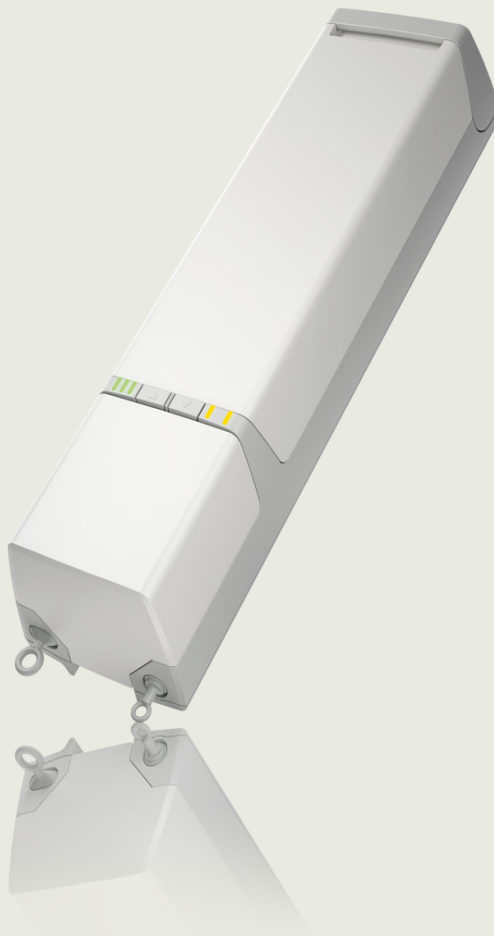


Control Box CAL40

Data Sheet



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Introduction



The control box CAL40 is part of the LIFT40 product series specially developed for patient lifts.

LIFT40 is a complete system consisting of the control box CAL40 or CAL40+, a battery BAL40 and an external charger CHL40 in a flexible solution. Combined with one or more actuators and a hand control you have a complete system for modern patient lifts.

The LIFT40 control box range is available in two product levels. Full feature level CAL40+ and entry level CAL40.

The CAL40+ control box is equipped with a series of features like Bluetooth, 3 channels and customisable software (SoftCon2). The entry-level control box comes with maximum 2 channels. Both level control boxes meet the patient's need for a safe and comfortable lift. Combine this with an easy-to-replace battery. All housed in a modern and intuitive ergonomic package for fast and easy battery exchange.

The updated design with a clean white surface reduces visual noise. This makes it easy to integrate the LIFT40 design into the OEM patient lift design.

Feature highlights

- Ingress protection IPX6
- Cable management
- Redundant control buttons on channel 1
- Emergency stop located on top for easy access and to avoid unintended activation
- BLE - Bluetooth® Low Energy (only CAL40+)
- Service and overload indicator (only CAL40+)
- SoftCon2-ready for on-location software customisation (only CAL40+)

Features and options

Features	CAL40+	CAL40
Channels	Up to 3 channels	Up to 2 channels
Soft start/stop	Yes	Yes
Emergency stop function	Located on top to avoid unintended activation	Located on top to avoid unintended activation
Output current*	12 A on all channels (duty cycle 2/18 min.)	10 A both channels (duty cycle 2/18 min.)
DC outlet	Yes, max. 2 A	No
Acoustic battery alarm	Yes	Yes
LED Indicators	Battery status (3 green LEDs, first LED on left side switches to orange at lowest status) and system status/service (2 x orange)	Battery status (1 pc.) and system status (1 pc.)
Wireless operation	BLE, Bluetooth® Low Energy	No
Redundant control buttons on channel 1	Up and down channel 1	Up and down channel 1
Cable management	Yes, cable locking and cable routing	Yes, cable locking and cable routing
Ingress Protection	IPX6	IPX6
Safe Working Load (SWL) adjustment	Yes	Yes
Battery charging	Internal and external	Internal and external
Software customisation/SC2	SoftCon2	One std. software/LIX configurable
Colour base	Light grey RAL7035	Light grey RAL7035
Cable cover colour	Signal White RAL9003	Signal White RAL9003
Feedback actuators	No	No
Service status	Orange LED indication + buzzer	Orange LED indication + buzzer
Low battery information	Orange LED indication + buzzer	LED indication + buzzer

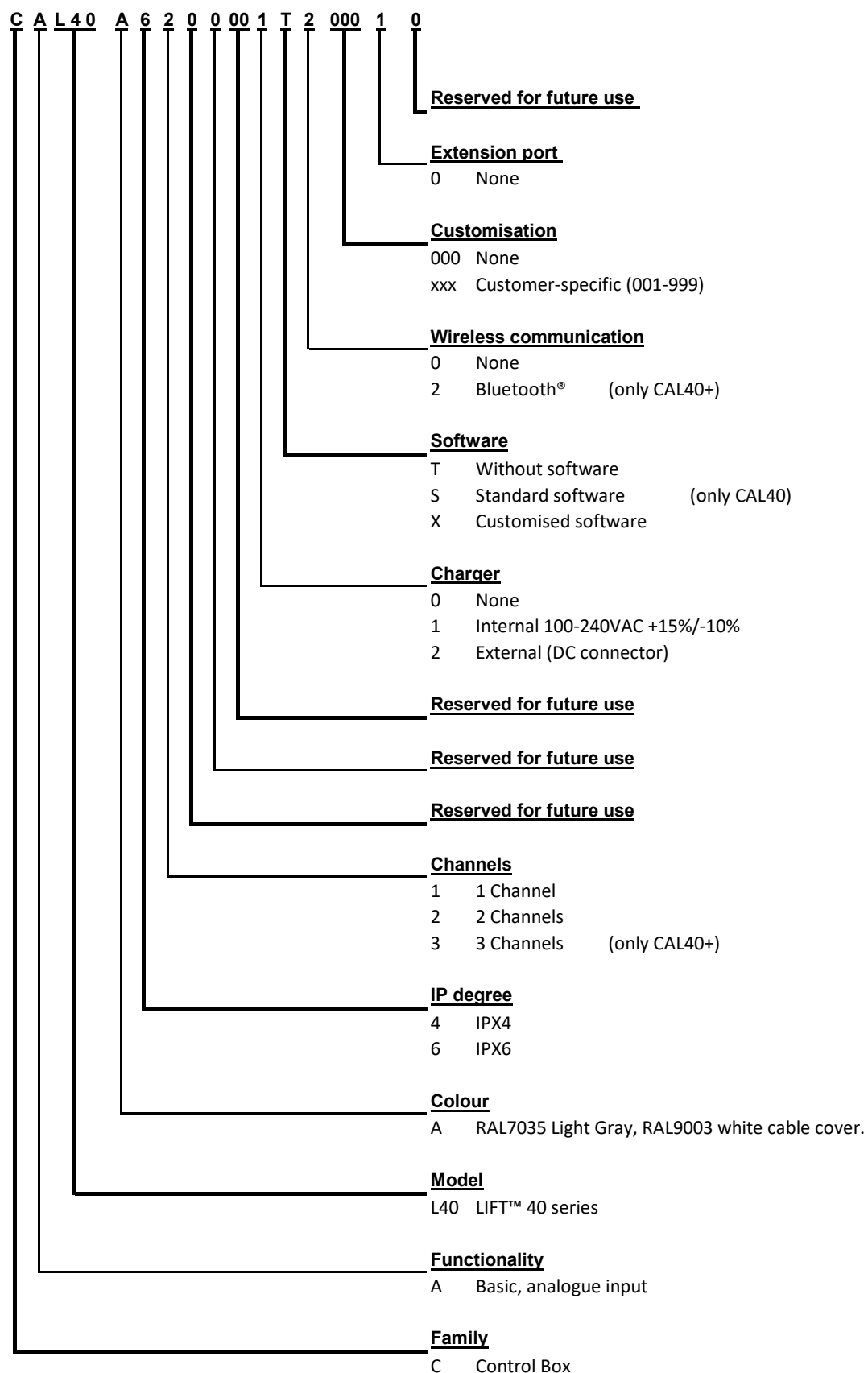
Output current*

If the output current is higher than 10 Amp, the output voltage is lowered from 24 V to approx. 20 V.

Usage

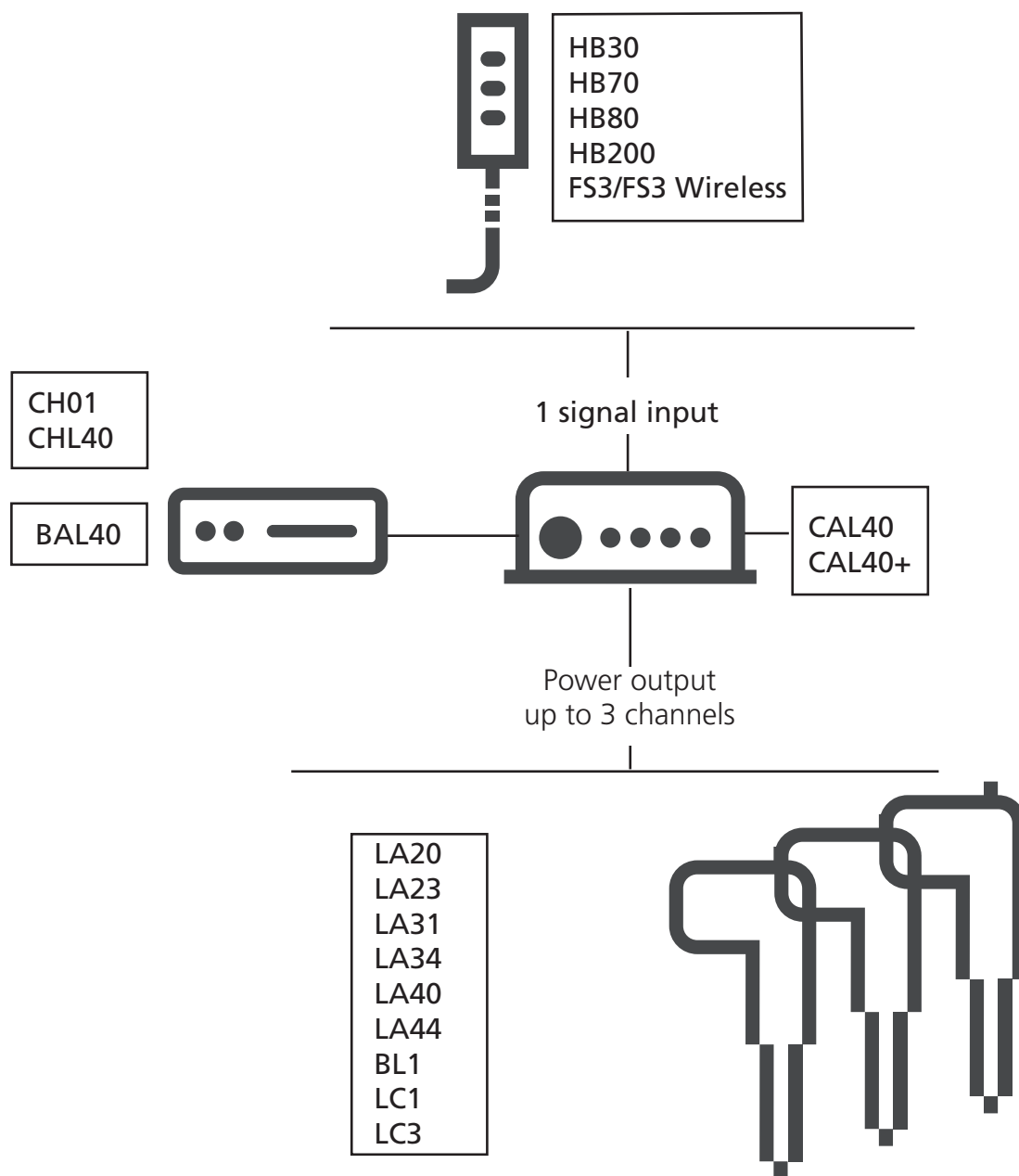
With internal charger	Nominal current draw max. 350 mA (depending on input voltage) Standby power of 230 VAC = 0.7 W (depending on input voltage) Improved BLE might give lower power consumption Input voltage range: 120-240 VAC (50/60 Hz) Power consumption (charging): max. 30 W (depending on input voltage)
Duty cycle	Max. 10%, 2 minutes continuous use followed by 18 minutes without use
Operating 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 100 A	
Approvals	<u>CAL40</u> - EN IEC 60601-1 - ANSI/AAMI ES60601-1 - CAN/CSA-C22.2 NO. 60601-1 - EN IEC 60601-1-2 <u>CAL40+</u> - EN IEC 60601-1 - ANSI/AAMI ES60601-1 - CAN/CSA-C22.2 NO. 60601-1 - EN IEC 60601-1-2 - RED (EU) - FCC ID (US) - IC ID (Canada) - Telec (Japan)

Ordering example



Hand control cable lock is included when ordering CAL40.

System overview



Internal battery charger

LIFT40 is available with and without internal charger.

The internal SMPS charger makes charging of the batteries very efficient.

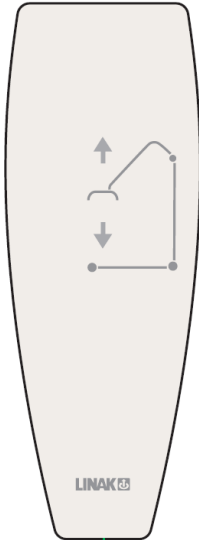
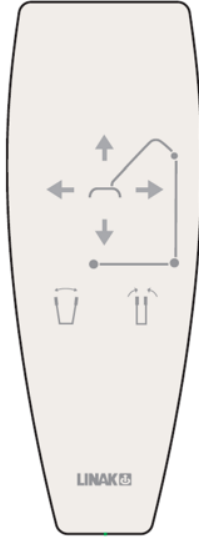
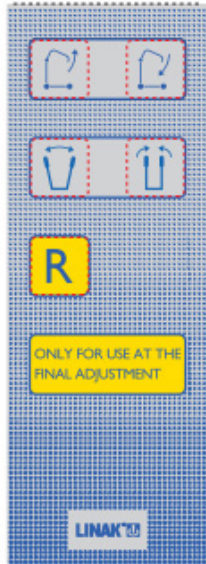
The charging time depends on the battery capacity and condition. Typically, the BAL40 charging time is 4-5 hours from fully discharged state.

Mains voltage from 120-240 VAC (50/60 Hz).

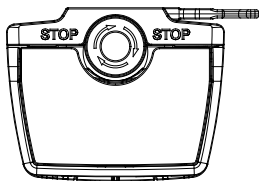
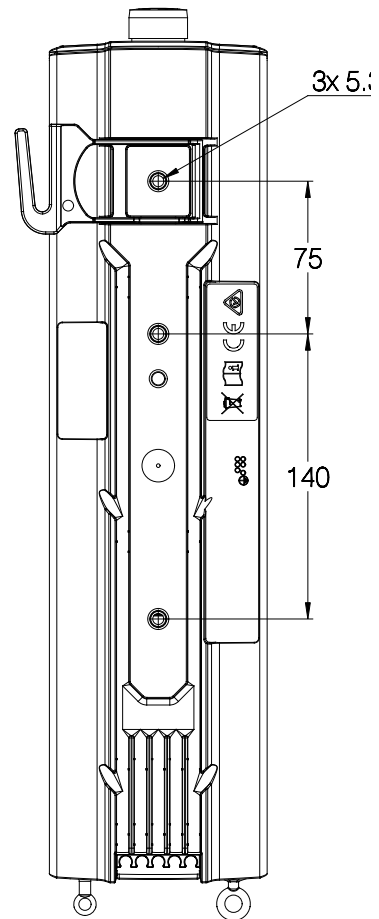
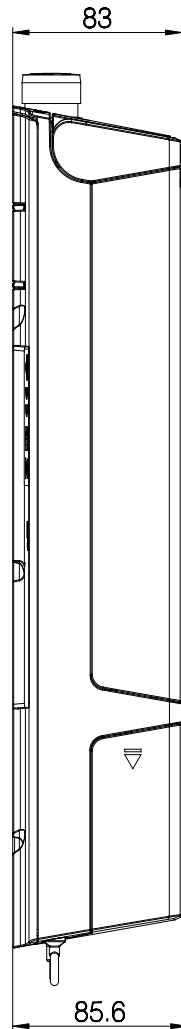
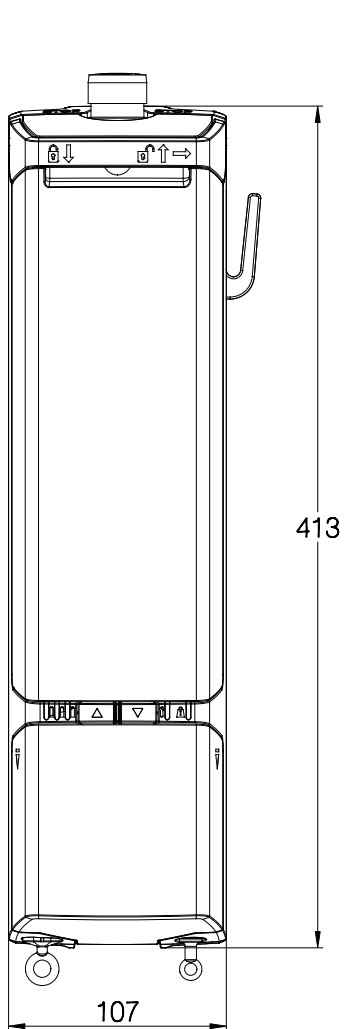
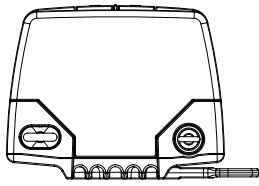
The charger indicates whether it is connected to mains or whether the battery is being charged.

See LED functionality graphics.

LIFT40-compatible hand controls

1 Channel	2 Channel	3 Channel
J05628 (HB310000B006-2102D1E000). Hook w/rubber, IPX6, PU cable J05616 (HB310000B004-2M02D1E000). Magnet, IPX4, PU cable	J06531 (HB320000B004-2M02D1E000). Magnet, IPX4, PU cable J05306 (HB320000B004-2002D1E000). Hook, IPX4, PU cable	HB30132-00 (Hook) HB30133-00 (Magnet)
		
Hand control for the SWL function Special hand control prepared for use with the SWL function. Item number: HB7x161-00		

Dimensions



Drawing no. 1048W4000

Accessories list and item numbers

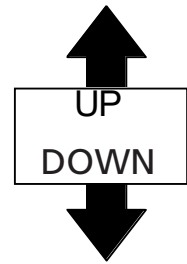
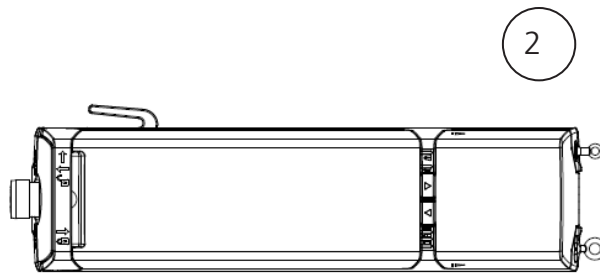
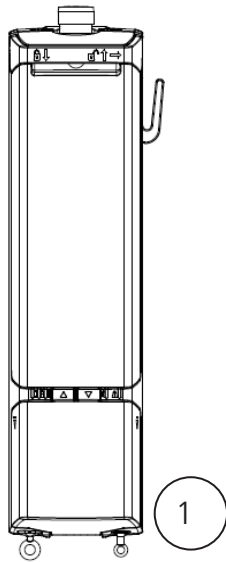
Cable cover (cable lock)	Item no.: SA1048W1003
--------------------------	-----------------------

Cable hanger	Item no.: SA1039W1041
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Programming adaptor (to be used with Programming Box PB31001-00) Access point for programming box below product label.	Item no.: PB31PP-00
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Be aware that cables and blind plugs must be ordered separately.

LIFT40 mounting



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