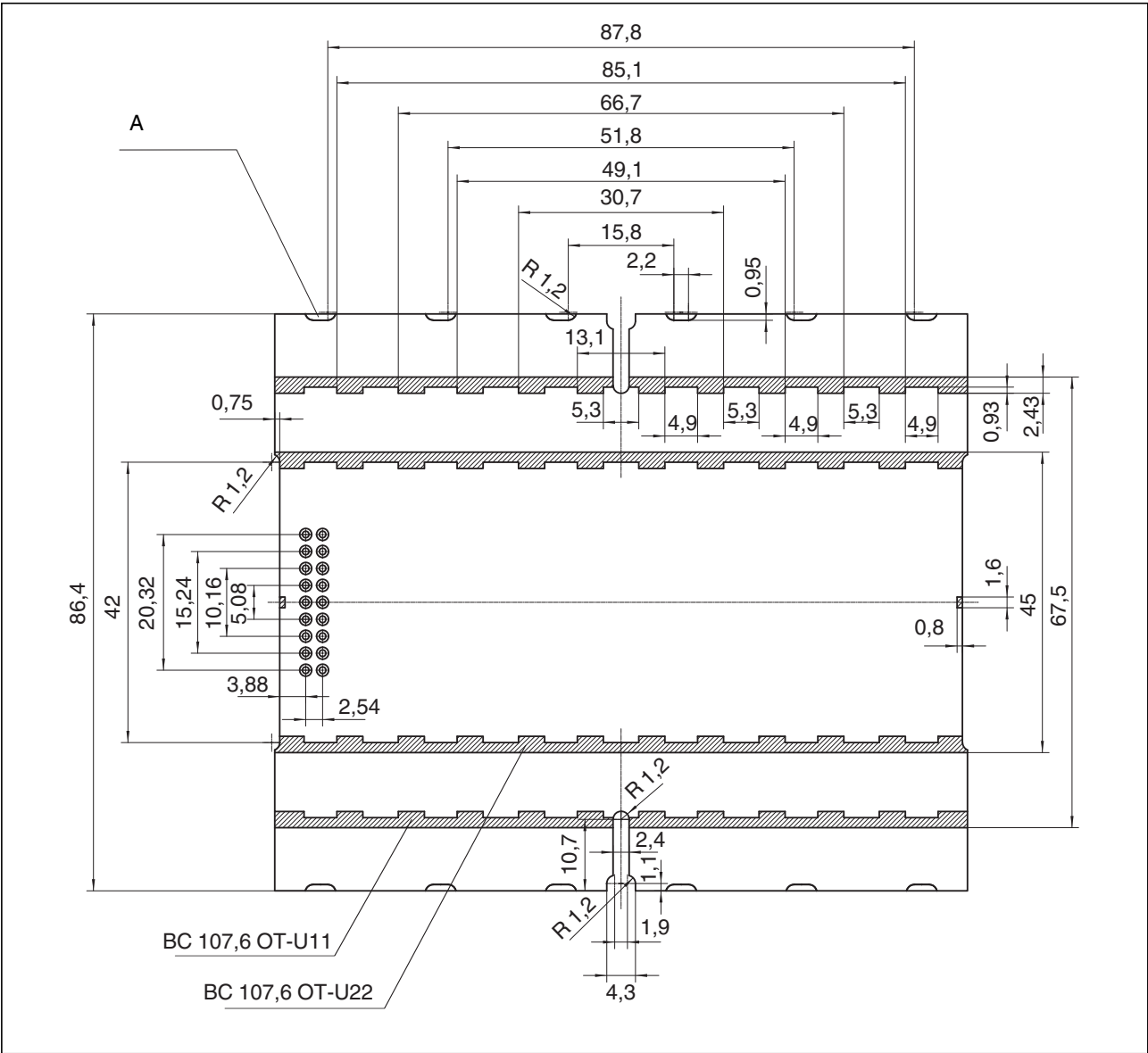


Figure 19 Dimensions of PCB 1 (BC 107,6) – upper side

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>A</b>                                                                            | Contour for filler plug                       |
| <b>PCB thickness</b>                                                                | Maximum 1.8 mm                                |
|  | Locked area, no components at these positions |

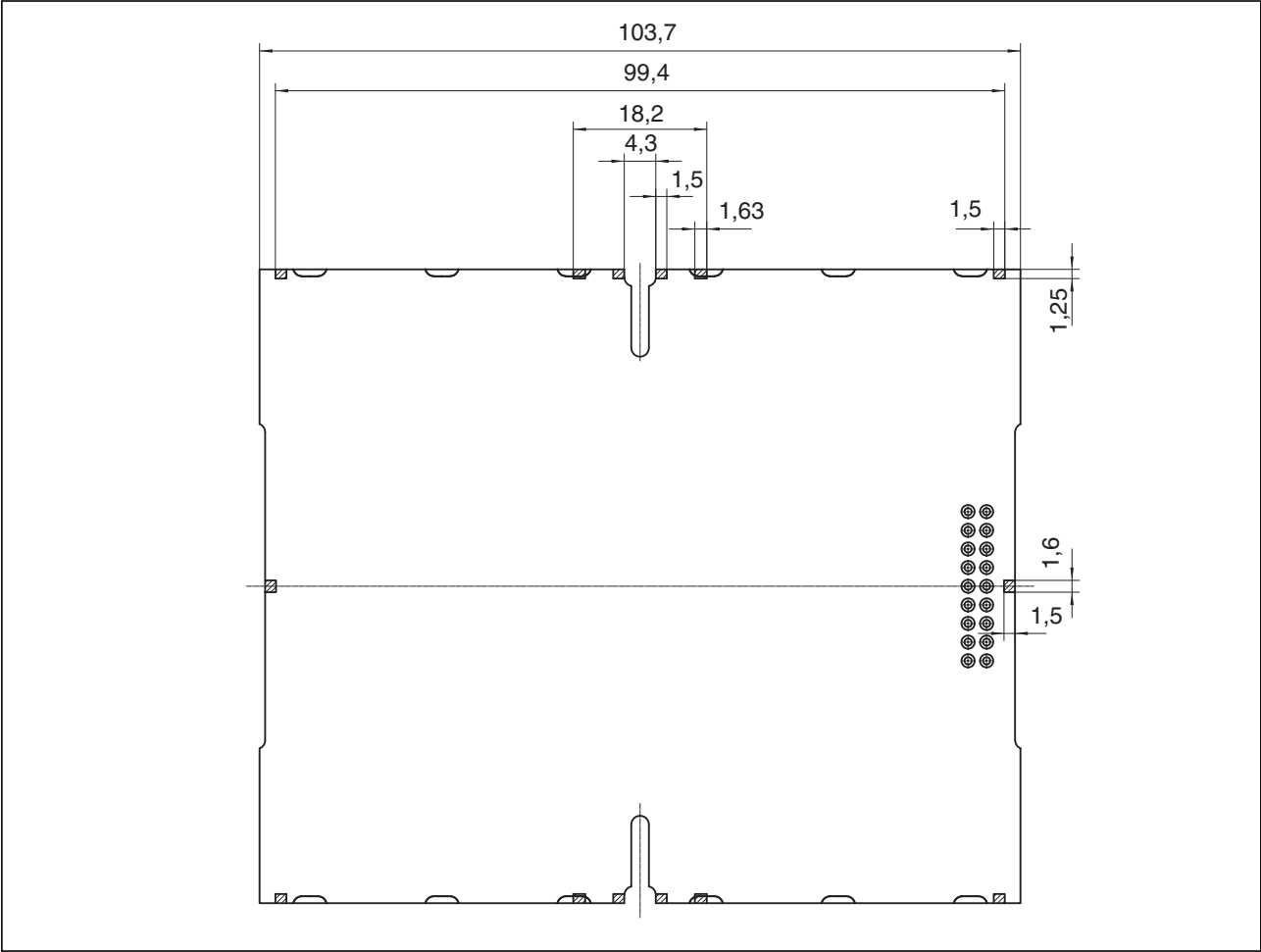


Figure 20 Dimensions of PCB 1 (BC 107,6) – lower side

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>PCB thickness</b>                                                                | Maximum 1.8 mm                                |
|  | Locked area, no components at these positions |

### Circuit board dimensions for PCB 1, horizontal (BC 161,6...)

An overview of the arrangement of the horizontal circuit boards PCB 1 – 9 can be found on page 16.

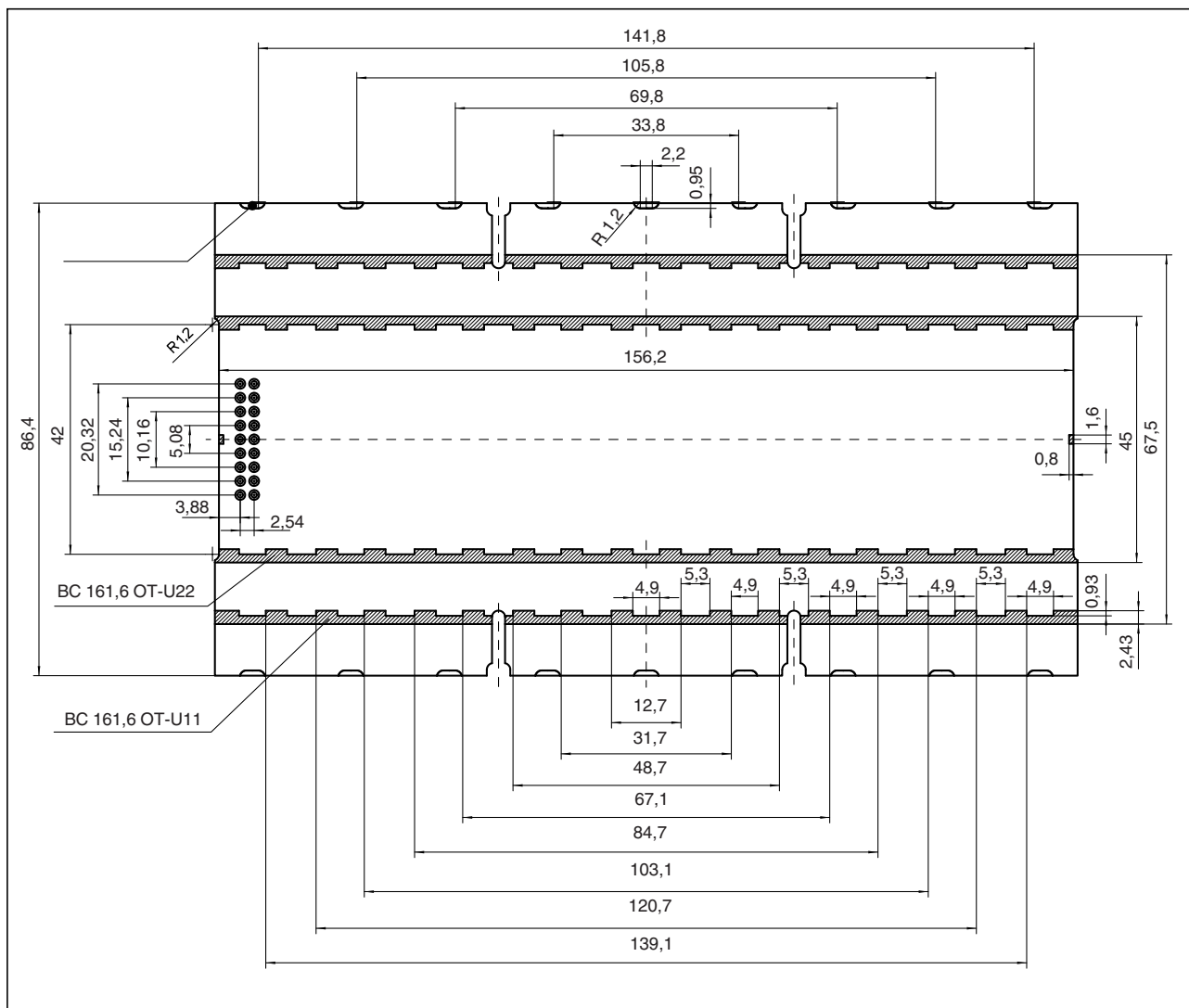


Figure 21 Dimensions of PCB 1 (BC 161,6) – upper side

## PCB thickness

Maximum 1.8 mm



Locked area, no components at these positions

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>PCB thickness</b>                                                                | Maximum 1.8 mm                                |
|  | Locked area, no components at these positions |

### 7.3 Circuit board dimensions for PCB 2 to 8, horizontal

An overview of the arrangement of the horizontal circuit boards PCB 1 – 9 can be found on page 16.

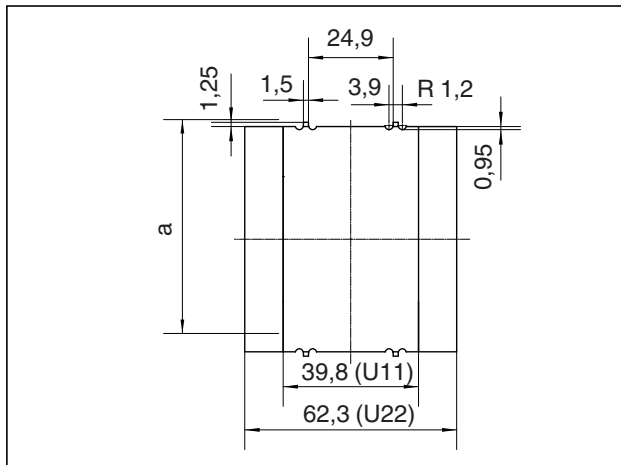


Figure 23 Dimensions of PCB 2

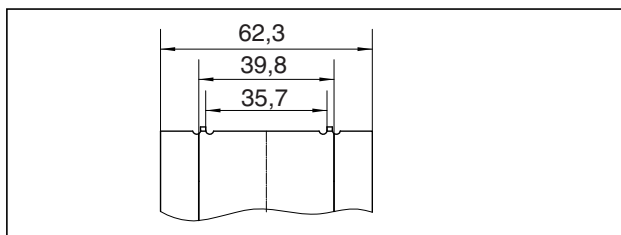


Figure 24 Dimensions of PCB 3

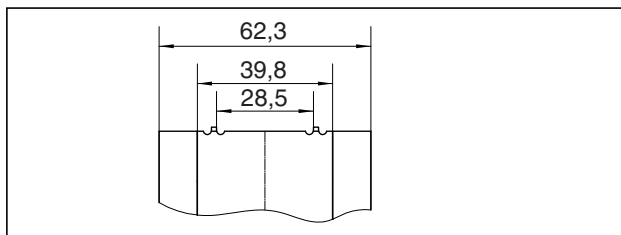


Figure 25 Dimensions of PCB 4

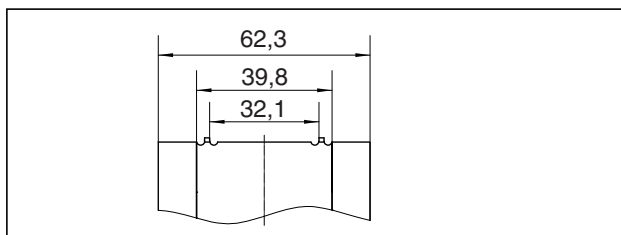


Figure 26 Dimensions of PCB 5

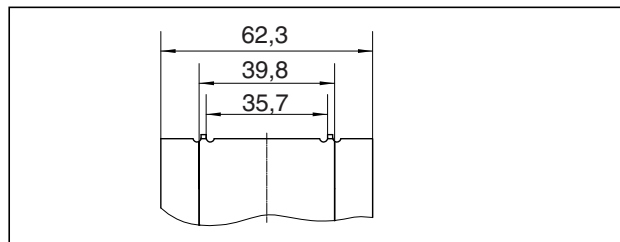


Figure 27 Dimensions of PCB 6

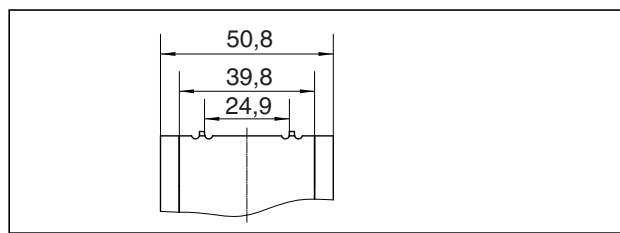


Figure 28 Dimensions of PCB 7

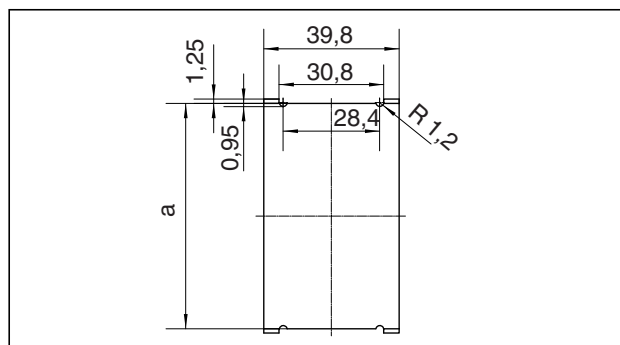


Figure 29 Dimensions of PCB 8

#### Dimensions for a

|             |       |
|-------------|-------|
| BC 35,6 UT  | 30.3  |
| BC 53,6 UT  | 48.3  |
| BC 71,6 UT  | 66.3  |
| BC 71,6 UT  | 102.3 |
| BC 161,6 UT | 156.3 |

#### PCB thickness

Maximum 1.8 mm

#### 7.4 Circuit board dimensions for PCB 9, horizontal

A circuit board at PCB 9 is only possible when a fitted cover is not used. The fitted cover is supplied as standard with the transparent cover.

An overview of the arrangement of the horizontal circuit boards PCB 1 – 9 can be found on page 16.

##### Circuit board dimensions for PCB 9, horizontal (BC 35,6...)

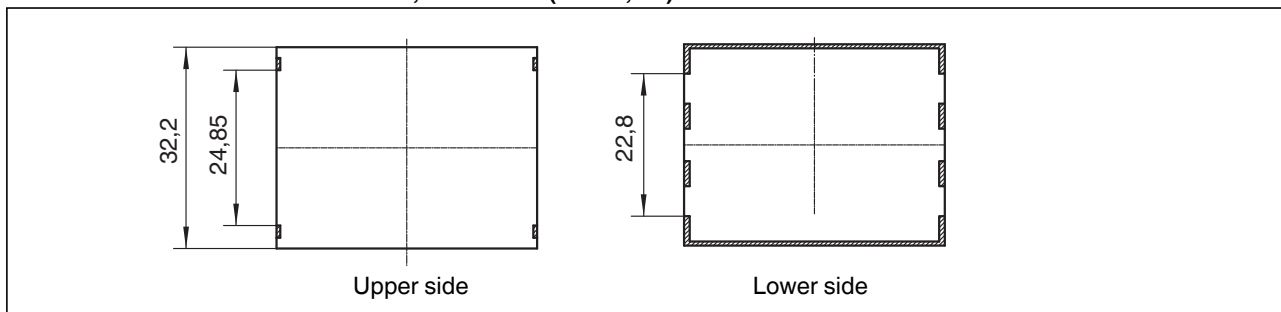


Figure 30 Dimensions of PCB 9 (BC 35,6)

##### Circuit board dimensions for PCB 9, horizontal (BC 53,6...)

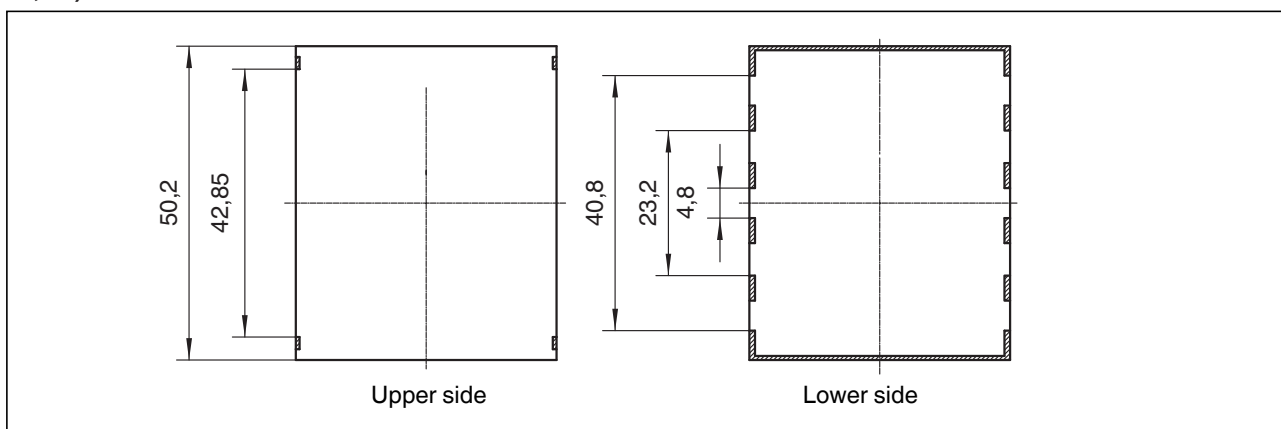


Figure 31 Dimensions of PCB 9 (BC 53,6)

##### PCB thickness

Maximum 1.8 mm



Locked area, no components at these positions

### Circuit board dimensions for PCB 9, horizontal (BC 71,6...)

An overview of the arrangement of the horizontal circuit boards PCB 1 – 9 can be found on page 16.

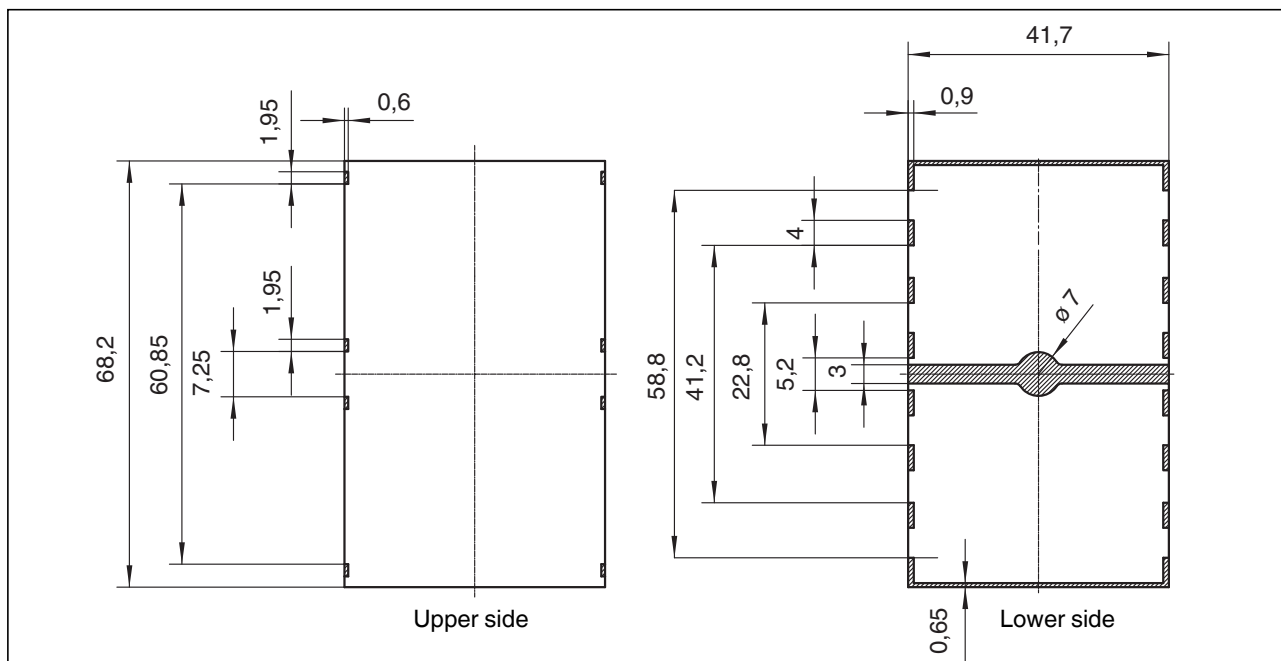


Figure 32 Dimensions of PCB 9 (BC 71,6)

## PCB thickness

Maximum 1.8 mm



Locked area, no components at these positions

Circuit board dimensions for PCB 9, horizontal (BC 107,6...)

An overview of the arrangement of the horizontal circuit boards PCB 1 – 9 can be found on page 16.

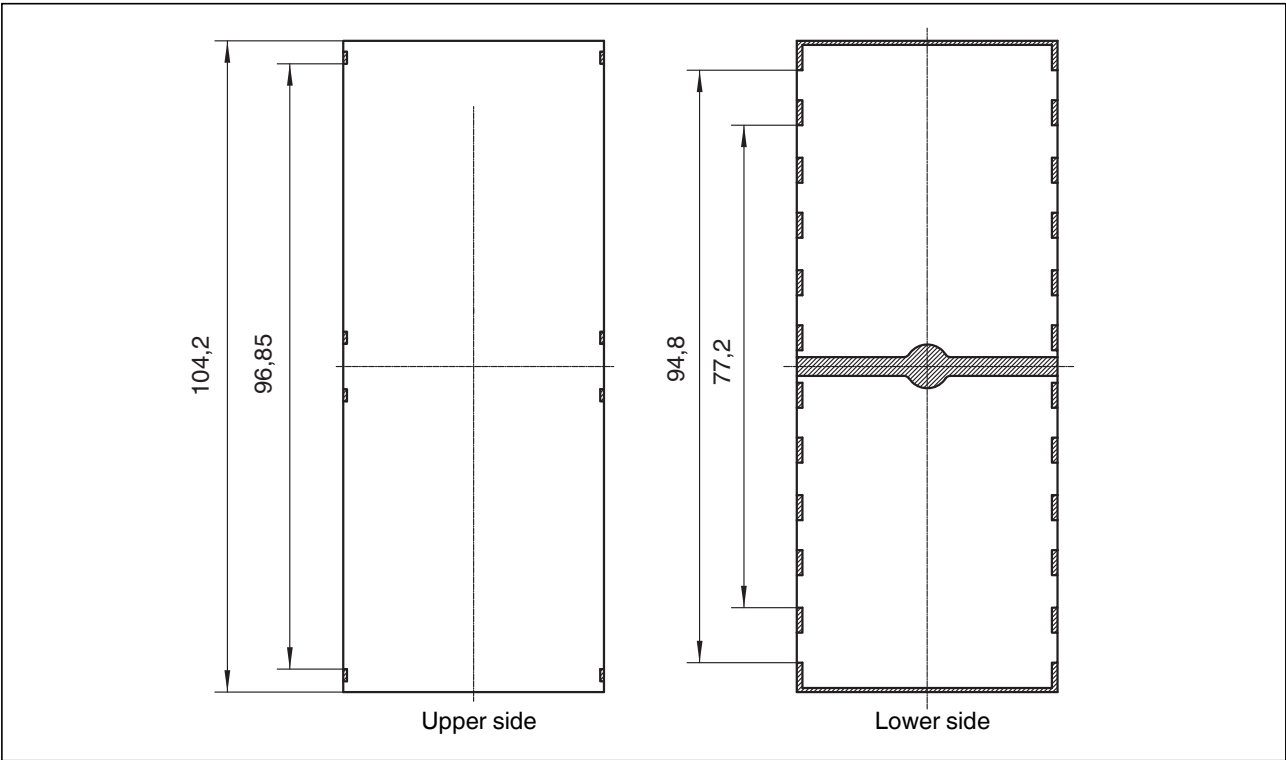


Figure 33 Dimensions of PCB 9 (BC 107,6)

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>PCB thickness</b>                                                                | Maximum 1.8 mm                                |
|  | Locked area, no components at these positions |

Circuit board dimensions for PCB 9, horizontal (BC 161,6...)

An overview of the arrangement of the horizontal circuit boards PCB 1 – 9 can be found on page 16.

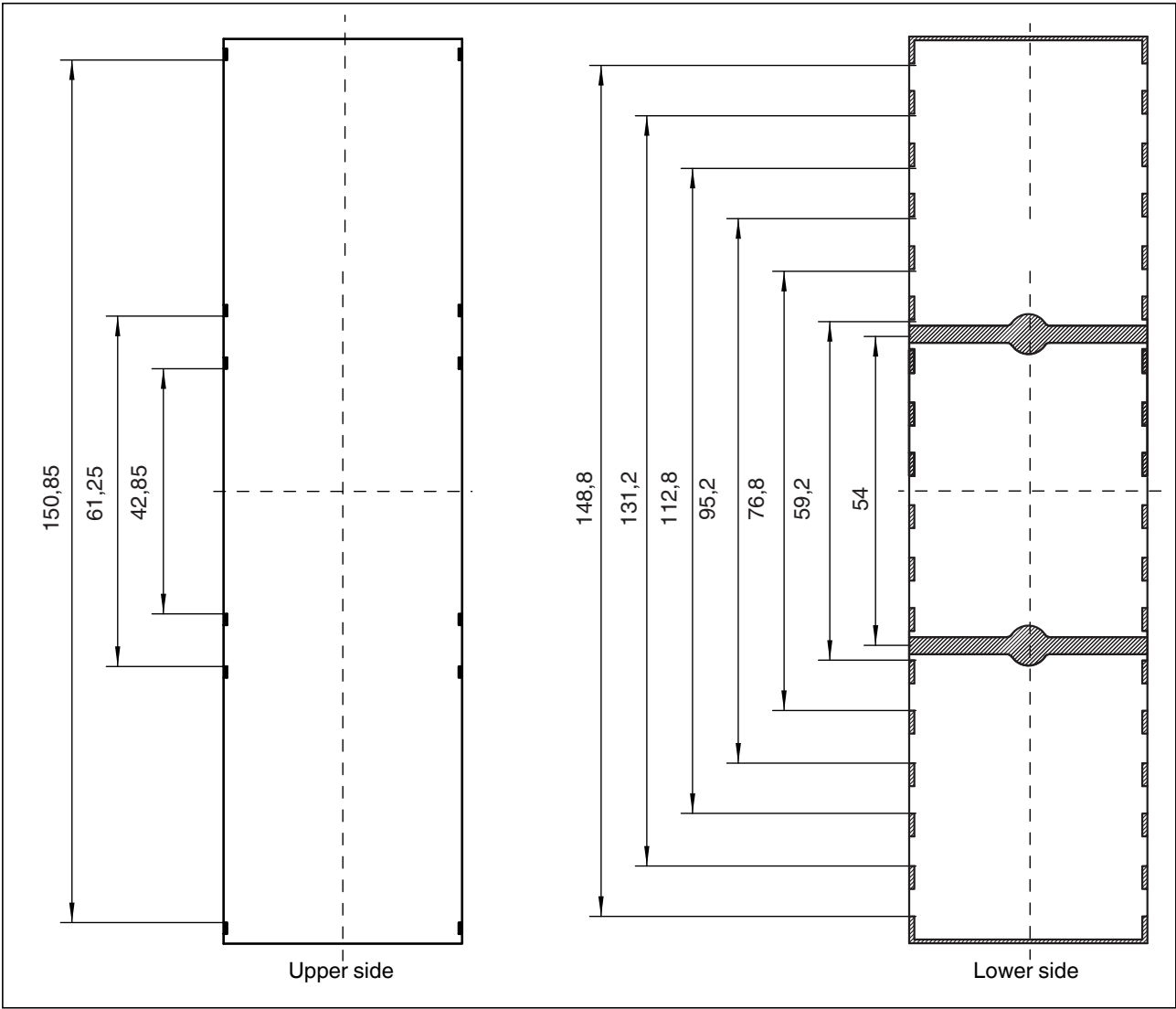


Figure 34 Dimensions of PCB 9 (BC 161,6)

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>PCB thickness</b>                                                                | Maximum 1.8 mm                                |
|  | Locked area, no components at these positions |

7.5 Perpendicular PCBs – transverse to the DIN rail

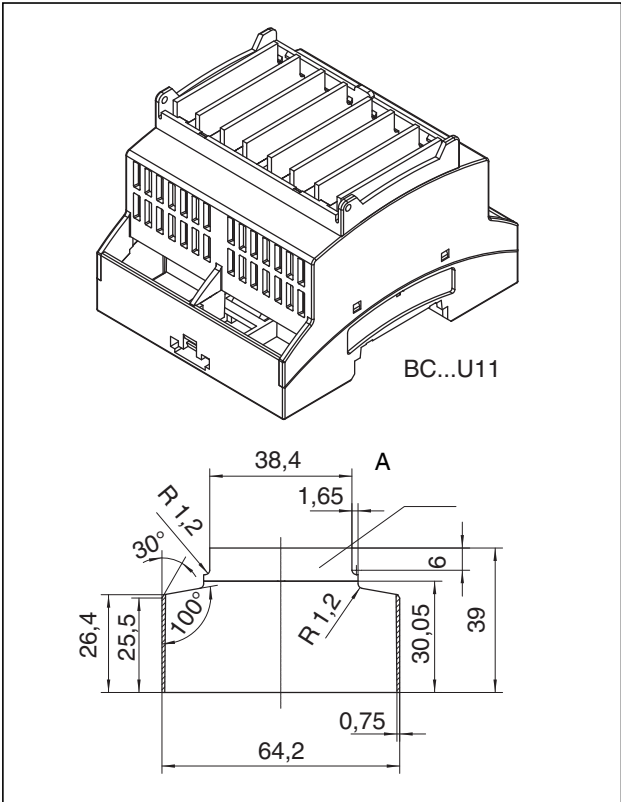


Figure 35 Dimensions of BC...U11

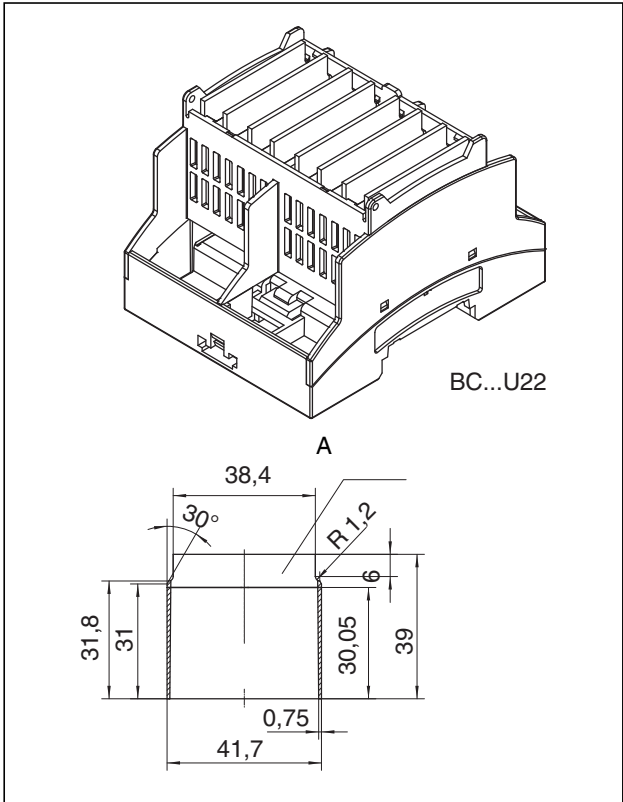


Figure 36 Dimensions of BC...U22

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>PCB thickness</b>                                                                | Maximum 1.8 mm                                |
|  | Locked area, no components at these positions |
| <b>A</b>                                                                            | PCB surface, when no fitted cover is used     |

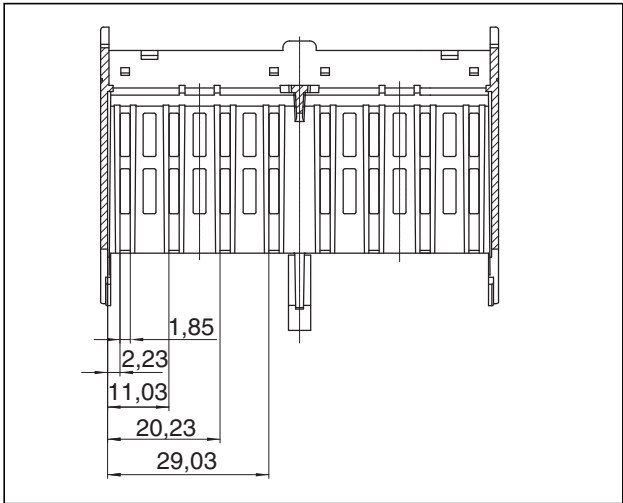


Figure 37 Cross-sectional view - perpendicular PCBs

7.6 Perpendicular PCBs – parallel to the DIN rail

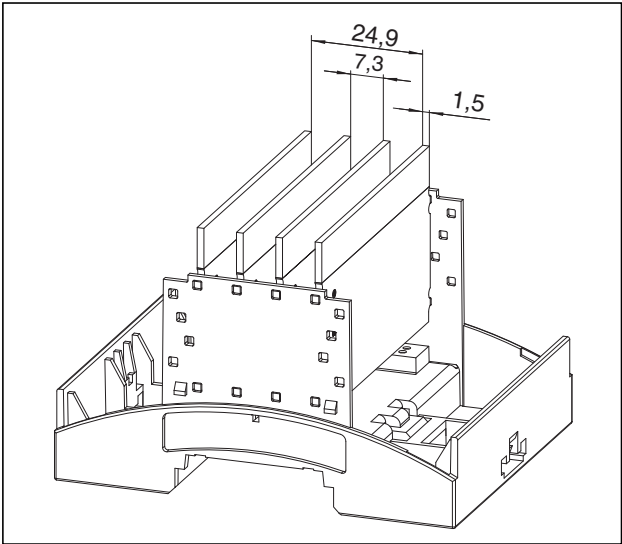


Figure 38 Perpendicular PCBs arranged parallel to the DIN rail

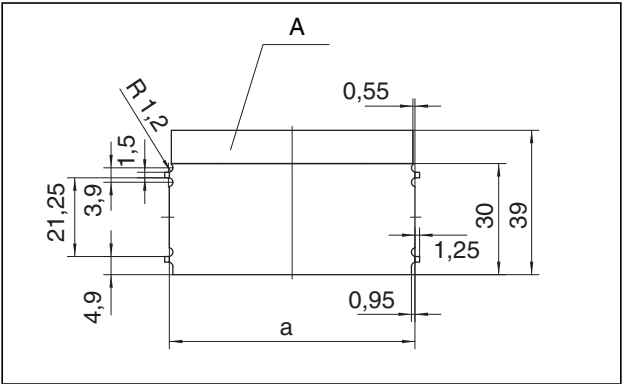


Figure 39 Dimensions for perpendicular PCBs

Dimensions for a

|             |       |
|-------------|-------|
| BC 35,6 UT  | 30.3  |
| BC 53,6 UT  | 48.3  |
| BC 71,6 UT  | 66.3  |
| BC 71,6 UT  | 102.3 |
| BC 161,6 UT | 156.3 |

PCB thickness

Maximum 1.8 mm



Locked area, no components at these positions

A

PCB surface, when no fitted cover is used

## 8 PCB arrangement for BC 161,6 modular

### 8.1 Plug-in positions for horizontal PCBs

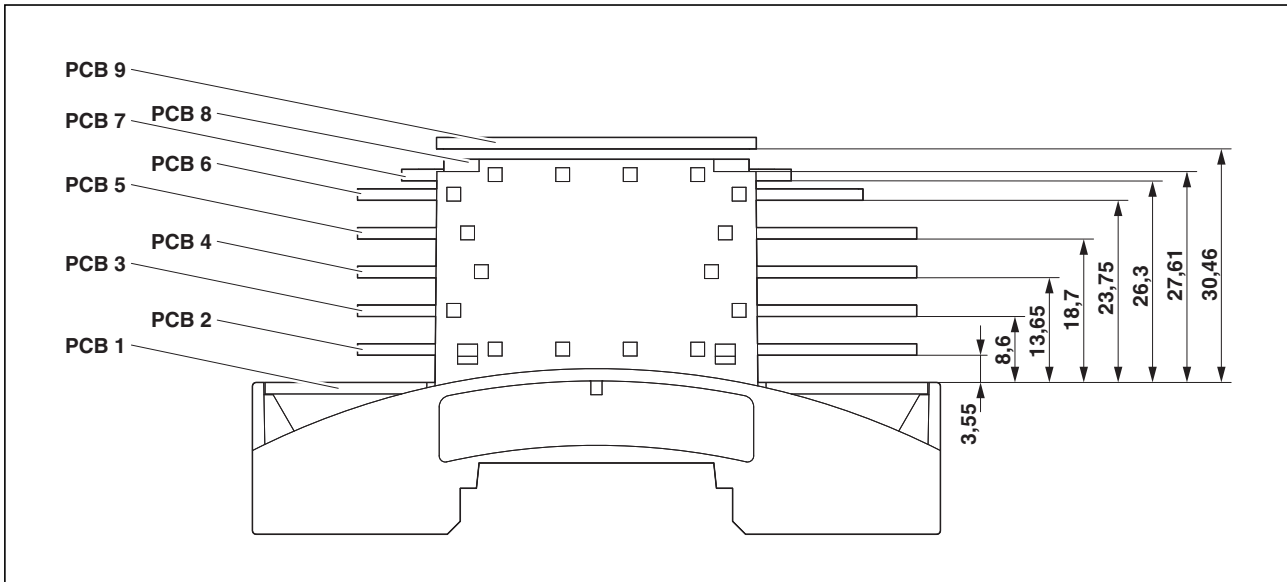


Figure 40 Overview of the plug-in positions for horizontal PCBs

#### PCB thickness

|           |                |
|-----------|----------------|
| PCB 1     | Maximum 1.8 mm |
| PCB 2 – 8 | Maximum 1.8 mm |
| PCB 9     | Maximum 1.8 mm |

## 8.2 Versions for the terminal installation space

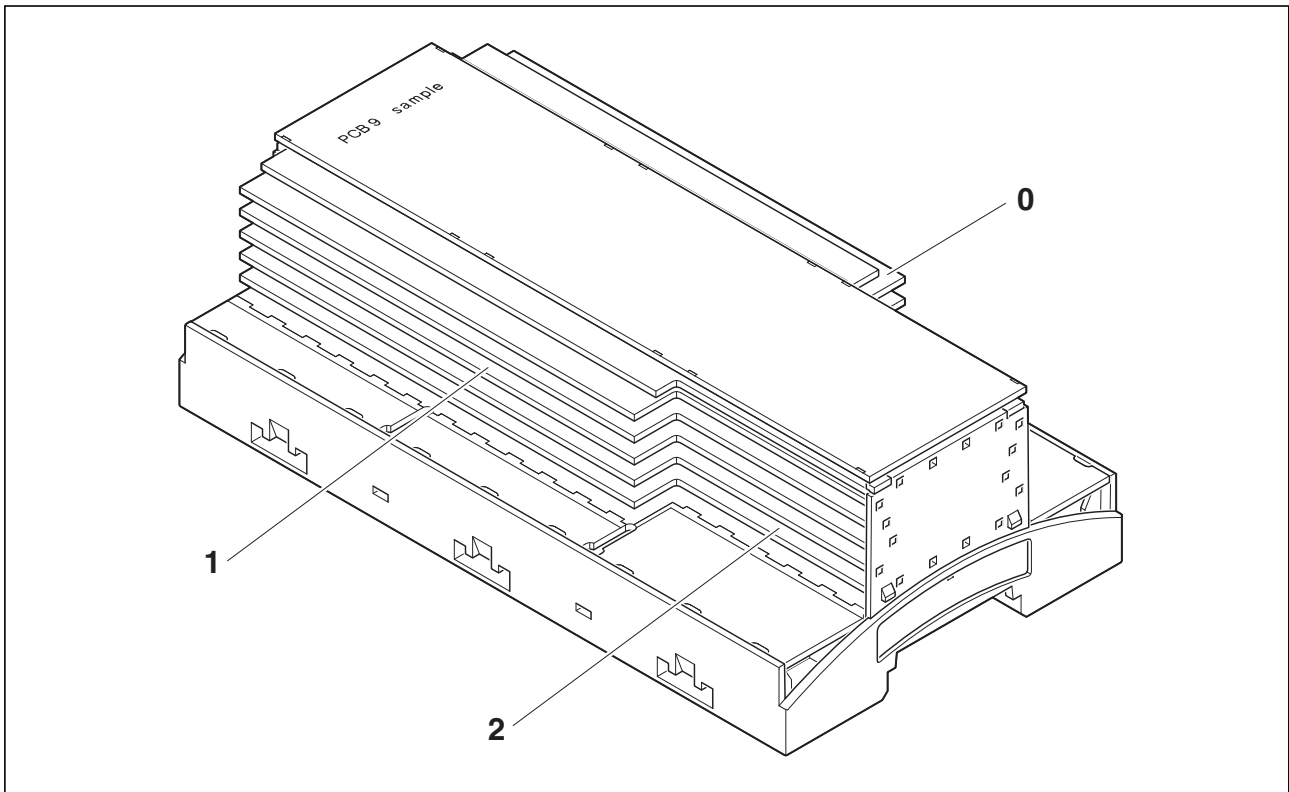


Figure 41 Terminal installation depth 0, 1 and 2

| Version | Terminal installation depth |
|---------|-----------------------------|
| 0       | 0 mm                        |
| 1       | 11 mm                       |
| 2       | 22 mm                       |

### 8.3 Circuit board dimensions for PCB 1, horizontal

An overview of the arrangement of the horizontal circuit boards PCB 1 – 9 can be found on page 32.

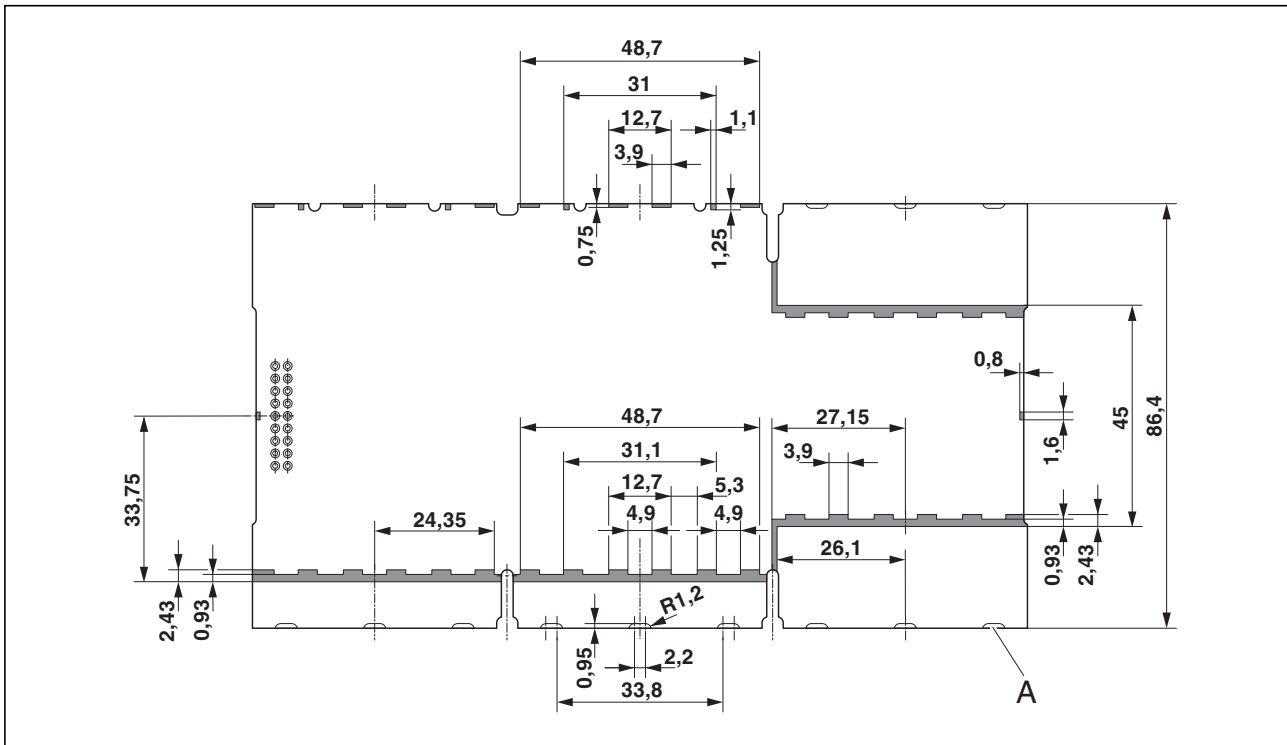


Figure 42 Upper side – mounting side of BC modular 161,6 (example BC 161,6 OT 010122)

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>A</b>                                                                            | Contour for filler plug                       |
| <b>PCB thickness</b>                                                                | Maximum 1.8 mm                                |
|  | Locked area, no components at these positions |
| Surface of the main PCB approx. 13000 mm <sup>2</sup> (mounting side)               |                                               |

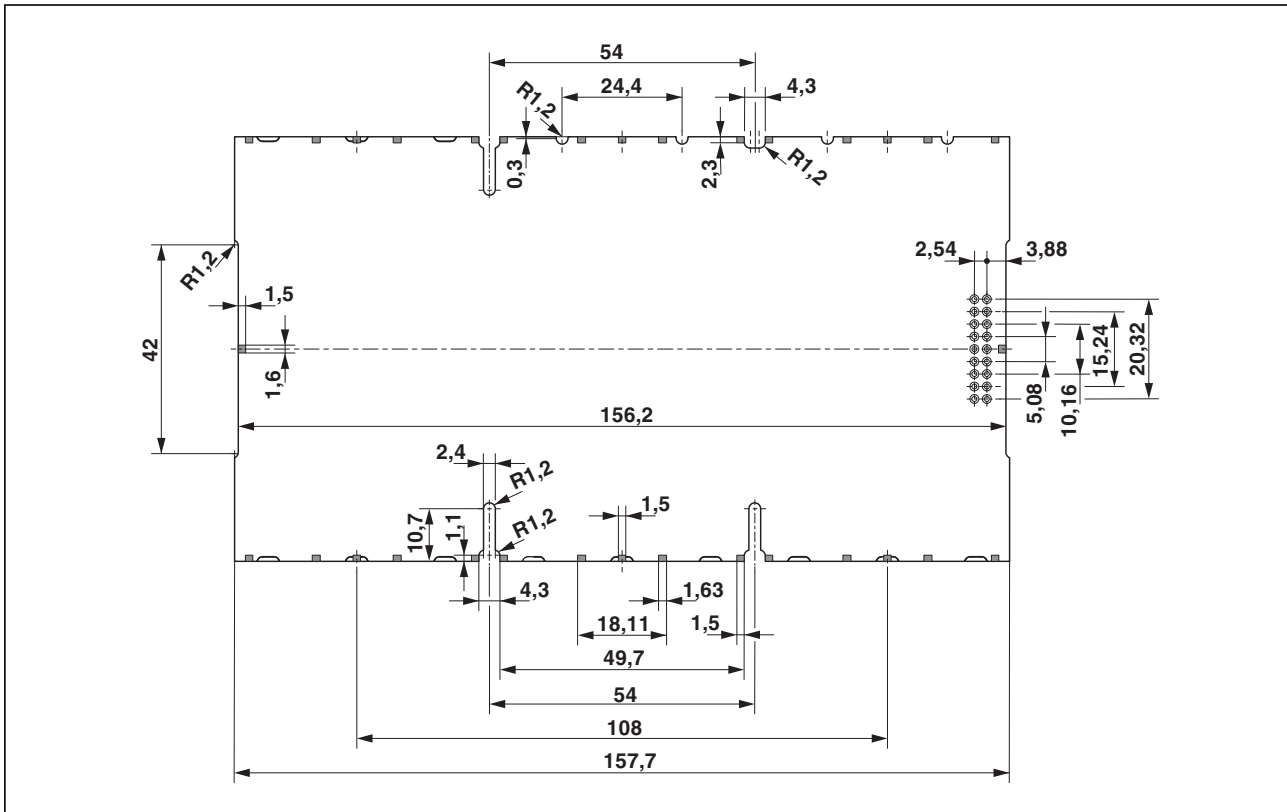


Figure 43 Lower side – soldering side of BC modular 161,6 (example BC 161,6 OT 010122)

**PCB thickness**

Maximum 1.8 mm



Locked area, no components at these positions

#### 8.4 Circuit board dimensions for PCB 2 to 8, horizontal

An overview of the arrangement of the horizontal circuit boards PCB 1 – 9 can be found on page 32.

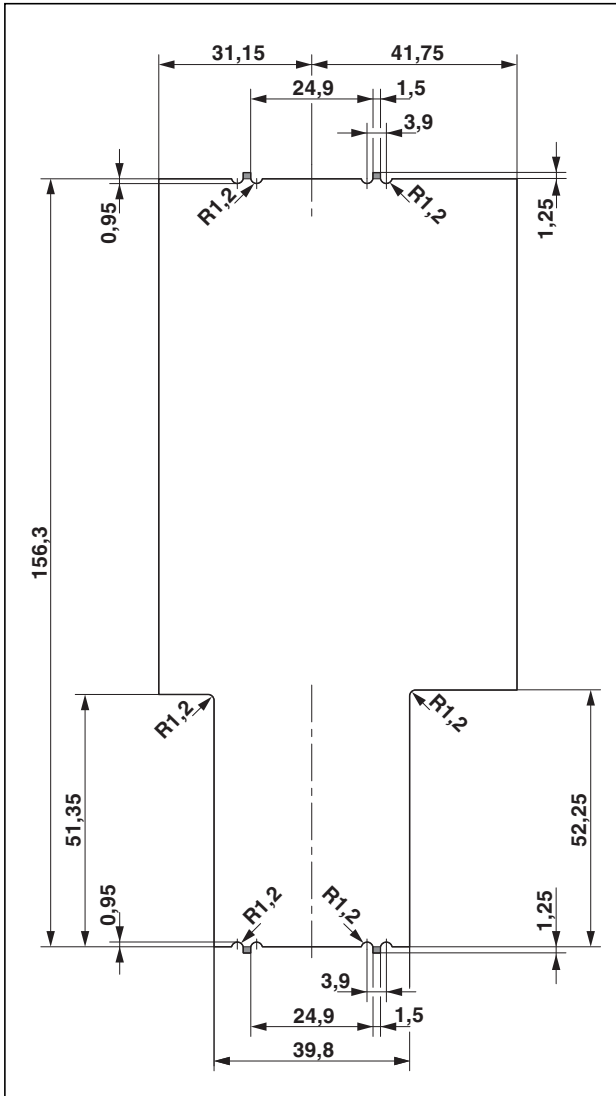


Figure 44 Dimensions of PCB 2  
(example BC 161,6 OT 010122)

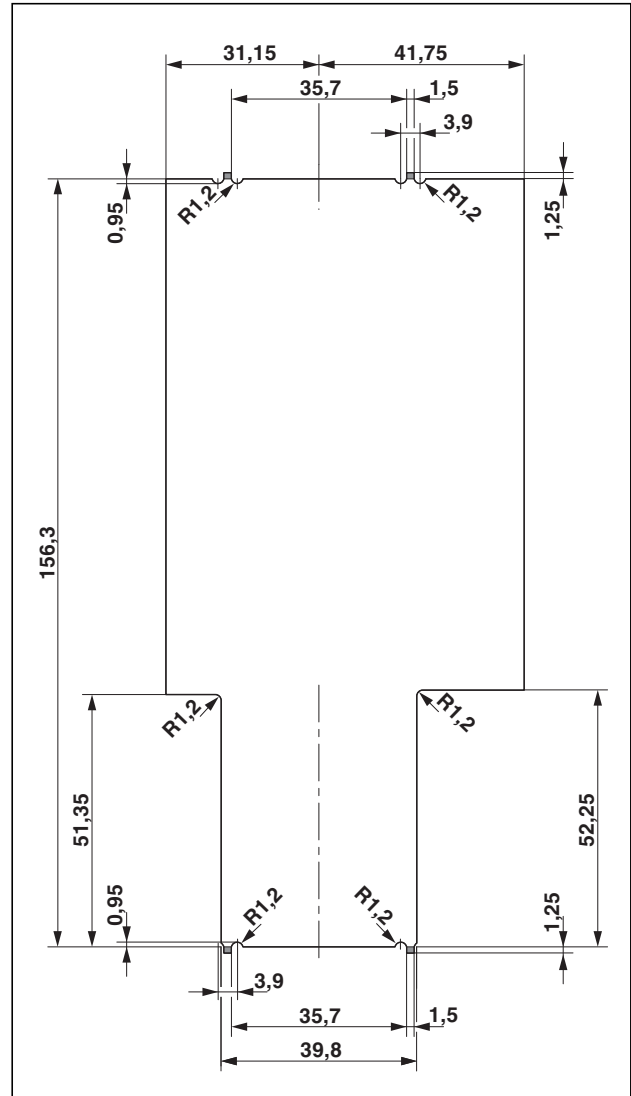


Figure 45 Dimensions of PCB 3  
(example BC 161,6 OT 010122)

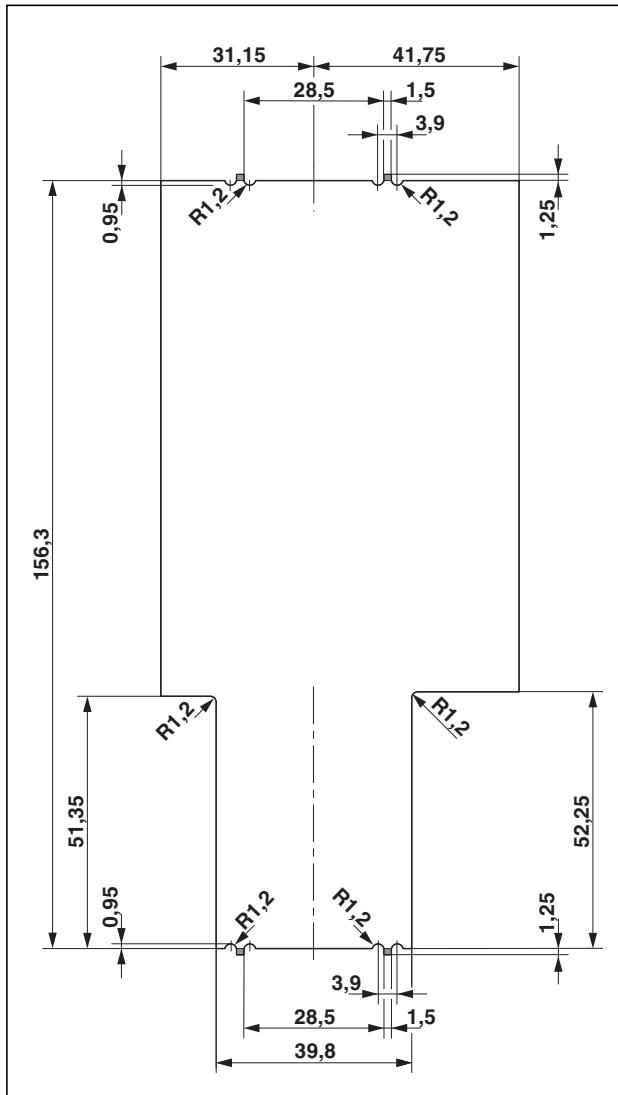


Figure 46 Dimensions of PCB 4  
(example BC 161,6 OT 010122)

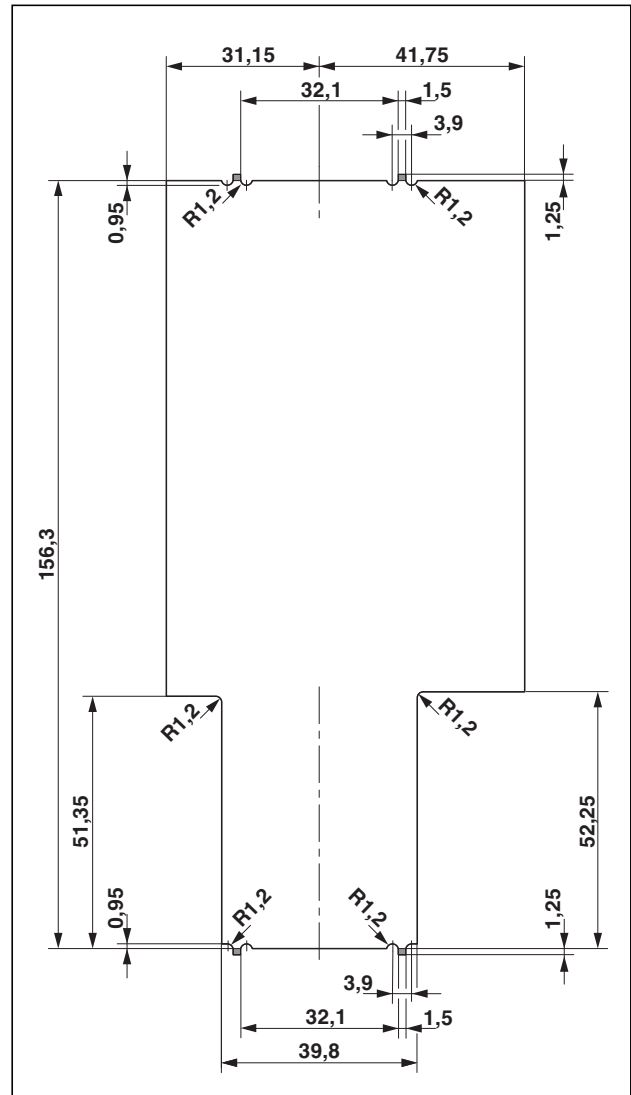


Figure 47 Dimensions of PCB 5  
(example BC 161,6 OT 010122)

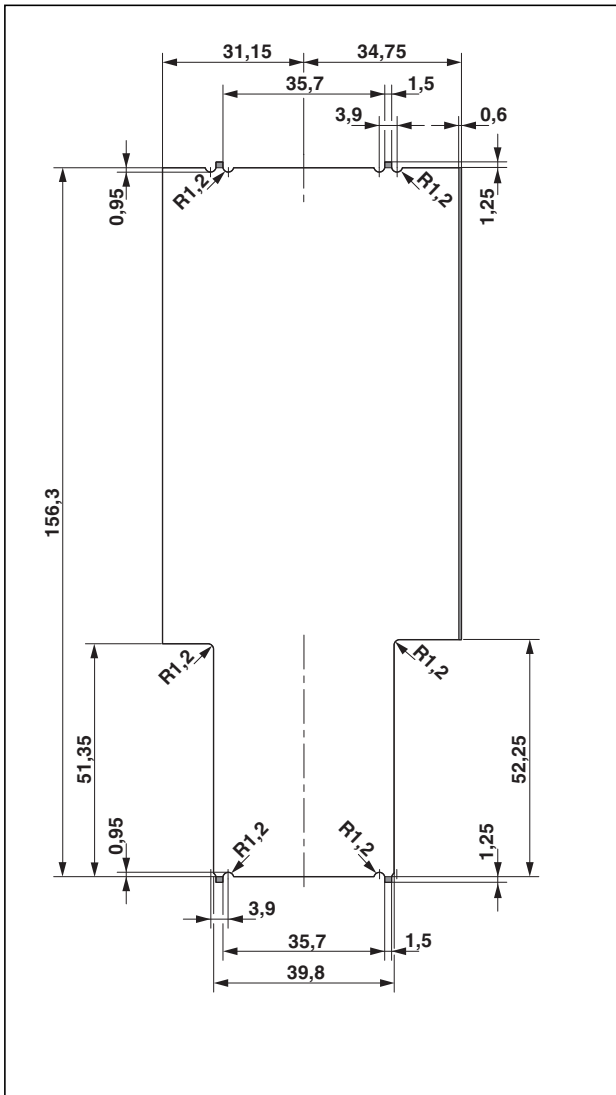


Figure 48 Dimensions of PCB 6  
(example BC 161,6 OT 010122)

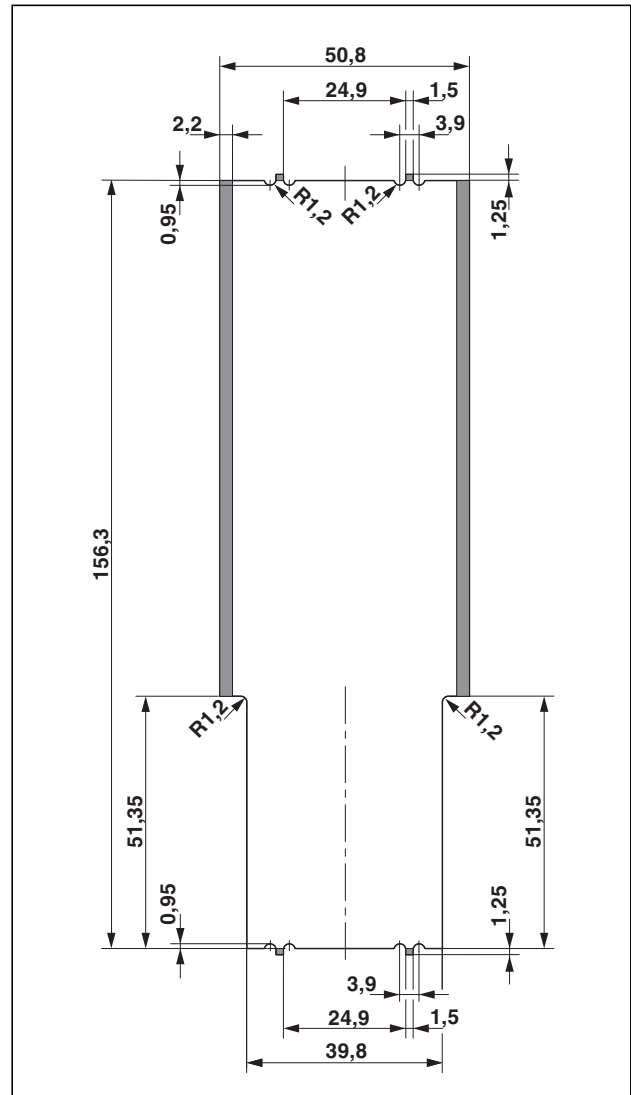


Figure 49 Dimensions of PCB 7  
(example BC 161,6 OT 010122)

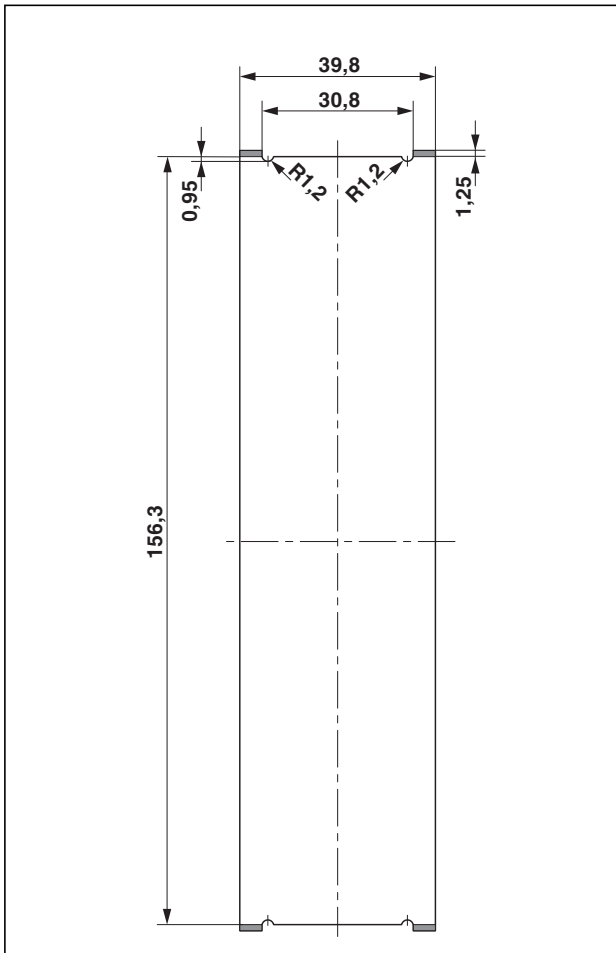


Figure 50 Dimensions of PCB 8  
(example BC 161,6 OT 010122)

### 8.5 Circuit board dimensions for PCB 9, horizontal

An overview of the arrangement of the horizontal circuit boards PCB 1 – 9 can be found on page 32.

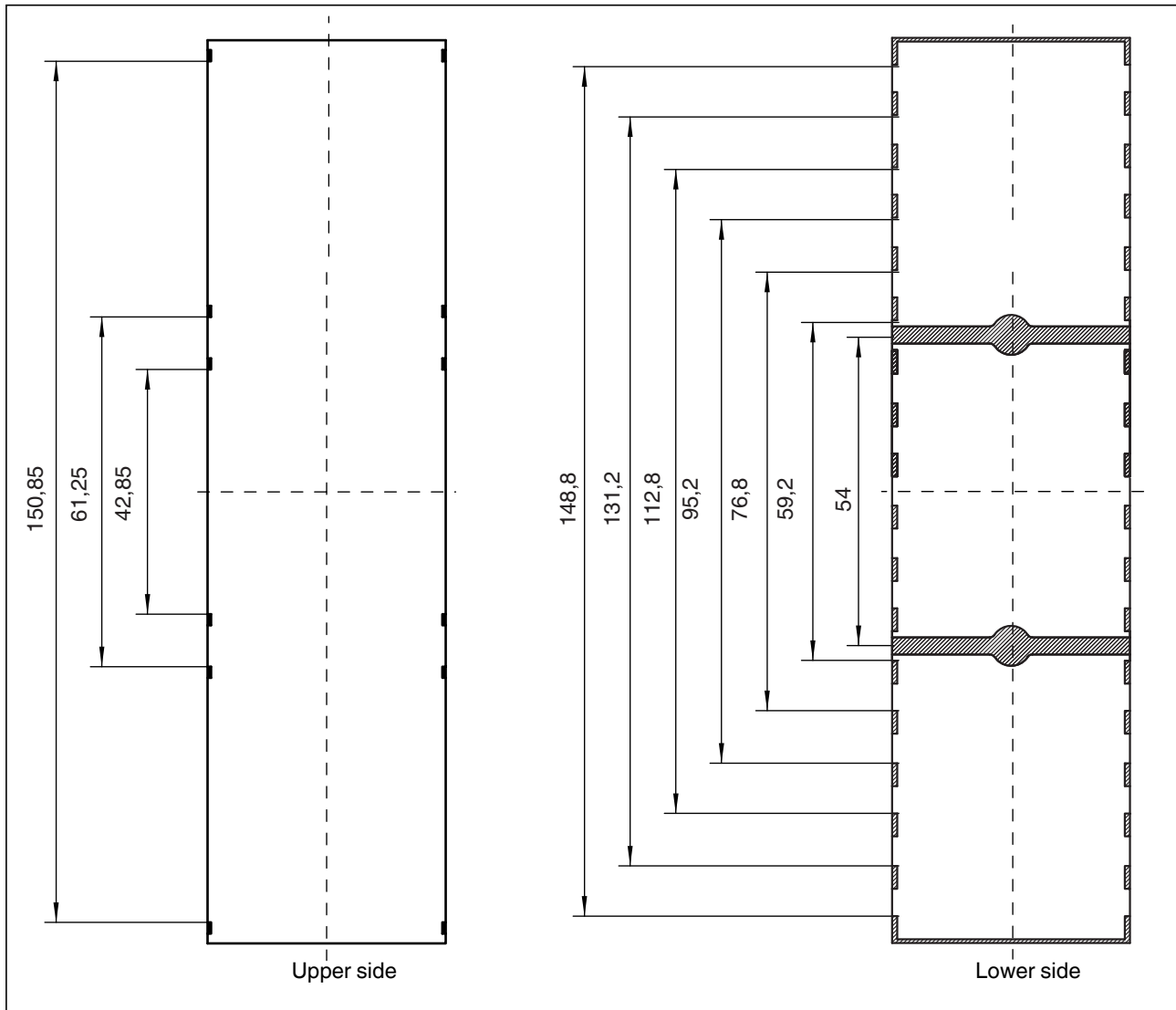


Figure 51 Dimensions of PCB 9 (BC 161,6)

#### PCB thickness



Maximum 1.8 mm

Locked area, no components at these positions

## 8.6 Perpendicular PCBs (BC 161,6 modular)

PCBs transverse to the DIN rail

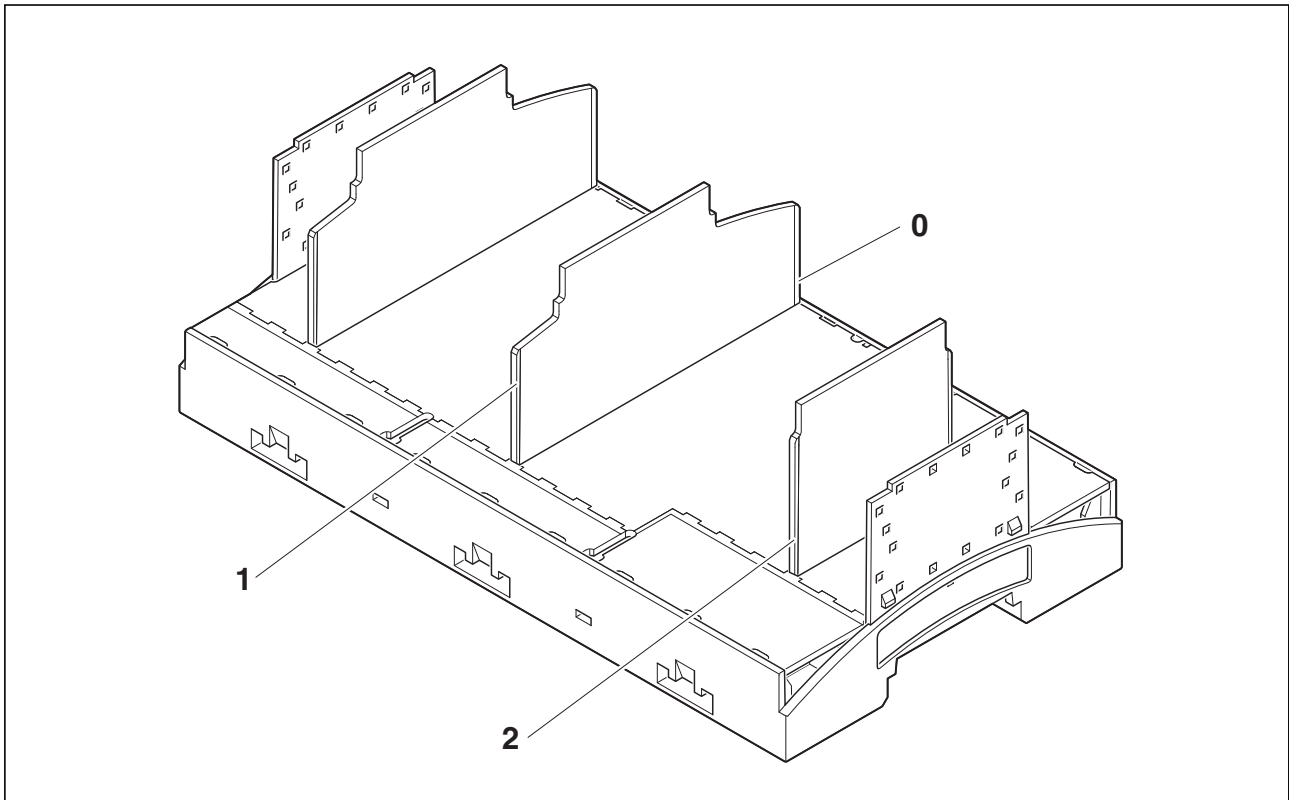


Figure 52 Terminal installation depth 0, 1 and 2 (example BC 161,6 OT 010122)

| Version | Terminal installation depth |
|---------|-----------------------------|
| 0       | 0 mm                        |
| 1       | 11 mm                       |
| 2       | 22 mm                       |

### Dimensions for perpendicular PCBs transverse to the DIN rail

An overview of the arrangement of the perpendicular circuit boards that are arranged transverse to the DIN rail can be found on page 41.

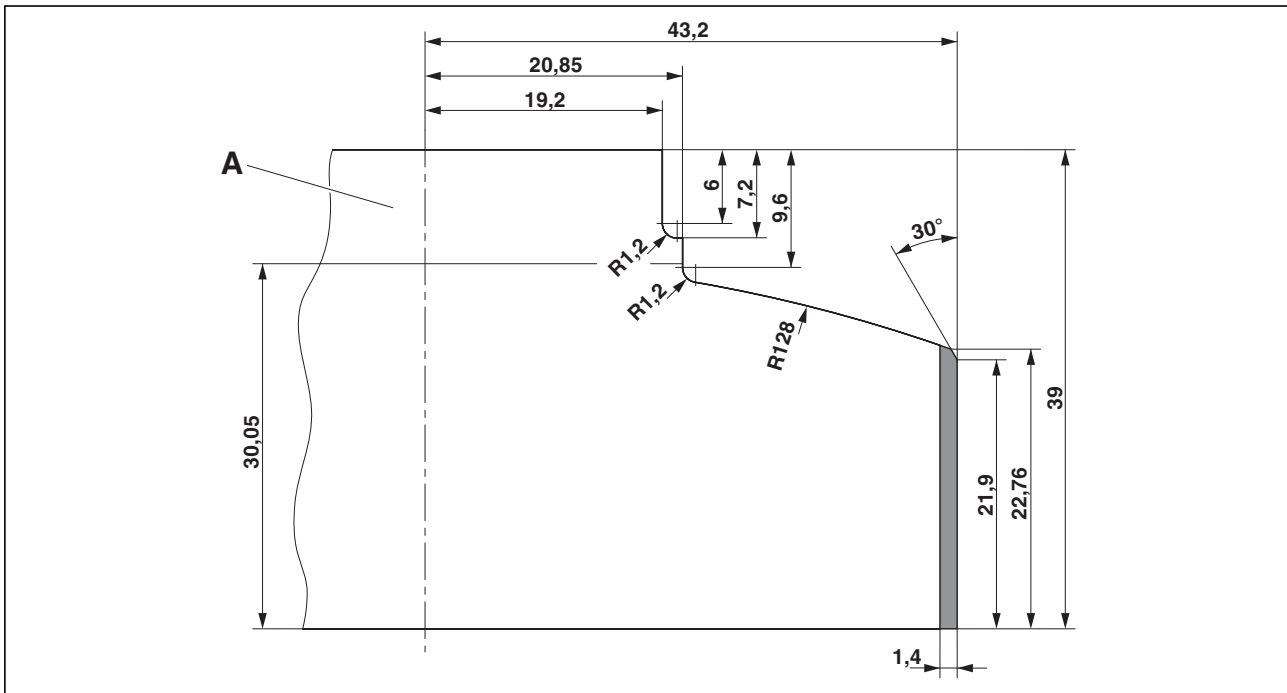


Figure 53 Terminal installation depth 0 mm

|                                                                                     |                                               |
|-------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>PCB thickness</b>                                                                | Maximum 1.8 mm                                |
|  | Locked area, no components at these positions |
| <b>A</b>                                                                            | PCB surface, when no fitted cover is used     |

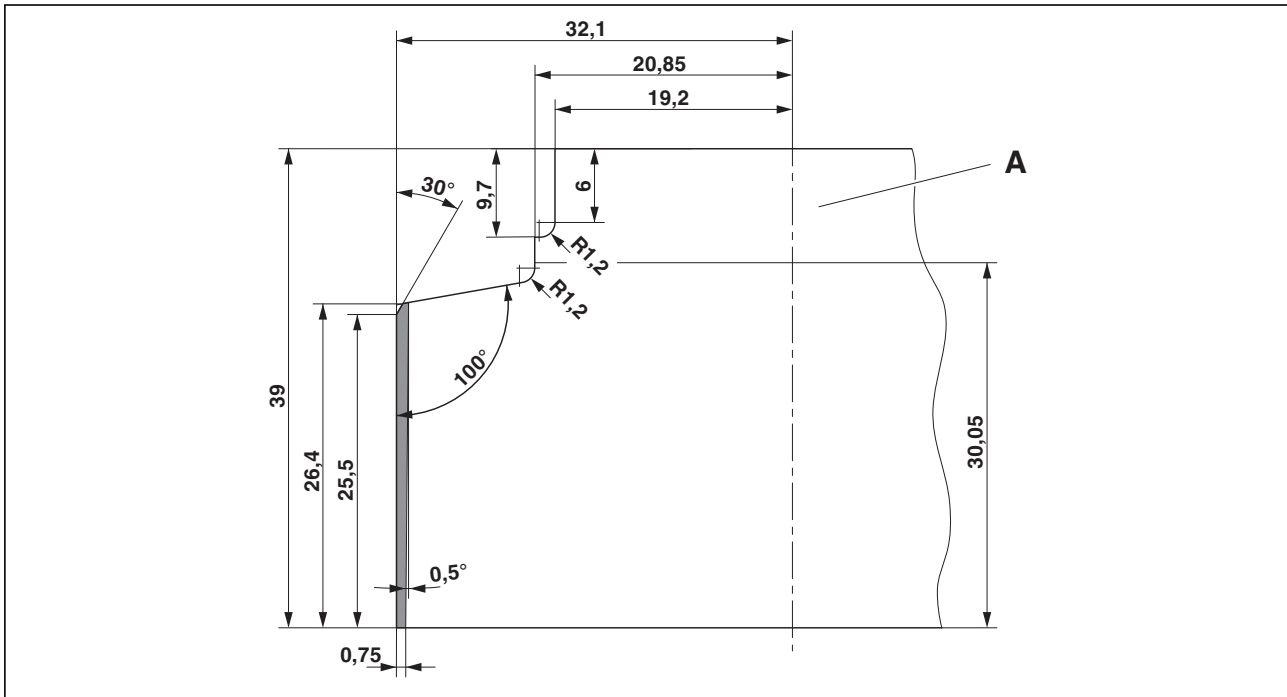


Figure 54 Terminal installation depth 11 mm

**PCB thickness**

Maximum 1.8 mm



Locked area, no components at these positions

**A**

PCB surface, when no fitted cover is used



## 9 DIN rail connector with 1 slot (2TE – 9TE)

### 9.1 Circuit diagram of DIN rail connector

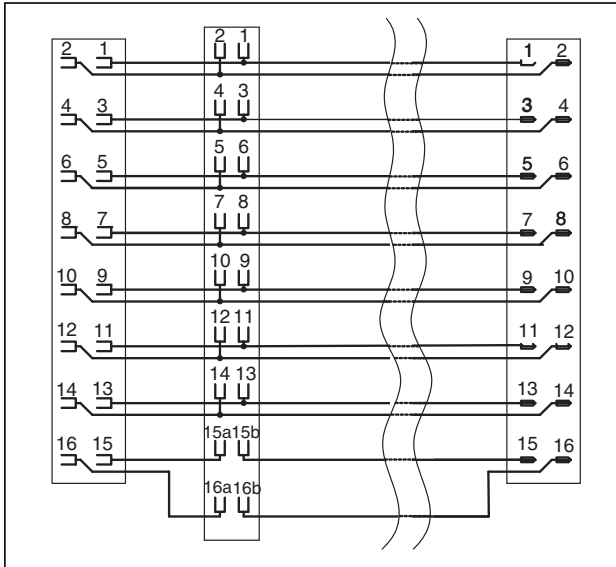


Figure 57 Circuit diagram HBUS...-16P-1S BK

#### Contacts

Contact 1 ... 4      Power  
Contact 5 ... 16      Signal

#### Air and creepage distances

|                              |              |
|------------------------------|--------------|
| ... to the DIN rail          | min. 0.23 mm |
| ... between one another      | min. 0.13 mm |
| ... between power and signal | min. 0.8 mm  |

#### Current carrying capacity for each contact

3 A, maximum total current 25 A

### 9.2 Dimensional drawing of connector for DIN rail connector

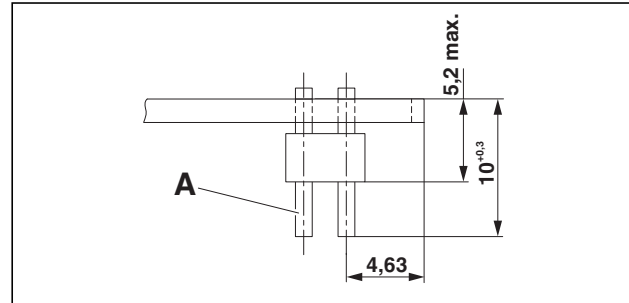


Figure 58 Dimensional drawing of connector on perpendicular PCB (all except for BC 17,8) for contacting in the DIN rail connector

- A** Pin strip, max. 2 x 9-pos.  
 □ 0.63 x 0.63 mm or  $\varnothing$  0.7 – 0.8 mm  
 2.54 mm pitch  
 Gold-plated surface

## Cover - BC 107,6 DKL S TRANS - 2896131

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Installation component housing, Housing cover, Cross connection: Housing cover, Color: transparent, Width: 107.6 mm

### Product Features

- ☒ Item is from the BC product range
- ☒ Conforms to DIN EN 43880
- ☒ Tool-free mounting
- ☒ Available in overall widths from one to nine width units (17.8 mm ... 161.6 mm)
- ☒ Inflammability class V0 according to UL 94
- ☒ Variety of connection technologies
- ☒ Can be mounted on the DIN rail or the wall
- ☒ Optional with bus connector for DIN rail mounting

### Key Commercial Data

|                                      |          |
|--------------------------------------|----------|
| Packing unit                         | 1 pc     |
| Minimum order quantity               | 10 pc    |
| Weight per Piece (excluding packing) | 25.5 g   |
| Custom tariff number                 | 85389099 |
| Country of origin                    | Germany  |

### Technical data

#### General

|                  |                                |
|------------------|--------------------------------|
| Housing type     | Installation component housing |
| Housing material | Polyamide                      |
| Color            | transparent                    |

#### Ambient conditions

|                                 |                                                    |
|---------------------------------|----------------------------------------------------|
| Ambient temperature (operation) | -40 °C ... 105 °C (depending on power dissipation) |
|---------------------------------|----------------------------------------------------|

#### Dimensions

|       |          |
|-------|----------|
| Width | 107.6 mm |
|-------|----------|

## Cover - BC 107,6 DKL S TRANS - 2896131

### Technical data

#### Technical data

|                                        |    |
|----------------------------------------|----|
| Flammability rating according to UL 94 | V0 |
|----------------------------------------|----|

### Classifications

#### eCl@ss

|            |          |
|------------|----------|
| eCl@ss 4.0 | 27180401 |
| eCl@ss 4.1 | 27180401 |
| eCl@ss 5.0 | 27180506 |
| eCl@ss 5.1 | 27180506 |
| eCl@ss 6.0 | 27180802 |
| eCl@ss 7.0 | 27182702 |
| eCl@ss 8.0 | 27182702 |

#### ETIM

|          |          |
|----------|----------|
| ETIM 2.0 | EC001031 |
| ETIM 3.0 | EC001031 |
| ETIM 4.0 | EC000886 |
| ETIM 5.0 | EC001031 |

#### UNSPSC

|               |          |
|---------------|----------|
| UNSPSC 6.01   | 31261501 |
| UNSPSC 7.0901 | 31261501 |
| UNSPSC 11     | 31261501 |
| UNSPSC 12.01  | 31261501 |
| UNSPSC 13.2   | 31261501 |

### Approvals

#### Approvals

#### Approvals

UL Recognized / EAC

#### Ex Approvals

#### Approvals submitted

## Cover - BC 107,6 DKL S TRANS - 2896131

### Approvals

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#### Approval details

UL Recognized 

EAC

### Accessories

#### Accessories

#### Fiber optics

Component housing - HS LC-V-D3/ R2XC1-5,08 - 2202311



Fiber optics Can be used for the BC housing range (housing must be processed), Color: transparent

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Component housing - HS LC-V-D3/ R3XC1-5,08 - 2202312



Fiber optics Can be used for the BC housing range (housing must be processed), Color: transparent