# **CBR** – Relay box for lighting [accessory]

## Introduction CBR

CBR is a relay box för lighting that is used together with either Room climate controller RCX, Laboratory climate controller LCX, Climate baffel controller BCX or an Active supply air diffuser.

Connection blocks and control electronics are integrated in a double connection box.

### **Function**

- Can link lighting with lighting zones, which offers flexible lighting control.
- Can turn lighting on and off via occupancy signals from the lighting zone or from a push button.
- Eliminates power spikes at the moment of switching and consequent disturbances in the cable network.
- Can log switchings and time illuminated for follow-up.

### Configuration of lighting system control

The desired lighting function and times for turning on and off are set by login to the connected controller or via superior system.

#### Lighting zones

Lighting for the desired lighting zone can be configured via the connected controller. If any of the light fittings in a lighting zone is activated, all lights in the same zone are turned on.

### Service intervals

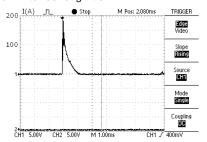
Communication with the superior system enables logging and display of the number of switching and duration of illumination, which gives a basis for replacing HF units and fluorescent tubes.



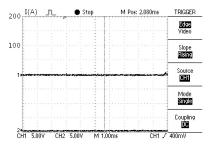
CBR - Relay box for lighting

# Elimination of power spikes

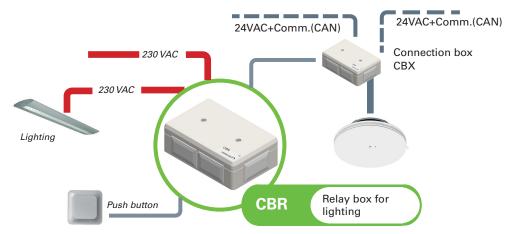
Lindinvent s lighting system control uses a double relay function to protect the building's cable network from disturbances when lights are turned on. The illustrations below show how power spikes are eliminated with simultaneous ignition.



Turning on with normal switches. The power spike reaches as high as 200 A when 4 light fittings are turned on at the same time.



The same operation with CBR. The power spike is limited to 4 A.



Connection diagram: Relay box CBR with connections.



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## **Technical specifications CBR**

### General

**Dimension** 

121 x 80 x 41 mm (LxWxH)

Material

Thermoplastic encapsulation

Colour

White

IP class

Encapsulation complies with IP44

## Electrical system

Supply voltage

24 VAC

Output

1 VA

**CE** marking

Complies with EMC and the Low Voltage Directive

Maximum load

3A (corresponds to 18 35W fluorescent tubes)

#### **Connections**

1 x connection for supply, 24 VAC.

1 x input for push button, 5 VDC. The signal is connected onward to the connected controller.

1 x potential-free relay output 230 VAC for lighting (NC).

1 x input for relay.

## **Accessory**

To simplify installation of CBR see the pre-connected mounting plate FMP-X-R-4U. The mounting plate, which is fixed to the plenum box of an active supply air diffuser, has CBX and CBR pre-mounted together with a branch connector for connection to lighting. There is also a version of the mounting plate without branch connector.

## Additional product documentation CBR

Table 1: Additional documentation for CBR can be obtained via links on the product's website under Products at www.lindinvent.se

Document	Available	Not available	Comments
Installation Instruction			
Start-up instruction			Instructions for commissioning with connected control unit
Maintenance instruction			Regarded as maintenance-free.
External connection diagram			
Environmental product declaration			Assessed by Byggvarubedömningen and Sundahus.
User information			Not applicable.
Modbus list			Not applicable.
AMA text			

Product documentation can be downloaded via www.lindinvent.se/produkter/



Contact

www.lindinvent.se Tel: 046–15 85 50 Lindinvent – Smarter indoor climate. Greener buildings.

The company offers products and systems for controlling ventilation, lighting, solar shading and local utilization. Equipment and climate solutions are being developed for offices, schools, hospitals, laboratories and similar working environments. Lindinvent's systems work together to provide high indoor comfort and the lowest possible energy use.

