# CONTROL BOX CB18

**Features:**
- *Choice of 12 different standard software packages (See ordering example) configuration changes can be made after delivery via IB18 programming box*
- *Connection of up to 4 actuators - configured to LA32R as standard. Configuration possible to actuators type LA28R, LA28SR, LA30LR, LA31R, LA32R with jack plugs*
- *Mains voltage: 220-240V/120V/100V AC, 50-60 Hz*
- *Duty cycle: Max. 10% or 6 min./hour at continuous use*
- *Output voltage: 24 V DC, jack-plug*
- *Ambient temperature: +5° to +40°C*
- *Protection class: IP51, IP65 and IP66*
- *Colour: black or grey*
- *DIN-socket for handsets HB40, HB50, HB70, depending on software*
- *3.2 m straight mains cable*
- *Electronic overload protection (EOP) prevents overload of the actuator*
- *Microprocessor controlled*
- *Low current consumption in standby mode*
- *Low electromagnetic emission and effective and compact high-power toroidal transformer gives low self-heating and increased speed of the actuators*
- *When the actuator has been run to end position it cannot be activated further in this direction if you push repeatedly on the handset. The electronics will ensure that the actuator can only be activated in the opposite direction. Hereby you obtain a protection of the mechanical parts in the end position*
- *EAS*
- *By using the PC interface box IB18 in the HB(A) port it is possible to:*
  - *configure or re-configure CB18 standard software package*
  - *download other software packages from the PC to the CB18*
- *Approved according to EN60601-1 and UL60601-1*

**Options:**
- *2 DIN-sockets for 2 handsets*
- *1 DIN-socket for 1 ACP box (requires special art. no. and software)*
- *Possibility for securing the connected plugs with a bayonet socket. This protects the plugs from being pulled out of their sockets. The bayonet socket can only be dismantled again by using a tool*

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CB18 is developed for system solutions, where there is a request for running 2 or more actuators/lifting columns in parallel and/or with memory function.

CB18 can control up to 6 actuators.

The CB18 offers protection up to IP 66 and is fitted with a toroidal transformer giving low electromagnetic emission and low power consumption by standby.

The CB18 is compatible with the LINAK ACP box (attendant control panel) making it the ideal choice for a wide variety of applications such as advanced hospital beds, computer workstations, workbenches, writing desks and other sophisticated installations.

# LINAK®

WE IMPROVE YOUR LIFE

**Options:**
- 0.6 m coiled mains cable
- Available with separate battery back-up BA18 i.e. batteries can be exchanged without disassembling the CB18

- Protection against single fault condition when used together with ACP-box and CB18 with customer designed software
- Possible to order with earth connection
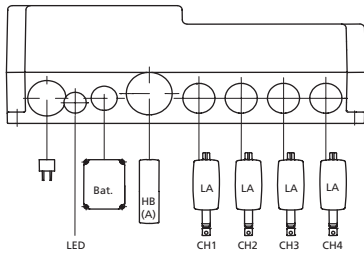
**Standard software package**

One of the 12 standard software configurations (A, C, D, E, F, G, H, I, J, K, P, Q), has to be chosen when ordering, but they are all available in a standard CB18 for reconfiguration after delivery. Choosing between the 12 packages as well as various parameter adjustment can be done by connecting an interface box IB18 to the HB (A) port.

Following parameters can be set / adjusted by means of IB18 and a corresponding PC software (configurator):

- Functionality: 2 parallel, 3 parallel etc.
- HB type in port A
- HB type in port C
- Memory Mode: Normal or Impulse
- FET mode: Normal / soft start/stop
- Overload protection mode and level for each channel

All standard configurations are set to actuator LA32. Handset type depends on memory type.

CB18 with microprocessor and standard software (Example of how to connect)



Special characteristic for CB18 with microprocessor and standard software:
- Can be delivered with up to 4 channels
- Parallel operation of up to 4 channels

**Initialisation of CB18 with standard software:**

The CB18 can only be initialised with all application-necessary actuators mounted.

Before using the CB18 or when it has lost its position it must be initialised. For all types of software this can be done by driving all actuators into end position in inward direction until the actuators stops.

When one or more of the actuators in a parallel system reaches end position in inward direction, the remaining actuators will continue at full speed until end position.

**CB18 with microprocessor and customised software:**

The software is developed in co-operation with the customer. There will always be a special code number on this type of CB18. (Example of how to connect)
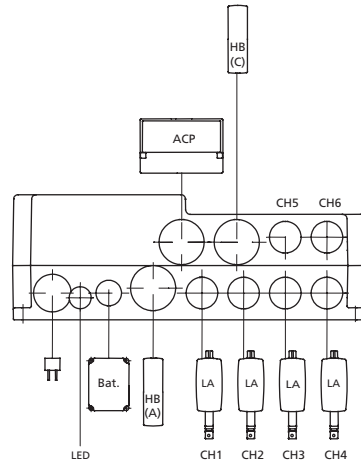


Special characteristic for CB18 with microprocessor and customised software:

- Available with up to 6 channels
- Can be delivered for Handset in port A or in both port A and C
- Protected against single fault condition when used in connection with an ACP box and special software
- Possibility for wet alarm with IP 66
- Possibility for connection of 2 HB, 1 ACP-box and 2 SLS
- Separate mounting of battery, giving the following advantages:
  - The CB18 need not to be opened when the battery is replaced
  - The battery back up box is easy to re-mount (however it is necessary that the CB18 is prepared for the AT-version)

The advantage of customised software is that it is possible to adapt it to a specific application, e.g. a hospital bed.
I.E. it is possible to programme mutual operation of actuators and thereby preventing collision situations to happen.

**Dimensions:**

120.3

83.3

70.3

235,5

219,5 ±1.5

100.5 ±0.7

115.3

26.5 ±0.2

A    1    2    3    4

Ø 5.5
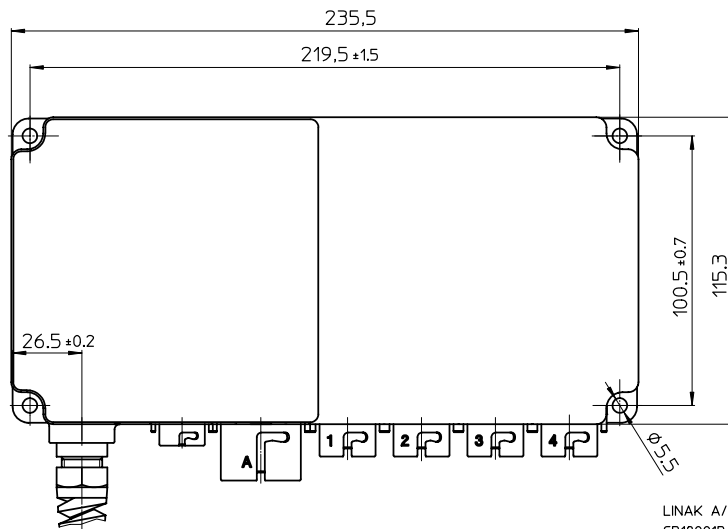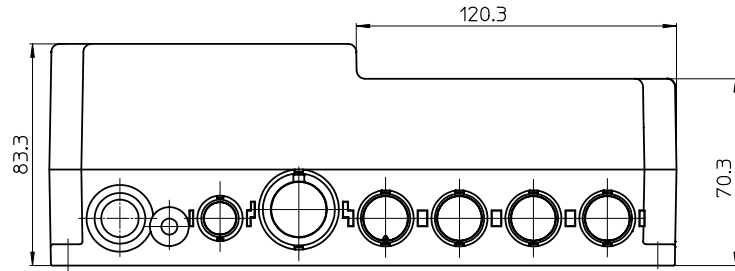
LINAK A/S
CB18001B

**Dimensions without tolerances are maximum dimensions.**

120.3

83.3

70.3

LINAK A/S
CB18002A

235.5

219.5 ±1.5

Ø 5.5

136.3

115.3

100.5 ±0.7

A    B    C    5    6
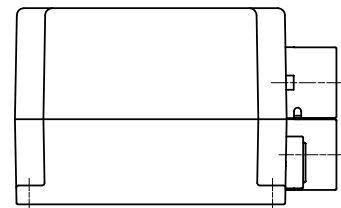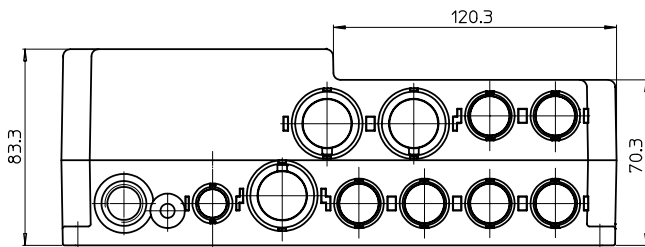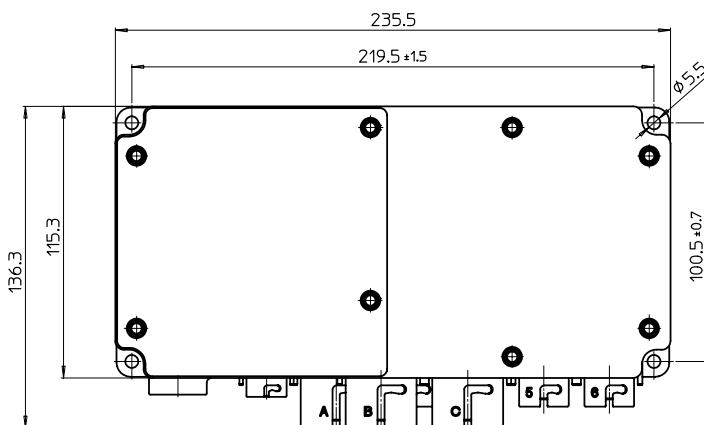
**Dimensions without tolerances are maximum dimensions.**

## CB18

**Ordering example:**

CB18  4  1  0  0A  4  +  A  0  00

Mains cable:

|  | Black | Grey |
|---|---|---|
| **Without earth connection** | | |
| 00 = Straight cable | 0015110 | 0015137 |
| 01 = Coiled cable | 0015802 | 0015803 |
| 03 = English std. cable | 0015126 | 0015126 (Black) |
| 04 = Japanese cable | 0015127 | 0015153 |
| 05 = UL cable | 0015174 | 0015175 |
| 06 = Straight cable, Schweiz | 0015199 | 0015199 (Black) |
| 07 = Straight cable, Australia | 0015200 | 0015200 (Black) |
| | | |
| **With earth connection** | | |
| 0A = Straight cable (EU) | | 0015509 |
| 0B = Coiled cable (EU) | | 0015235 |
| 0D = Coiled cable (UK) | | 0015265 |
| 0F = Straight cable (UL) | | |
| 0G = Coiled cable (CH) | | 0015266 |
| 0I = Coiled cable (UL) | | |

Mains voltage:
0 = 230V
1 = 120V
2 = 100V

Battery: Always prepared for battery

Colour:
+ Grey
- Black

Channels: 1 - 4

Functionality:

| Func. | Parallel channels | Memory | Impulse | Actuator | HB type |
|---|---|---|---|---|---|
| 0 A | CH1 / CH2 | + | + | LA32 | **HB5XL/N** |
| 0 C | CH1 / CH2 / CH3 | + | - | LA32 | **HB5XL/N** |
| 0 D | CH1 / CH2 / CH3 | + | + | LA32 | **HB5XL/N** |
| 0 E | CH1 / CH2 / CH3 | - | - | LA32 | **HB4X0/HB7X0** |
| 0 F | CH1 / CH2 / CH3 / CH4 | + | - | LA32 | **HB5XL/N** |
| 0 G | CH1 / CH2 / CH3 / CH4 | + | + | LA32 | **HB5XL/N** |
| 0 H | CH1 / CH2 / CH3 / CH4 | - | - | LA32 | **HB4X0/HB7X0** |
| 0 I | CH1 / CH2 + CH3 / CH4 | + | - | LA32 | **HB5XL/N** |
| 0 J | CH1 / CH2 + CH3 / CH4 | + | + | LA32 | **HB5XL/N** |
| 0 K | CH1 / CH2 + CH3 / CH4 | - | - | LA32 | **HB4X0/HB7X0** |
| 0 P | CH1 / CH2 | - | - | LA32 | **HB4X0/HB7X0** |
| 0 Q | CH1 / CH2 | + | - | LA32 | **HB5XL/N** |

HB channels:
0 = HB in channel A only
C = HB in channel A and C

IP degree:
1 = IP51
5 = IP65
6 = IP66

MK4

Type: CB18

Bayonet sockets:

| Article | Colour | Article no. |
|---|---|---|
| Jack plug | Black | 00918027 |
| Jack plug | Grey | 00918028 |
| DIN-plug | Black | 00918029 |
| DIN-plug | Grey | 00918030 |
| Battery plug | Black | 00918031 |
| Battery plug | Grey | 00918032 |

Blind plug for CB18M:

| Article | Colour | Article no. |
|---|---|---|
| Actuator | Black | 00918026 |
| Actuator | Grey | 00918033 |
| Hand set | Black | 00918039 |
| Hand set | Grey | 00918038 |
| Battery | Black | 00918034 |
| Battery | Grey | 00918035 |