

Issued: March 1999

Product and Applications Description

The light intensity control module N 342 is a N-system DIN-rail mounted device. It allows to control ten independent groups of luminaires in response to the outside light intensity.

For each of the ten groups an individual light intensity graph may be specified. Dimming telegrams are generated accordingly and sent to the dimming actuators, e.g. switching/dimming actuator GE 525 (constant light control).

The outside light intensity that is used with all ten groups is measured by e.g. the brightness controller GE 253 and sent to the light intensity control module N 342.

If in subsequent manual dimming (e.g. with a rocker switch), the respective light intensity graph is shifted to meet the desired value.

The next time the group of luminaires is switched on again the original graph is restored.

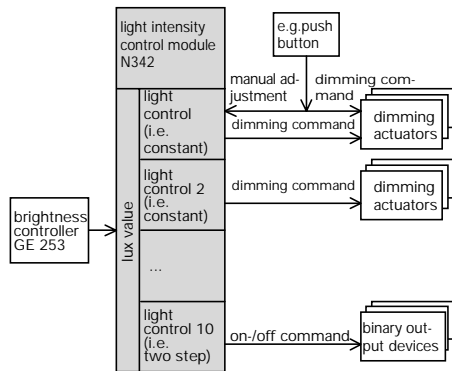
Alternatively, control of a group of luminaires may be set to two-step control mode with hysteresis, i.e. the group of luminaires is not dimmed but switched on and off respectively e.g. via binary outputs in response to the outside light intensity.

With the ETS (EIB Tool Software) the application program is selected, its parameters and addresses are assigned appropriately, and downloaded to the light intensity control module N 342.

Application Programs

See Siemens product database from version E, update 5 onward

Example of Operation



Technical Specifications

Power supply
via bus cable

Control elements
1 learning button:
for switching between normal operating mode and addressing mode

Display elements
1 red LED:
for monitoring bus voltage and displaying mode, selected with the learning button

Connections
bus line: pressure contacts on data rail

Physical specifications

- housing: plastic
- dimensions: N-system DIN-rail mounted device, width: 1 SU (1SU = 18 mm)
- weight: approx. 100 g
- fire load: approx. 1150 kJ ± 10 %
- installation: rapid mounting on DIN EN 50022-35 x 7,5 rail

Electrical safety

- fouling class (according to IEC 664-1): 2
- protection (according to EN 60529): IP 20
- protection class (according to IEC 1140): III
- overvoltage class (according to IEC 664-1): III
- bus: safety extra low voltage SELV DC 24 V
- device complies with EN 50090-2-2 and IEC 664-1: 1992

Reliability

rate of failure: 522 fit at 40 °C

Electromagnetic compatibility

complies with EN 50081-1, EN 50082-2 and EN 50090-2-2

Environmental specifications

- climatic conditions: EN 50090-2-2
- ambient temperature operating: - 5 ... + 45 °C
- ambient temperature non-op.: - 25 ... + 70 °C
- relative humidity (non-condensing): 5 % to 93 %

Certification

EIB certificate

CE norm

complies with the EMC regulations (residential and functional buildings), and low voltage regulations

Location and Function of the Display and Operator Elements

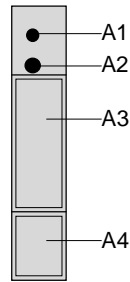


Figure 1: Location of the display and operator elements

- A1 LED1 for indicating normal operating mode (LED1 off) and addressing mode (LED1 on); on receiving the physical address the device automatically returns to normal operating mode
- A2 Learning button for switching between normal operating mode and addressing mode for receiving the physical address
- A3 Type plate
- A4 Label for noting the physical address

Installation Instructions

- The device may be used for permanent interior installations in dry locations within distribution boards.

WARNING

- The device may be built into distribution boards (230/400V) together with appropriate VDE-devices only and must be mounted and commissioned by an authorised electrician.
- Free DIN rail areas must be covered with covers, order no. 5WG1 192-8AA01.
- The prevailing safety rules must be heeded.
- The device must not be opened. A device suspected faulty should be returned to the local Siemens office.

Mounting and Wiring

General description

The N-system DIN-rail device (1 SU) can be installed to N-system distribution boards, surface or flush mounted, or to any DIN-rail EN 50022-35 x 7,5 available that has a data rail installed.

The connection to the bus line is established by clicking the device onto the DIN-rail (with a data rail installed). Take care that the type plates of all devices on a DIN-rail can be read in the same direction, guaranteeing the devices are polarised correctly.

Mounting DIN-rail devices (Figure 2)

- Slide the device (B1) onto the DIN-rail (B2) and
- swivel back the device (B1) until the slide clicks into place audibly.

Dismounting DIN-rail devices (Figure 2)

- Press down the slide (C3) with a screw-driver and
- swivel the device (C1) from the DIN-rail (C2).

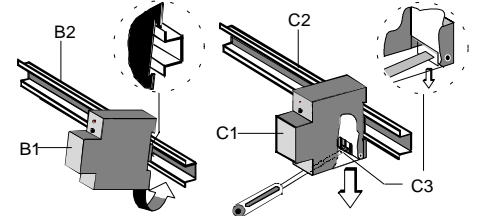


Figure 2: Mounting and dismounting a DIN-rail device