

Control box CBJ2

Data Sheet



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Introduction



The control box CBJ2 is part of the battery-driven modular JUMBO system which consists of a control box (CBJ2), a battery either based on lead acid or Li-Ion technology (BAJ/BAJL). Together with a charger (CHJ2), JUMBO is an ideal and flexible solution, specially developed for patient lifts.

Main benefits of using CBJ2:

- Soft stop for safety and comfort
- Valuable information via display
- Easily accessible emergency stop
- Customisable front covers

CBJ2 is available in a special edition that can be used in harsh conditions, such as indoor and outdoor pool environments.

Features and options

- Output voltage: 24 V DC
- Soft start/stop on channel 1
- Emergency function down
- Acoustic battery alarm at approx. 25% battery capacity
- Bayonet lock for locking the hand control plug (DIN-plug)
- Protection class: IPX5
- Colours: Dark grey (RAL 7016) or light grey (RAL 7035) bottom and light grey top (RAL 7035)
- Electronic overload protection (EOP)
- Matching hand controls for CBJ2: HB30, HB70 and HB80 (see hand control chapters)
- Emergency stop button
- LCD-display showing the actual battery capacity and indicating when the battery needs recharging
- Socket for external battery pack. This socket for external battery pack enables furthermore charging of the JUMBO battery pack BAJ with CH01 through the control box.
- Internal charger possible
- Possible to mount an Emergency Stop Guard
- Customised front covers
- Variable current cut-off

Pool Lift version Features and Options:

- Improved contact terminals
- Rubber seal around contact terminals
- Stainless steel screws
- Robot injected sealing glue
- Internal charger not possible
- Always external charger CHJ2
- No display option
- No emergency stop
- Always IPX5

Usage

CBJ2 with internal charger: Nominal current draw max. 400 mA
 Power consumption (standby) max. 2.5 W
 Power consumption (charging) max. 19 W
 Duty cycle: max. 10% or 2 min.continuous use then 18 min. without use

Operation temperature: +5 °C to +40 °C

Storage temperature: -10 °C to +50 °C

Relative humidity: 20% to 80% – non-condensing

Atmospheric pressure: 700 to 1060 hPa

Meters above sea level: Max. 3000 meters

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

Approvals: IEC60601-1
 ANSI/AAMI ES60601-1
 CAN/CSA-22.2 No 60601-1

Ordering example

CBJ 2 0 0 1 N A 0 0 1 0 4 1

IP protection

- 1 = IPx5
4 = IPx4

Front cover no.

See the front cover table for details

xx (last 2 digits) 01-99

CBJ 2	A,B,E,F	0	0	09	00J2CB009
A,B,E,F	A,B,E,F	0	1,3	02	00J2CB002
A,B,E,F	A,B,E,F	1	0	17	00J2CB017
A,B,E,F	A,B,E,F	1	1,3	03	00J2CB003
C,D,G,H	C,D,G,H	0	0	08	00J2CB008
C,D,G,H	C,D,G,H	0	1,3	04	00J2CB004
C,D,G,H	C,D,G,H	1	0	54	00J2CB054
C,D,G,H	C,D,G,H	1	1,3	01	00J2CB001
C,D,G,H	C,D,G,H	1	1,3	51	00J2CB051

*Light grey

Color of bottom part

- 1 = RAL7016, dark grey (standard)
2 = RAL7035, light grey

Emergency stop

- 0 = without emergency stop
1 = with emergency stop
3 = with emergency stop and guard

Indicator options

- 0 = without LCD-display
1 = with LCD-display

Option

- A = LINAK battery BAJ or BAJL
B = External batteries via DC Power connector
C = LINAK batteries BAJ or BAJL and internal charger. (max. IPx4)
D = External batteries and internal charger* (max. IPx4)
E = LINAK battery BAJ or BAJL and variable current cut-off CH1
F = External batteries via DC Power connector and variable current cut-off CH1
G = LINAK batteries BAJ or BAJL, int.charger and variable current cut-off CH1 (max. IPx4)
H = External batteries, int.charger and variable current cut-off to CH1 (max. IPx4)

Version:

- 1N = CH1 normal current cut-off
2N = CH1 normal current cut-off
3H = CH1 Current cut-off for LA28S
4H = CH1 Current cut-off for LA28S
5N = CH1 normal current cut-off
6H = CH1 high current cut-off
7H = CH1 high current cut-off
8H = CH1 high current cut-off
- CH2 current cut-off for LA28
CH2 current cut-off for LA28S
CH2 current cut-off for LA28S
CH2 current cut-off for LA28
CH2 current cut-off for LA28S

Not used

Type:

- 2 = CBJ2

* Pool lift version should be ordered as special article.
Please contact LINAK A/S sales for further information if you need this CBJ2 solution.

Current cut-off for CBJ2

CBJ2	CH1		Leg spreader CH2	
	Min.	Max.	Min.	Max.
CBJ2001N	7	9	-	-
CBJ2002N	7	9	2	2.9
CBJ2003H	4.9	5.9	-	-
CBJ2004H	4.9	5.9	4.7	6.2
CBJ2005N	7	9	4.7	6.2
CBJ2006H	9.8	11.8	-	-
CBJ2007H	9.8	11.8	2	2.9
CBJ2008H	9.8	11.8	4.7	6.2

The minimum and maximum values stated above refer to the tolerance range, not the adjustment range.

The current cut-off tolerance is +/- 0.2 A depending on the ambient temperature (20 °C).



Warnings

To avoid injury, all control boxes with variable current cut-off are preset to < 4.5 A, unless otherwise specified.

When plugging a mono jack plug into channel 1 the current cut-off will be as the high speed table.

Internal battery charger

The internal charger is a Switch Mode Power Supply (SMPS) version which makes charging of the batteries more efficient.

The charging time for a BAJ battery pack is approx. 4-5 hours.

Mains voltage from 100-240VAC (50/60 Hz) is possible on same charger.

The charger indicates whether the charger is connected to mains (green LED) or whether the battery is being charged (yellow LED).

Medically approved.



When connected to AC and full battery

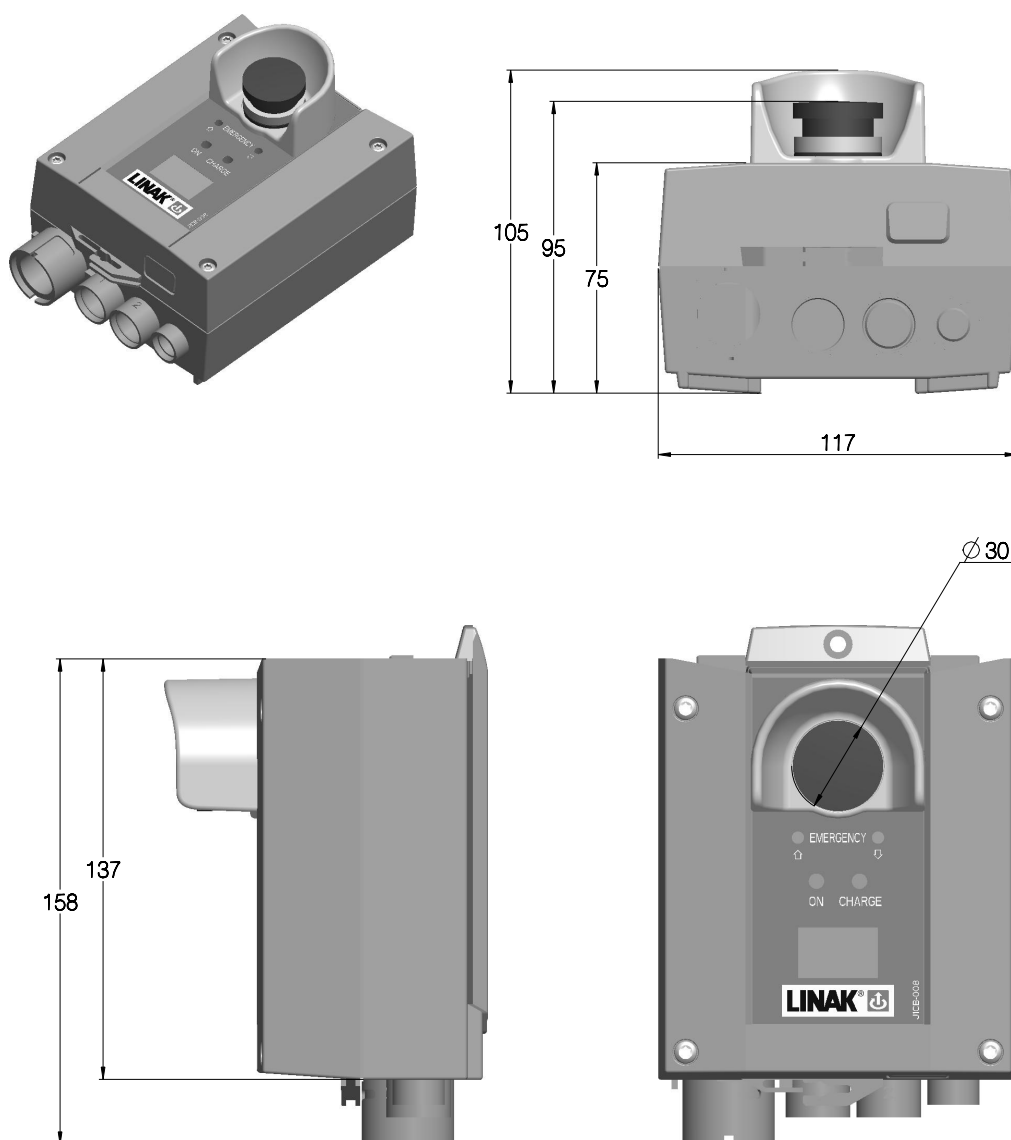
When connected to AC and charging battery



Recommendations

- The mains cable must always be ordered separately when ordering a CBJ2 with an internal charger.
- Use only original LINAK mains cables to ensure proper connection to internal charger.
- To reduce strain on mains cable, it is always recommended to use cable relief when mains is connected. Alternatively, use extension cable CAB0015579.

Dimensions



Drawing number: CBJ001

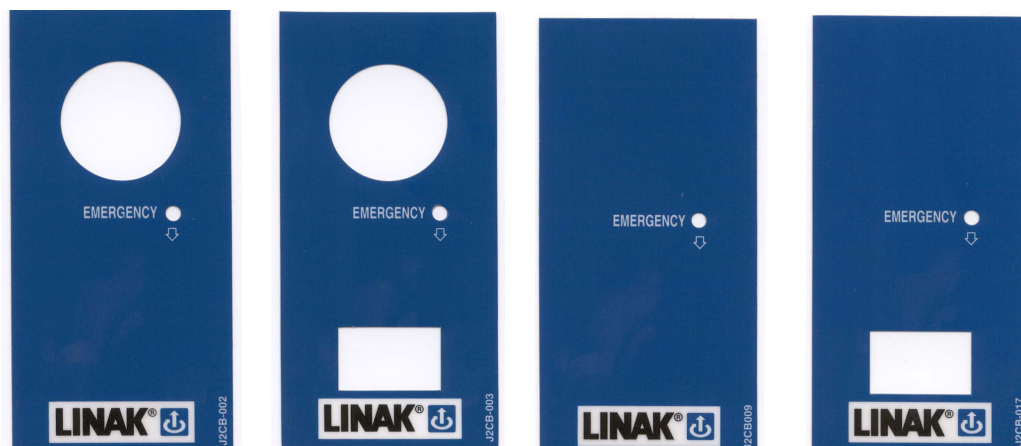
Available blind plugs for JUMBO products

Item number	Colour	Ports
032046	Black	Actuator port
032210	Grey	Actuator port
00918175	Black	DC port
00918174	Grey	DC port
00912204	Grey	Hand control port

Standard front covers

For version without internal charger

CBJ2



00J2CB002

00J2CB003

00J2CB009*

00J2CB017

* Standard front covers for pool lift

For version with internal charger

CBJ2



00J2CB001

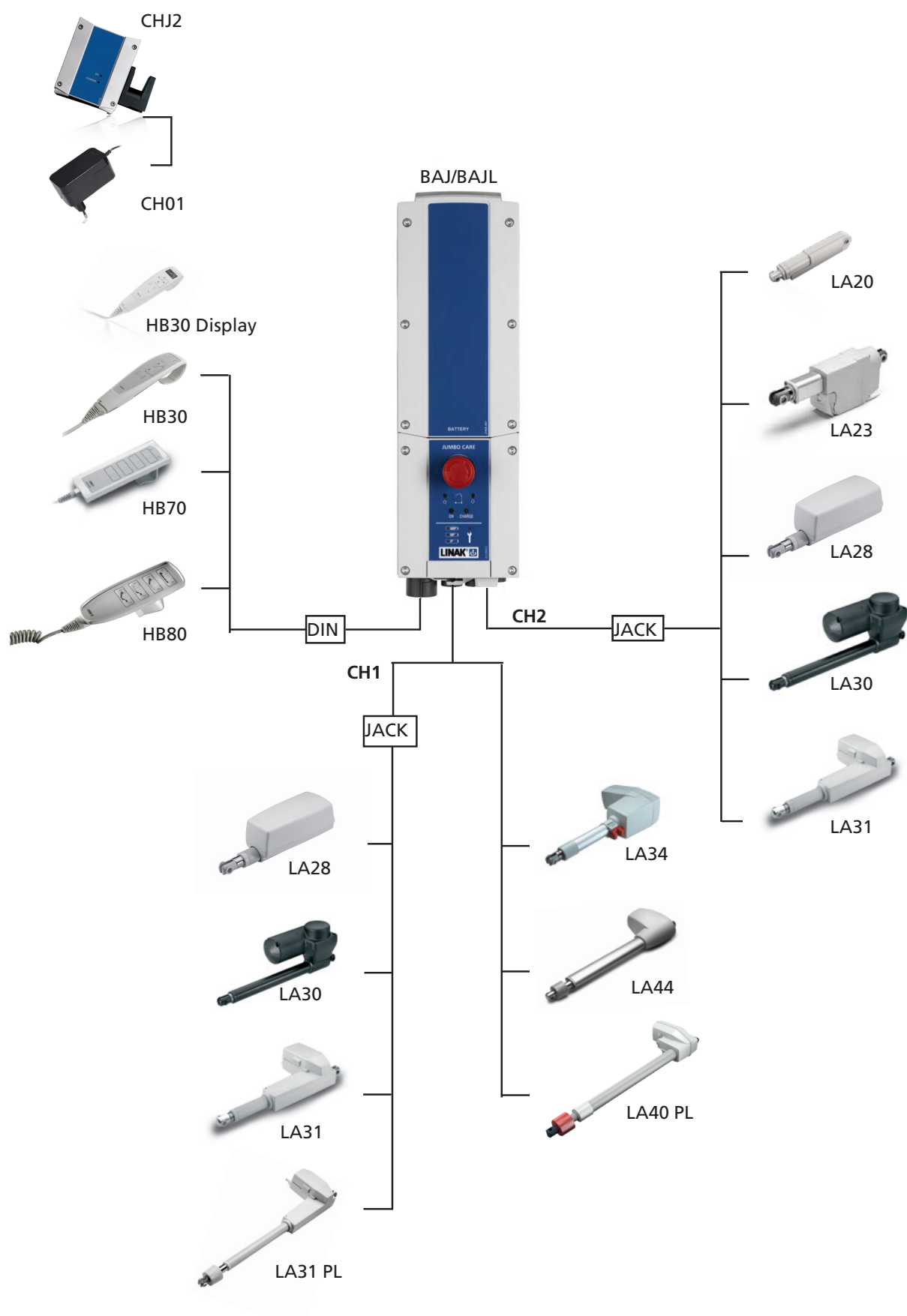
00J2CB004

00J2CB008

00J2CB051

00J2CB054

JUMBO combinations



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