CBD4
CONTROL BOX

Features:
- The CBD4 can be connected with up to 4 actuators/columns
- Mains voltage: 100, 120, 220-240 V AC, 50–60 Hz
- Compact high-power toroidal transformer
- Low power consumption in stand-by mode due to use of a toroidal transformer
- Colour: black
- Exchangeable standard mains cable
- Protection against overload (EOP), by individual current limitation
- The control box is designed with a soft start/stop function
- A hook for mains cable relief
- Auto detection of the number of units connected
- Auto detection of leg/unit type connected

Option:
- SLS input
- Anti-Collision™ (only for DL4, DL6 and DL9)
- Simulator function (for life tests or demonstration at exhibitions)
- Configurator for local configuration or programming
- Multiparallel for up to 16 legs in parallel

Usage:
- Duty cycle max. 10 % ~ 6 min. per hour or 2 min. at continuous use at full load
- The control box is compatible with DL4, DL5, DL6, DL7, DL9 columns and DB4, DB5, DB6, DL7 built-in actuators for single or parallel drive
- Compatible with the controls DPA, DP, or WDP
- Approved according to EN 60335-1 and according to UL 73

The CBD4 control box is the most sophisticated control box within the LINAK DESKLINE® product range. The CBD4 ensures that the DESKLINE application has a very low and pleasant noise level and a constant speed level in the normal use area. The control box is compatible with the columns DL4, DL5, DL6, DL9 and the built-in actuators DB4, DB5, DB6, DL7. The CBD4 ensures optimised parallel drive for 2, 3, or 4 legs in parallel or a smooth drive as a single leg control box.
Mounting abbreviations:
B = Connection of the control (DPA, DP1U, WDP), the Anti-Collision™ dongle or the simulator dongle
AC = Connection to the mains
1-4 = Sockets for DB or DL lifting units

Auto detection means that the control box can detect the number of DL's/DB's plugged in.
E.g. it is possible to run a 2-parallel system on either a 3 or 4-channel control box.

If you want to run a 2-parallel system on a 3 or 4-channel control box you plug in the DL/DB on channel 1 and channel 2 and then initialise the system using the standard procedure. It is important that you plug the DL/DB's in on the correct ports – the 2 closest to the control inputs (see drawing).

Note:
No matter whether it is a 2, 3, or 4 channel control box channel 1 is always the channel closest to the control input (B on the drawing)

Connection guidelines:

Connection of the control and mains cable:
The control (DPA, DP1U, or DP1K) is to be connected on the same side of the control box as the lifting units.
On the advanced CBD4 there are 2 DP ports, which can both be used.

Finally, the mains cable is to be mounted and power to be switched on.

Please note that the control box must only be connected to the voltage stated on the label.
**CBD4**

**Ordering example:**

- **Class:**
  - 9 = Without cable 2 Pole (without earth. Class II)
  - 0 = Without mains cut-off
  - F = Mains cut-off. 3 m. Black. Non-detachable cable. Without earth

- **Mains voltage:**
  - 0 = 230 V 200W
  - 1 = 120 V 200W
  - 3 = 230 V 300W*
  - 4 = 120 V 300W*

- **Colour:**
  - - = Black
  - A = Advanced

- **Channels:**
  - 2 = 2 Channels
  - 3 = 3 Channels
  - 4 = 4 Channels

- **Functionality:**
  - C = 3 Parallel
  - H = 4 Parallel
  - P = 2 Parallel

- **Name:**
  - 4

- **Family:**
  - CBD

* = must always be chosen for 3 and 4 parallel systems

To enable the anti-collision function order the separate dongle (bag with 100 pcs.): 0624010
To enable the simulator function (only software 0076072) order the separate dongle (bag with 100 pcs.) 0624015

Mains cable must be ordered separately.
Ordering number 0015562, for the EU version.
Ordering number 0015942, for the US version.

**Mains cable 0015562:**
The plug on the new exchangeable mains cable is smaller than on earlier standard cables.
Together with a cable relief hook on the CBD4 it ensures a stable cable connection.

Other mains cables (class II):

- 0015186  Coiled EU version, black, 0.6 m
- 0015193  Straight UK version, black, 3.2 m
- 0015239  Straight AUS version, black, 3.2 m
- 0015196  Straight EU version, grey, 3.2 m
- 0015197  Coiled EU version, grey, 0.6 m
**Anti-Collision™**
The anti-collision function is a new option for the standard CBD4 advanced control box software version 1.66 and later. A system with anti-collision can limit material damages on a desk if a collision with a solid object should occur.

The option is compatible with DL4, DL6 and DL9. The option is not suitable for DL5 due to the ball deformation in the profile. Anti-Collision may be possible to combine with DB’s (DB4, DB5, DB6) that will depend on the customers’ guidance and must be tested first.

**Enabling the anti-collision**
To enable the anti-collision function a little plug called a dongle must be mounted in one of the 2 control ports. The function is only active when the dongle is mounted. – If you remove the dongle again you disable the function.

**Method of operation**
When the DL/DB’s are running, the CBD4 monitors the current consumption on each channel using a special algorithm. If the current consumption on one channel is increased more than a predefined slope a collision is assumed and all channels are stopped immediately and all DL/DB’s will start to run in the opposite direction (approx. 50 mm). This return drive is done automatically and continues with or without any control key pressed (for max. 2.5 sec.).

The anti-collision sensitivity is different in up and downwards direction. Upwards the force is approx. 20 kg. Downwards the load will be approx. 40 kg + the load on the DL/DB (the desk + what is on top of the desk). The 40 kg are needed to activate the anti-collision function.