

CARELINE® CONTROL BOX CB9



CB9: Compatible with LA31, LA31R, LA34, LA34R¹⁾ and RA40

Features:

- Connection of max. 4 actuators, type LA31/LA31R and LA34/LA34R, via 4-pole DIN sockets.
- Compatible with the Rotary actuator, RA40 (only AD type)
- Extremely compact design
- Mains voltage: 100/120/230V AC 50-60 Hz
- Duty cycle: Max. 10% or 6 min./hour at continuous use
- Output voltage 24V DC
- Ambient temperature: +5° to +40°C
- Protection class: IP54 or 66 (not for wash tunnels)
- Colour: Grey or black
- DIN-socket for handsets:
 - Ax types: HB40, HB60, HB70, DP or FS
 - Px types: HB4XE, HB5XE, HB60M (PM/IN versions), HB7XE/W, DPXE or DP1M
- 3.2 m exchangeable straight mains cable
- EOP = Electronic Overload Protection (only AC, AD, AS and Px types)*
- Medically approved according to EN 60601-1
- Locking mechanism for DIN plugs and mains cable
- Electronic protection of the relays for extended lifetime, EAS (simple EAS); available on AC, AD, AE and Px (not PM and PN) types
- Double power control (FET + relay) monitoring on all AC, AD and AE types.

- * - AD type CH1+2 via common current cut off; CH3+4 have no EOP!
- AS type via individual current cut off
- Px type via pulse measurement

The CARELINE® CB9 has been developed for use together with LA31/LA31R, LA34/LA34R¹⁾ and the Rotary actuator, RA40 in the Care & Rehab industry. CB9 and LA31 can be fully integrated which saves mounting and wiring or be installed separately.

Exchangeable mains cables, Electronic Overload Protection (EOP), EAS, earth connection (Class 1) and exchangeable mains fuse makes CB9 a good choice for the simple hospital and care beds.

The CARELINE® CB9 series are available as either analogue (Ax) type or m-processor based (Px) types.

The Ax types are developed especially for the Care & Rehab industry and are medically approved according to EN 60601-1 (IEC 601-1).

¹⁾ LA34R only as special-article.



WE IMPROVE YOUR LIFE

Features:

- Class 1 or 2 protection
- Power supply indication via an LED. Not available with mains cut-off.
- Exchangeable mains fuse from outside
- External battery back up and internal charger (only AE and AD types; use notation A for ordering)
- External battery backup (no internal charger) (only AE and AD types; use notation B for ordering)
- Mains cut-off
- Compact high power toroidal transformer with low power consumption and low electromagnetic emission

- Energy saving function (the control box restores to power down when not operated)
- Compact high power toroidal transformer with low power consumption and low electromagnetic emission.
- All actuators, which are used together with Px types, must be equipped with reed switch

* Electronic Overload Protection (only AD, AS and Px types)

- AC: Has common measurement on CH1, CH2, CH3 and CH4. If the total current exceeds 5A all channels will be cut-off.

- AD: Means a common current measurement on CH1+2. The current will be cut off when the total current on both channels reaches approx. 3.4 A.

- AS: Means an individual current measurement on CH1, CH2, CH3 and CH4. The current will be cut off only when the current on one channel reaches approx. 4 A. Max. current available from the CB9

Features only available in Px types:

- Choice of 8 different standard software packages. All standard software packages have either impulse memory or memory. To use memory in general a handset with memory has to be chosen.
- Approved according to EN 60335-1

Options (has to be stated separately):

- Can be mounted on the LA31
- Customised software may be ordered. Please see the guidelines for design of special software!

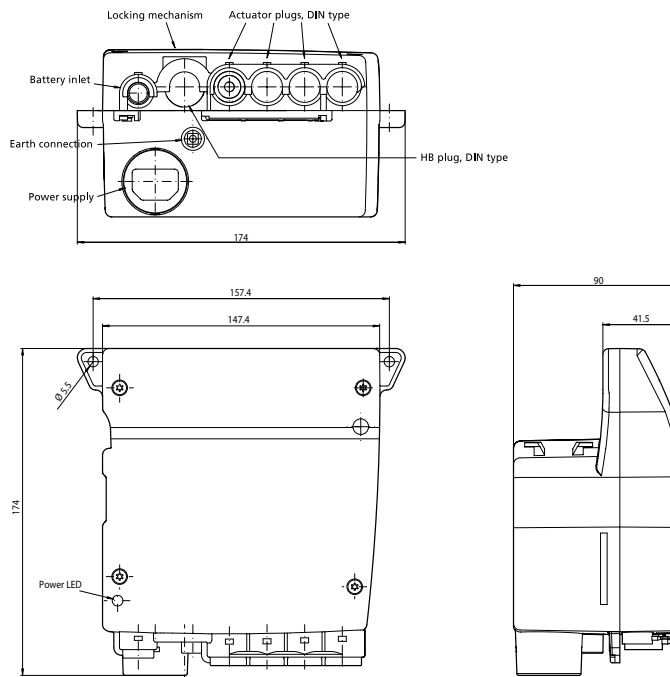


NOTE:

LA34 fast motor is not compatible with any of the CB9 standard versions, due to high current consumption. The combination LA34R/CB9 "Px" is only available as special articles. For use of LA34 standard motor and small motor always use a CB9 with EAS.

Additionally, actuators with reed switch may not be connected to AE or AD types because of a conflict between the CB signal wires and the reed wires.

CARELINE® CB9



Note: The tolerance between the mounting holes is +/- 0.5 mm.

CB9 CARELINE®
Ordering example:

CB9 1 6 0 AS 4 + 0 0 0 1A

MAINS CABLE

CARELINE, LINAK connector, without earth:	Black	Grey
10 = Straight, EU, straight mains-plug-end and straight CB-end	0015185	0015196
11 = Coiled, EU, straight mains-plug-end and straight CB-end	0015186	0015197
13 = Straight, UK, angled mains-plug-end and straight CB-end	0015193	
14 = Straight, Japan, straight mains-plug-end and straight CB-end	0015192	0015253
15 = Straight, USA, straight mains-plug-end and straight CB-end	0015194	
17 = Straight, Aus, straight mains-plug-end and straight CB-end	0015239	0015264
19 = Without cable		
CARELINE, LINAK connector, with earth:	Black	Grey
1A = Straight, EU, angled mains-plug-end and straight CB-end	0015183	0015184
1B = Coiled, EU, angled mains-plug-end and straight CB-end	0015191	0015198
1D = Straight, UK, angled mains-plug-end and straight CB-end	0015275	
1F = Straight, USA, straight mains-plug-end and straight CB-end	0015195	
1G = Straight, CH, straight mains-plug-end and straight CB-end	0015242	
1H = Straight, Aus, straight mains-plug-end and straight CB-end	0015241	
1J = Without cable		
CARELINE, mains cut off, non-detachable, without earth:	Black	Grey
F0 = Straight, EU (only CB9-trafo)	00WP039C00-00	
CARELINE, mains cut off, non-detachable, with earth:	Black	Grey
FA = Straight, EU (only CB9-trafo)	00WP039C00-0A	

MAINS VOLTAGE

- 0 = CB9 trafo 230V
- 1 = CB9 trafo 120V
- 2 = CB9 trafo 100V
- 3 = CB18 trafo 230V (only AS functionality)
- 4 = CB18 trafo 120V (only AS functionality)
- 5 = CB18 trafo 100V (only AS functionality)

FUSE COVER

- 0 = No
- 1 = Yes

BATTERY

- 0 = No battery
- A = Connection for external 24V battery and internal charger (only AD or AE func. and not with mains cut-off)
- B = Connection for external 24V battery (no internal charger) (only AD or AE functionality)

COLOUR

- + = Grey
- = Black

NO. OF CHANNELS

1 - 4

FUNCTIONALITY

Without microprocessor (analog)

	Current cut-off	Compatible with Rotary actuator	EAS
AS	4,1A at all ch.		
AC	5,0A at all ch.		X
AD	3,4A at ch. 1 & 2	X	X
AE			X

AS-func. is not for new designs. Please use AC-func. instead!

With microprocessor (with memory)

		Impulse drive	EAS
PM	Single		
PN	Single, alternative funct.	X	
PA	Parallel on ch 1/2	X	X
PB	Single	X	X
PC	Parallel on ch 1/2/3		X
PD	Parallel on ch 1/2/3	X	X
PH	Single		X
PI	Parallel on ch 1/3 and 2/4		X
PJ	Parallel on ch 1/3 and 2/4	X	X
PP	Parallel on ch 1/2		X

NOT USED

0

IP DEGREE

- 4 = IP 54
- 6 = IP 66

PLASTIC HOUSING

- 1 = CARELINE (no mains indicator and no fuse cover if mains cut off)

TYPE CB9

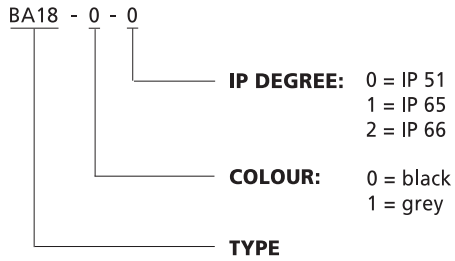


NOTE:

State separately if CB9 and LA31 must be mounted together.

BA1800 - External battery box

Ordering example:



Note:

An external charging device is not available as a standard article.



When activating several channels and they are at the same time independent of each other, contact technical support (related to simple EAS design).

It is possible to order blind plugs for CB9 CARELINE IP 66.

Order number:

Grey: 00931082

Black: 00931081

O-rings are not needed for these rubber plugs.

It is also possible to order blind plugs for the external battery box outlet (for BA1800)

Order number:

Grey: 00918035

Black: 00918034

O-rings: 0007018

The blind plugs are delivered in plastic bags of each 100 units.

When ordering a CB with mains cable the O-ring and locking ring are automatically included (to maintain the IP degree).

When ordering a mains cable you only need to specify if the O-ring and / or locking ring are required.

Order number:

O-ring: 0007029

Locking ring: 00912007

Specifications subject to change without prior notice.

It is the responsibility of the product user to determine the suitability of LINAK A/S products for a specific application. LINAK will at point of delivery replace/repair defective products covered by the warranty if promptly returned to the factory. No liability is assumed beyond such replacement/repair.