

# Control Box CB6

## Data Sheet



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## Introduction



The control box CB6 has been specially developed for use together with LA27/LA40 in the care and rehab industry. The control box is designed to be mounted on the actuator LA27/LA40 as with the CB9 and the LA31 system. The control box CB6 has a LED power ON indicator, detachable mains cable and strain relief for all cables.

The control box CB6 communicates with the LA27/LA40 by means of the built-in end stop signal switches in the actuator. Due to the signal switches the power to the motor will be cut off in the control box and not in the actuator.

LINAK recommends to use CA30 and CA40 for new projects.

## Features and options

- Connection of up to 4 actuators (LA27/LA40)
- Extremely compact design
- Mains voltage: 100/120/230V AC 50-60 Hz
- Standby consumption 7W.
- Output voltage 24V DC
- Ambient temperature: + 10o to + 40o C.
- Protection Class: IPX4, IPX6
- Colour: Dark grey (RAL 7016)
- Modular socket for handsets HB30 / HB70 / HL70 and HB80 / HL80
- 3.2m straight mains cable
- Locking mechanism for cables
- Class 2 protection



### Information

- Can be mounted on the LA27 by using the special mounting bracket article no. 009271002-A
- Can be mounted on the LA40 by using the special mounting bracket article no. 0401080 and mounting clip article no. 0401017-A

## Usage

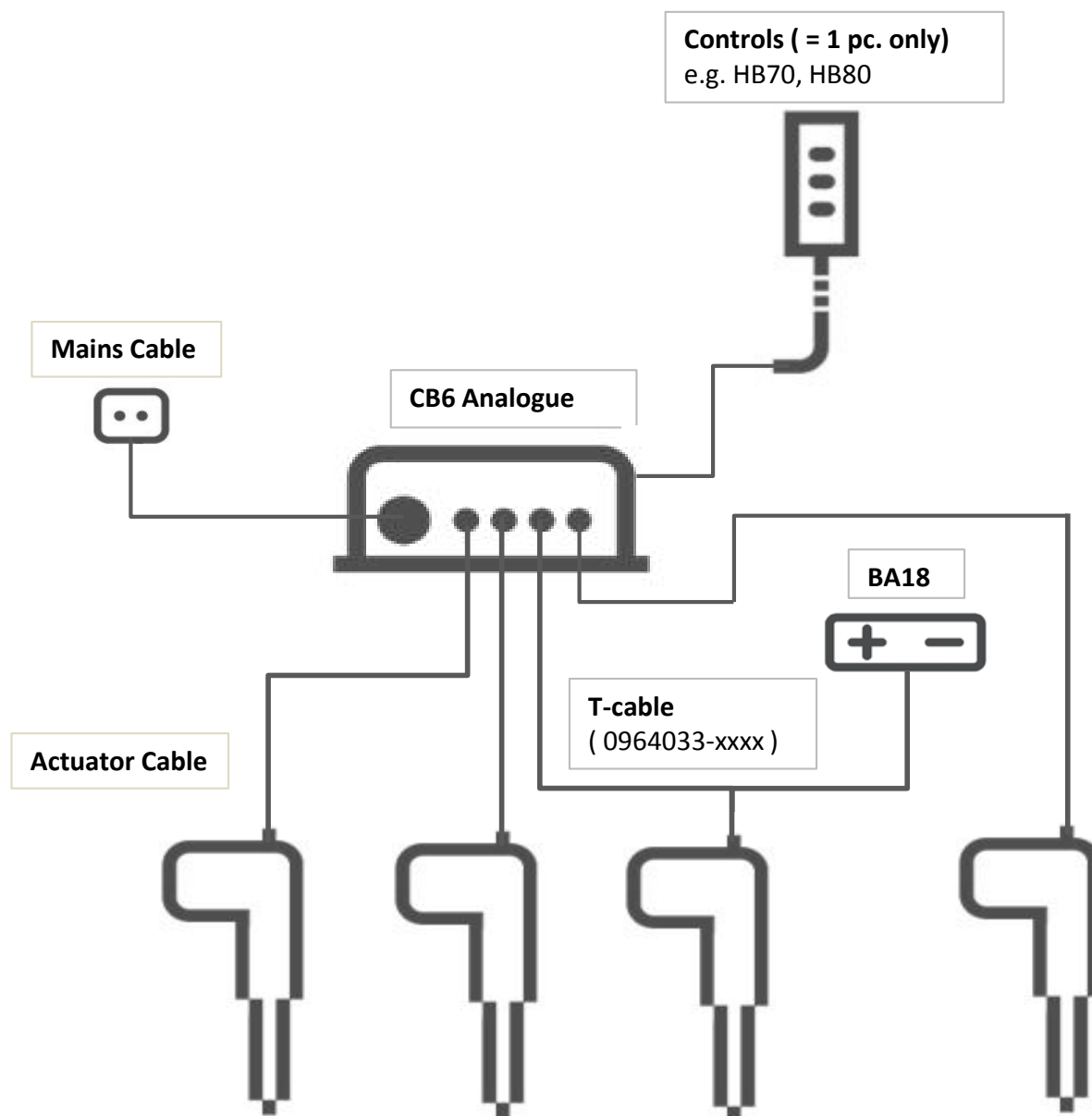
- Duty cycle: 2/18; 2 minutes continuous use followed by 18 minutes not in use
- CB6 is approved according to EN60601-1/UL60601-1
- The CB6 can only be combined with LA27/LA40 and HB30/HB70/HL70/HB80 and HL80.
- Mains supply grid should be limited to the highest prospective short circuit current of 35 A. Demands to mains supply safety for the application in accordance with IEC 60601-1 ed. 3.2, § 8.11.5

## Ordering Example

| CB6 | 4 | 0 | 4 | + | 1 | 0 | 0 | 1 | 9 |                                                                                             |
|-----|---|---|---|---|---|---|---|---|---|---------------------------------------------------------------------------------------------|
|     |   |   |   |   |   |   |   |   |   | Cable connection:                                                                           |
|     |   |   |   |   |   |   |   |   |   | 9 = Cable socket without GND (Class 2)                                                      |
|     |   |   |   |   |   |   |   |   |   | Power Connector:                                                                            |
|     |   |   |   |   |   |   |   |   |   | 1 = Power connector                                                                         |
|     |   |   |   |   |   |   |   |   |   | Voltage input:                                                                              |
|     |   |   |   |   |   |   |   |   |   | 0 = 230 V                                                                                   |
|     |   |   |   |   |   |   |   |   |   | 1 = 120 V                                                                                   |
|     |   |   |   |   |   |   |   |   |   | 2 = 100 V                                                                                   |
|     |   |   |   |   |   |   |   |   |   | To be defined:                                                                              |
|     |   |   |   |   |   |   |   |   |   | Connector:                                                                                  |
|     |   |   |   |   |   |   |   |   |   | 1 = Mini-fit/ Modular jack                                                                  |
|     |   |   |   |   |   |   |   |   |   | 0 = Modular plug (spare parts only)                                                         |
|     |   |   |   |   |   |   |   |   |   | Colour:                                                                                     |
|     |   |   |   |   |   |   |   |   |   | + = Plastics RAL 7016 (dark grey)                                                           |
|     |   |   |   |   |   |   |   |   |   | Number of channels:                                                                         |
|     |   |   |   |   |   |   |   |   |   | 1 = ch1                                                                                     |
|     |   |   |   |   |   |   |   |   |   | 2 = ch3, 4                                                                                  |
|     |   |   |   |   |   |   |   |   |   | 3 = ch1, 3, 4*                                                                              |
|     |   |   |   |   |   |   |   |   |   | 4 = ch1- 4*                                                                                 |
|     |   |   |   |   |   |   |   |   |   | PCB type:                                                                                   |
|     |   |   |   |   |   |   |   |   |   | 0 = Std.                                                                                    |
|     |   |   |   |   |   |   |   |   |   | 8 = Std. with 24V charger for BA18 via CH1 or CH2 with T-cable<br>(T-cable = 0964033-xxxx). |
|     |   |   |   |   |   |   |   |   |   | BA18 not protected against BA18 being deep-drained                                          |
|     |   |   |   |   |   |   |   |   |   | Protection class:                                                                           |
|     |   |   |   |   |   |   |   |   |   | 4 = IPX4                                                                                    |
|     |   |   |   |   |   |   |   |   |   | 6 = IPX6                                                                                    |
|     |   |   |   |   |   |   |   |   |   | Type:                                                                                       |
|     |   |   |   |   |   |   |   |   |   | Control box CB6                                                                             |

See explanation of  
channel operation

## System overview





## Information

Mounting of CB on actuators / Mounting of CB separately / Blind plugs / Mains cables / Order volume

a) It is possible to mount either LA27 or LA40 onto CB6:

Mounting of LA27 to CB6:

A mounting clip is included in the BOM of CB6 = item No. 009271002-A. The clip is used to fix LA27 onto CB6 and is included in the CB6 package of each CB6 delivery. This item no. can also be ordered separately as a spare part.

Mounting of LA40 to CB6:

For mounting LA40 onto CB6, 2 external parts are needed – a mounting clip 0401017-A and an adapter 0401080-A. These are NOT included in the BOM of CB6. These item Nos. can be ordered as a kit including both 0401017 + 0401080.

The item No. of the kit is: 40KIT-001.

b) When CB6 is to be mounted without being mounted to an actuator, a mounting bracket can be used. The bracket is available in the following versions: chromatised = item No. 9271233 or not chromatised = item No. 9271237.

c) It is possible to order blind plugs (500 per bag) for the actuator connections.

The item No. is 009271027.

d) Mains cables must be ordered separately.

## Channel explanation

For PCB type "0"

| When actuator X reaches the end-stop, then actuator Y can also be affected. |                                |                                                    |
|-----------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|
| CB Type<br>(number of<br>channels)                                          | Actuator X<br>(channel in use) | Actuator(s) Y<br>(influence on other<br>actuators) |
| 1                                                                           | 1                              | -                                                  |
| 2                                                                           | 3                              | no influence                                       |
|                                                                             | 4                              | no influence                                       |
| 3                                                                           | 1                              | 3, 4 (also stop)                                   |
|                                                                             | 3                              | no influence                                       |
|                                                                             | 4                              | no influence                                       |
| 4                                                                           | 1                              | 2, 3, 4 (also stop)                                |
|                                                                             | 2                              | 1, 3, 4 (also stop)                                |
|                                                                             | 3                              | no influence                                       |
|                                                                             | 4                              | no influence                                       |

\* PCB type 8 no influence on end-stop (Individual)

### How to read the table

The 4 type ( CB6404+10019) has 4 channels.

If the actuators in either channel 1 or 2 reach an end stop position and stop, then all other actuators will stop at the same time.

If actuators running in channels 3 or 4 reach the end stop position it will not influence any of the other actuators.

### Example with CB6403+10019:

- If channels 1 and 3 run together and channel 3 reaches the end stop then the actuator in channel 1 will continue running.
- If channels 1 and 3 run together and channel 1 reaches the end stop, then the actuator in channel 3 will also stop.

When channel 1 has stopped it is possible to start up channel 3 again (if it is not in end stop ).

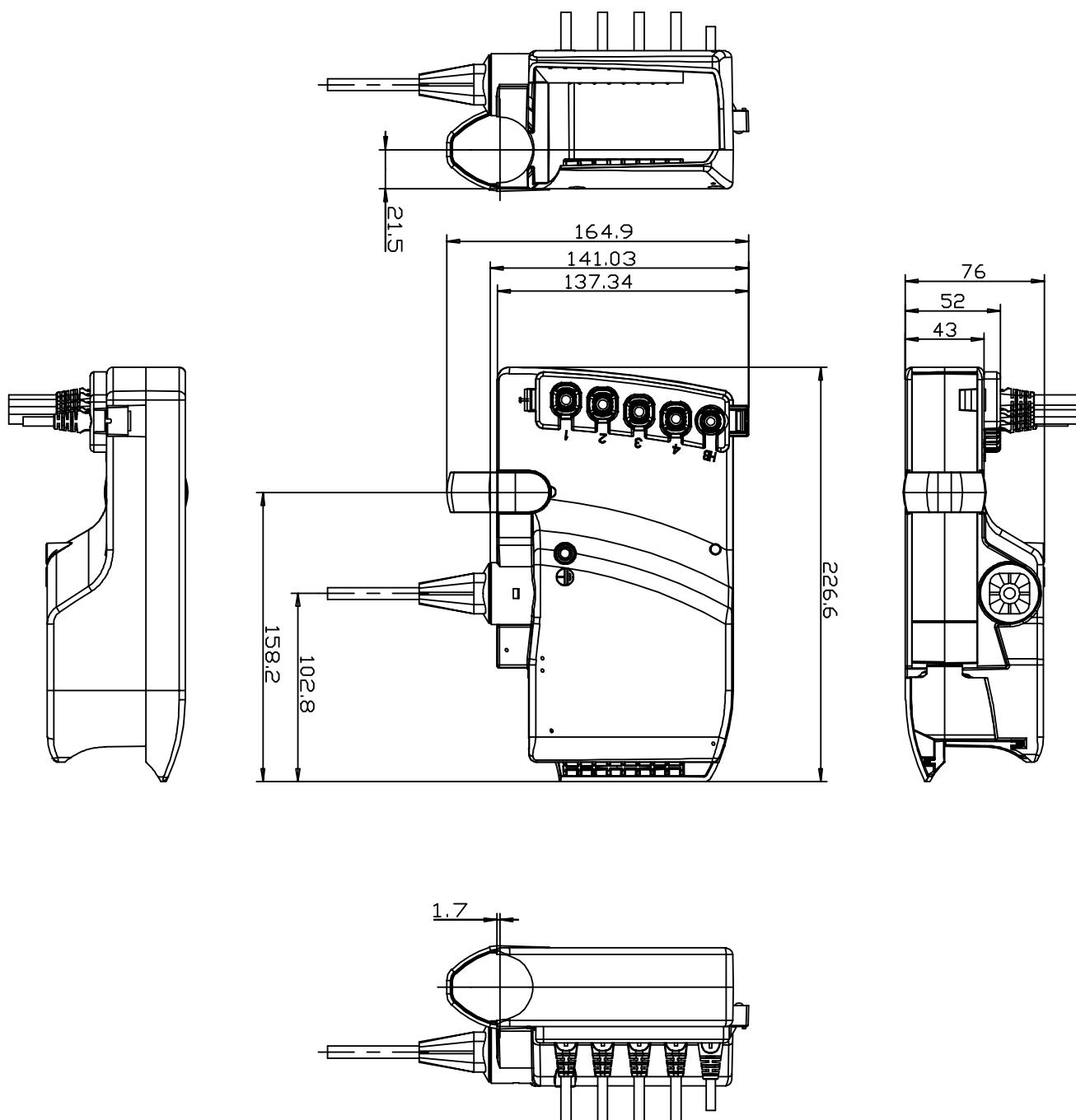


### Information

For CB6 the current will be cut off when the total current on all channels reaches approx. 5.1 to 5.4 Amp.

This means that when two LA27/LA40, running simultaneously, are connected to a CB6 they will not be able to lift the max. load mentioned under technical specifications (LA27/LA40).

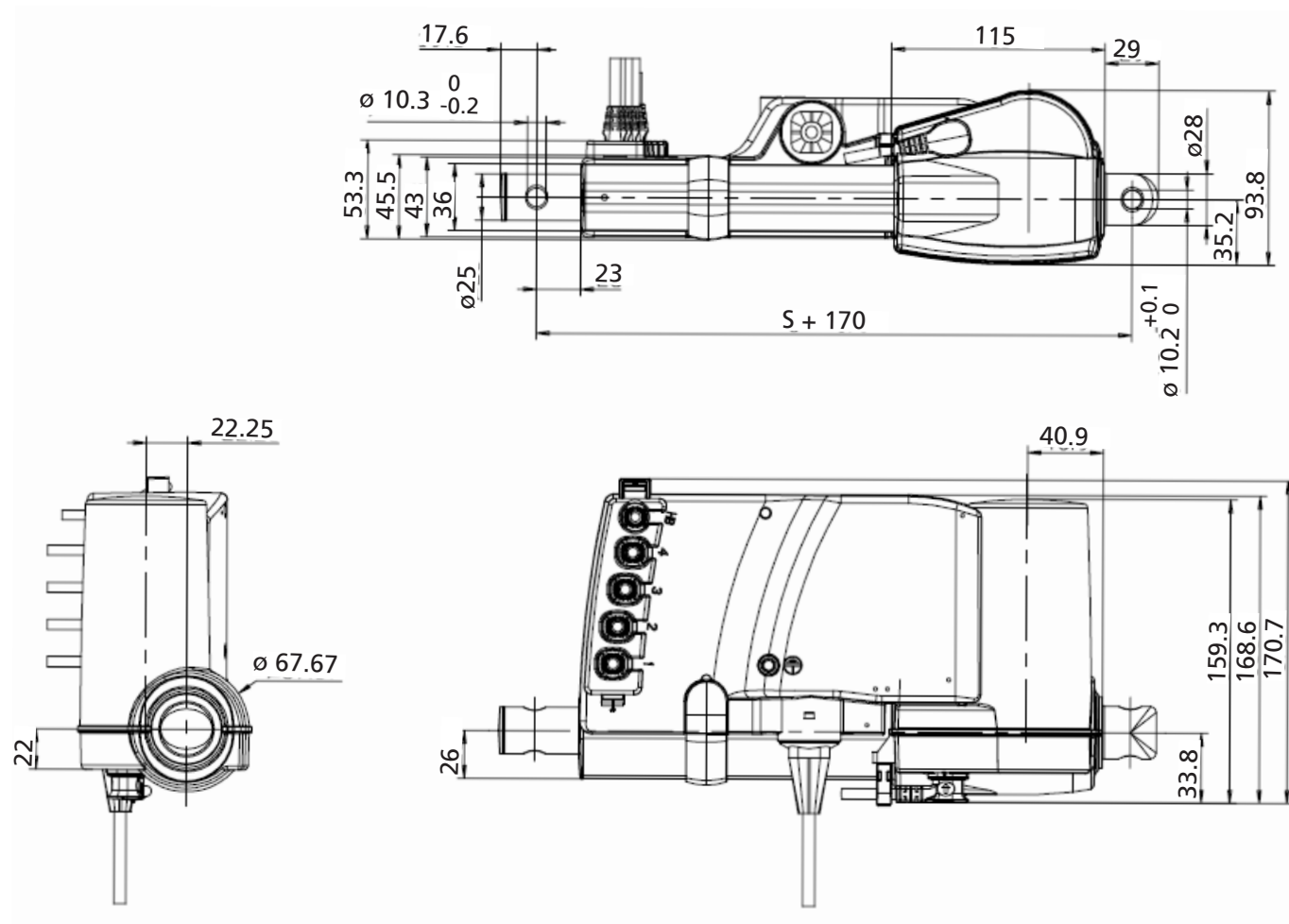
## Dimensions



Drawing no.: CB06001B



## Dimensions LA27 with CB6



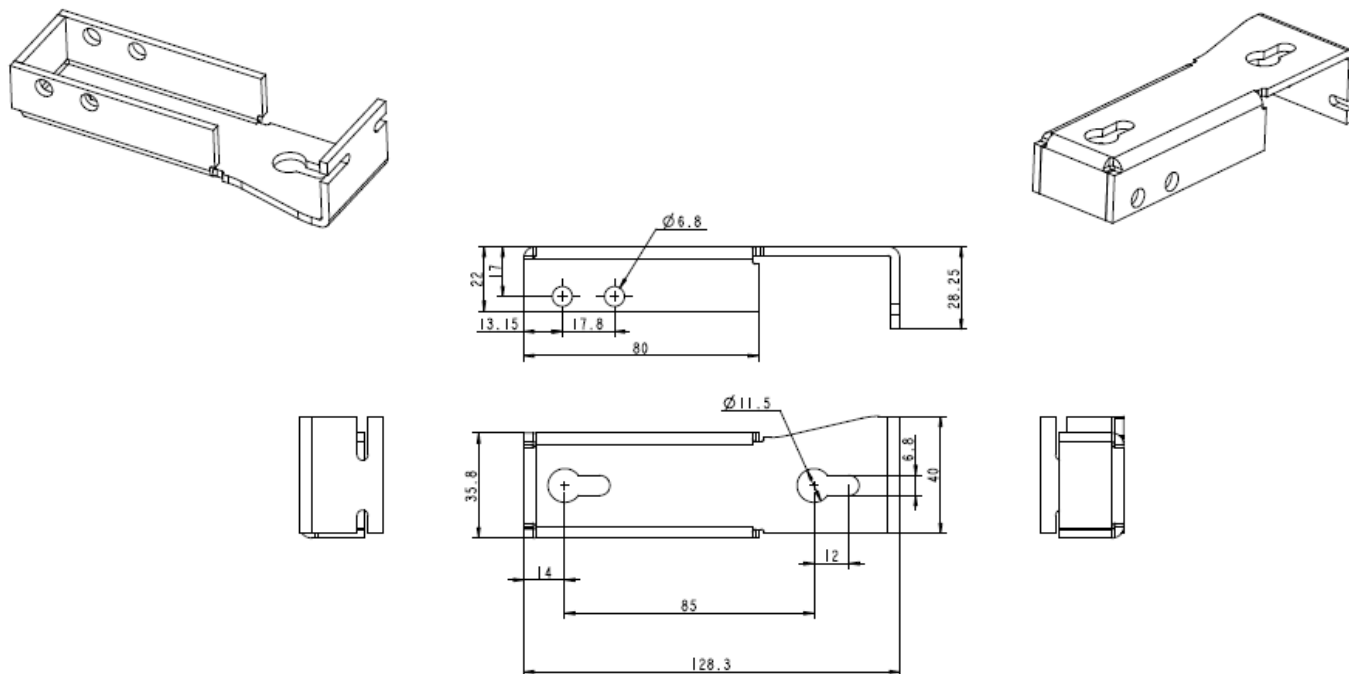
Drawing no.: CB6\_LA27001B

When CB6 is to be mounted without being mounted to an actuator, a mounting bracket can be used. The bracket is available in the following versions:

chromatised = item No. 9271233 or not chromatised = item No. 9271237.

Apart from LA27/LA40, it is not possible to mount CB6 onto LINAK actuators. In this case you need a CB6 mounting bracket which can be welded or likewise to the application.

This bracket is shown below:



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