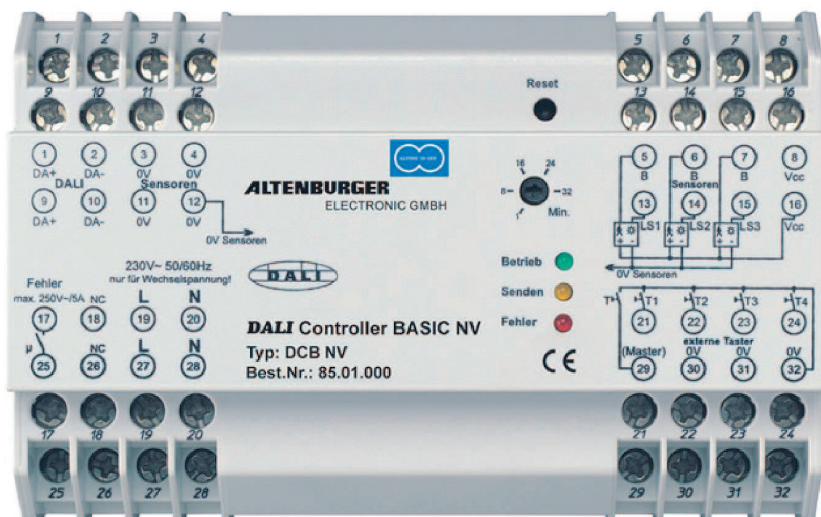


DALI Controller Basic NV, Type DCB NV



Functions of the DALI CONTROLLER BASIC:

- Programming and selection of 4 lighting scenes, individual dimming and switching of light circuits and master controls with the 5-pushbutton panel or 5 customary pushbuttons of up to 64 DALI ballasts or transformers and digital → analog converters (see page 14).
- Combined presence detection and constant light control in connection with ALLENBURGER Multi-Sensors.

Each individual lamp with its DALI ballast or transformer can be initiated with the 5-pushbutton panel and assigned to one of 4 lighting groups. Additional devices for the programming are not required. Lighting systems are becoming more flexible, requiring less expenses for installation.

The DALI-interface combines dim- and switch functions through a common control line. DALI ballasts or transformers and DALI Converters (digital-> analog) can individually be controlled. Fluorescent lamps, low-voltage halogen lamps or incandescent lamps thus can individually be dimmed or switched on the same circuit. A re-configuration is possible without any changing of the installation.

Functions of the DALI Controller Basic:

- **Basic functions**

After being connected to mains the Controller automatically carries out a basic assignment of light levels to each of the 4 groups being set ex works. The following light levels can be selected with the 4 pushbuttons:

Pushbutton 1 = 100% brightness

Pushbutton 2 = approx. 30% of the maximum brightness

Pushbutton 3 = approx. 50% of the maximum brightness

Pushbutton 4 = approx. 70% of the maximum brightness

These light levels also can be restored after other light levels have been programmed just by operating the reset-pushbutton at the basic controller. In this case after disconnection from mains the button has to be pressed continuously for approx. 10 secs. Also without programming with the master button at the control panel the following switch and dim functions can be realized:

- ON/OFF switching by short pressing the master button
- continuously pressing the master: lighting goes into brighter and darker
- releasing the button: lighting stops at the respective light level.
- short pressing the button: lighting switches OFF
- short pressing the button again: lighting goes into approx. 80 % of its max. brightness.

- **Group selection**

Up to 64 DALI ballasts can be assigned to 4 groups with the Basic Controller: Through simultaneously pressing the buttons 1+2+Master a lamp blinks and shows that it can be assigned to a group. The required group is determined through the pushbuttons 1 – 4 and confirmed with a master button.

- **Setting and selection of lighting scenes**

After each lamp has been assigned to one of the 4 groups the light levels can be set with the master and group buttons. The lighting scenes are stored by continuously pressing the respective buttons 1 - 4 (scenes).

- **Dimming and switching with Multi-Sensors**

With the connection of the controller to mains all connected Multi-Sensors (max. 6 sensors) automatically are recognized. On presence detection the controller automatically goes into scene 1 and operates the lighting in dependence of motion and daylight. The pre-selected lighting scene is the set value for the daylight-dependent constant light control. The delay time after the end of presence detection can be set at the controller between 1 and 30 min. After this time lighting goes into 1-2% of its max. value and finally switches off after approximately 10 min.

If during the sensor mode a group is switched, dimmed or another scene (2-4) selected the active constant light control is left. Presence detection however continues also in the new scene. If lighting is switched OFF and ON again it returns into scene 1.

Messages

Fault messages are identified with an LED at the module and a fault contact (voltage-free relay contact).

DALI faults

If no DALI is connected, a DALI wire interrupted or short circuited the red fault LED at the module blinks and the fault contact (optional: indicator lamp) switches synchronously.

Lamp fault

A lamp fault is identified with the red LED at the module and the fault contact (optional indicator lamp) is closed.

Operation

The green LED signalizes the readiness for operation.

The yellow LED indicates DALI-signals.

System Survey: DALI CONTROLLER BASIC (DCB NV)

up to 64 DALI ballasts

DALI ballasts



DALI-transformers



DALI-Converter 1...10V / 0...10V
for DIN rail systems



Dimmer



Multi-Sensors for daylight and motion



DALI-Converter 1...10V / 0...10V
for lamp fixtures



- The controller automatically recognizes connected Multi-Sensors in scene 1 and controls the lighting in scene 1 in dependence of the daylight and motion
- for the connection of up to 6 sensors



DALI Controller BASIC NV

Indicator lamp
- DALI fault
- Lamp fault
at DALI-control lamps



Control panel with the functions:



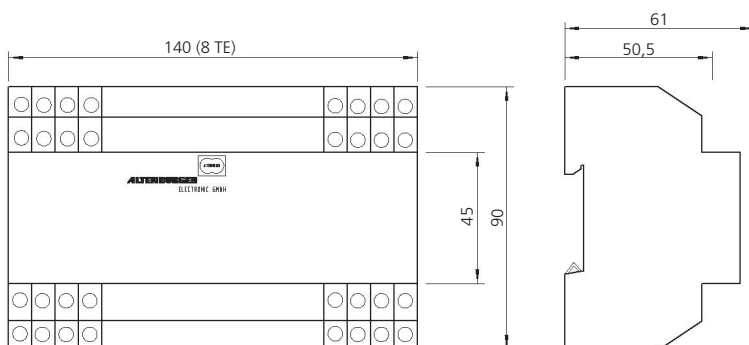
- master switch or master dimming control of all DALI ballasts with the master button
- assignment of all connected DALI ballasts to one of up to 4 groups
- switching and dimming of up to 4 groups
- storing and selection of up to 4 scenes
- pushbutton 1 (scene 1) is responsible for daylight-dependent control

Technical data

DALI CONTROLLER BASIC NV, Type DCB NV

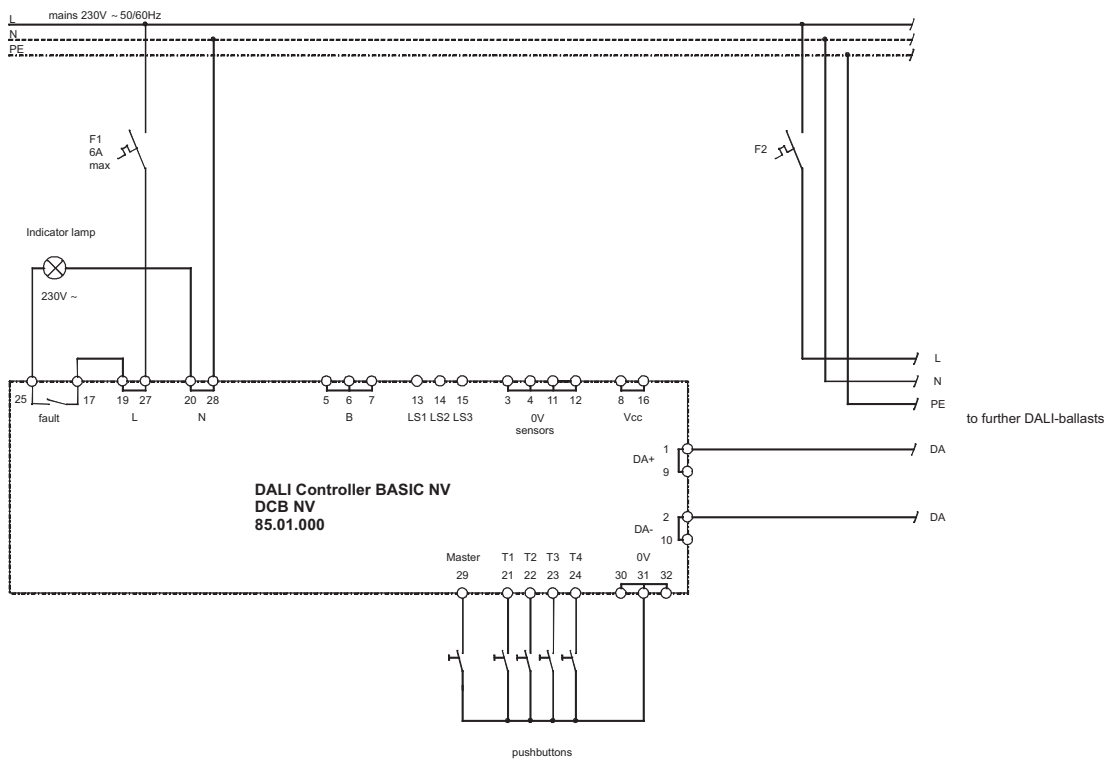
Designation	DALI Controller BASIC NV
Type	DCB NV
Order-Number	85.01.000
Power supply	230V~ 50/60HZ DC not permitted
Load consumption	Approx. 4 - 9W, dependent on the connected loads
Protection	Modules / fault contact external 6A
Ambient temperature	max. 45°C
Protective class	II (protective isolation)
Protective type	IP 20
Fault contact	Voltage-free relay contact (normally open contact), max. 250V~/5A~ resistive load Indicates lamp fault or DALI-fault
LEDs at the module	green: ready for operation yellow: DALI-interface active red: lamp fault
Delay time setting after presence detection	1-30 minutes at the module
Characteristic	accord. to DALI-specification
Pushbutton input	5 pushbutton inputs (normally open contacts). Pushbuttons for the operation of the module
Sensor inputs	3 inputs for light sensors (max. 6 sensors), 1 sensor for motion detection
Sensor supply	for 6 Multi-Sensors or individual light or motion sensors
DALI-interface	- interface according to DALI-specification - current supply for DALI ballasts: approx. 16V/150mA DC, $I_k < 250\text{mA DC}$, electr. current limitation and protection against overheating
Terminals	Screw terminals: 2x 0,3 – 2,5mm ² solid wire or ; 2x 0,3 – 1,5mm ² Litz wire with sleeve
Housing	Isolated housing for DIN rail systems
Dimensions	WxHxD 140x90x61mm
Weight	approx. 550g
Sensors and accessories	Light sensors and motion detectors (Multi-Sensors), pushbuttons, DALI ballasts, DALI converters
Wiring	see module print, manual and wiring diagrams. Wiring fault: destruction possible!

Dimensional drawing: DALI Controller Basic NV



Wiring Diagram

DALI Controller Basic without sensors

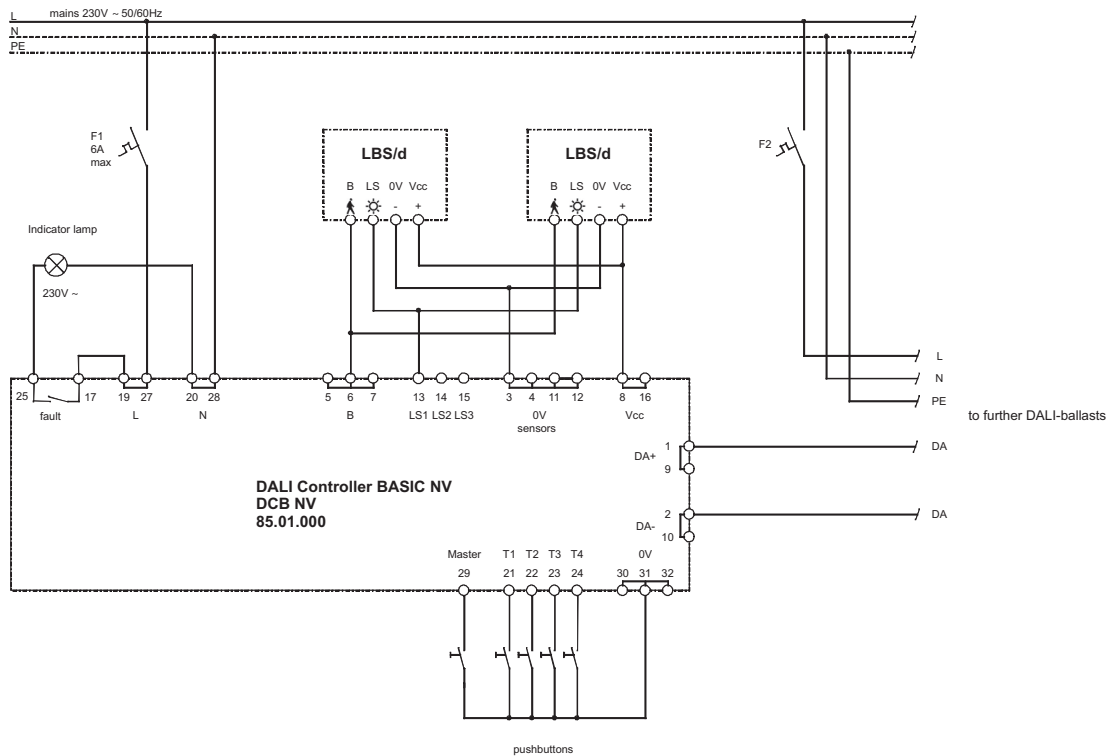


- The controller operates not in the automatic (sensor) mode. Sensors are not required.
- All groups are in the manual control mode.
- Maximal 64 DALI ballasts can be switched or dimmed.
- The DALI ballasts can be divided into 4 groups.
- Up to 4 Lighting scenes can be set and selected.
- Controls can be made with customary pushbuttons (normally open contacts).
- Pushbuttons can be switched in parallel.
- The indicator lamp is optional. This contact can be used for the evaluation of fault messages.

Wiring Diagram

DALI Controller with two at LS1 parallel connected Multi-Sensors (operating in dependence of the daylight and presence detection)

In lighting scene 1 (pushbutton 1): daylight dependent lighting control, forming a mean daylight dependent light level, with presence detection and extended range of recognition.

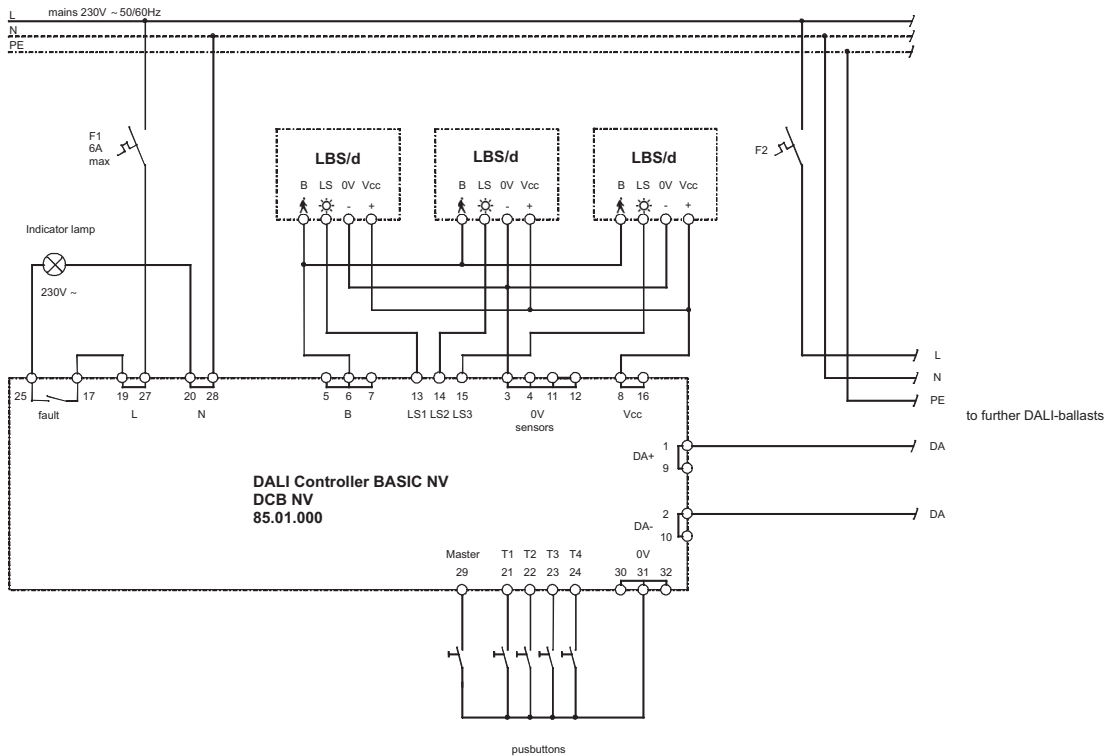


- The multi-sensors are connected in parallel with LS1 and are automatically assigned to group 1 (pushbutton 1). In this group the multi-sensor-control is realized.
- Groups 2 - 4 remain in the manual scene selector mode.
- As soon as daylight exceeds the set light level to be kept constant, or if presence no longer is recognized lighting goes to its minimum level and finally switches OFF after 10 minutes.
- The multi-sensors are switched in parallel such providing for a more sensitive recognition in a smaller area of identification or an extension of the area of detection in large rooms, corridors or stair cases.
- Without presence detection the lighting switches OFF after the set delay time.
- As soon as motion is recognized again automatically lighting scene 1 is selected.

Wiring Diagram

DALI Controller with 3 Multi-Sensors at LS 1 to LS 3

**Lighting scene 1: Lighting control of groups 1, 2 and 3 (e.g. 3 light rows)
Presence detection with extension of the range of recognition.**



- The Multi-Sensors are connected with LS1 to LS3 and assigned to the respective group.
- In lighting scene 1 all 3 groups (1 – 3) are in the automatic (Multi-Sensor) mode (e.g. 3 light rows).
- Group 4 is the normal lighting control group (not sensor-controlled).
- If daylight exceeds the set light level at a group lighting goes to minimum (1-2%) and finally switches OFF after 10 min.
- All motion outlets are switched in parallel such providing for a more sensitive recognition in a small area or an extension of the area of detection in large rooms.
- Without presence detection lighting switches OFF after the set delay time.
- After presence is recognized again lighting automatically goes into scene 1.

Please also refer to page 22.