Logical link device N 347/02 **5WG1 347-1AB02**

Product and functional description

The logical link device N 347 is a DIN rail mounted device with N-system dimensions, which makes it possible to link binary information logically.
It manages up to 255 x 1 bit communication objects (group addresses) of type EIS 1 which can be assigned as required to the inputs or the output of a logic gate. The user is thus not tied to a fixed gate size with a constant number of inputs. He can moreover determine for each gate the number of inputs it should have and which logic operations should be carried out.
The user can assign one of the following logic functions to a gate:

AND
NAND
OR
NOR.

The binary information of each input and output can be inverted (negated). Send conditions and time functions can be defined for each output.

Application programs

01 07 Logical link device 800C04
(for ETS2 Version 1.1 onwards)
01 07 Logical link device 800C09
(for ETS3 Version 1.0 onwards)

- With graphic projecting interface
- Used for the logical connection of 1 bit object values using virtual gates
- The basic functions of AND, NAND, OR and NOR are implemented
- The number of inputs per gate is freely selectable
- Multi-level logic operations and indirect feedback loops are possible
- A maximum of 255 gate inputs and outputs can be created
- Send conditions can be defined
- Outputs can be individually provided with time functions

Application examples

Using the ETS program (*EIB* Tool Software, only ETS2 version 1.1 onwards), the user is able to assign parameters to the N 347 and load the parameters into the device via the EIB.

- With certain limitations, the logical link device N 347 can be used instead of one or several logic modules N 301, if comprehensive logic functions are required.
- The N 347 can be used to produce group signals (it can be conveyed via one or several OR gates for example whether a light has been left on in the building or on a particular floor or the shutters have been lowered).
- Time functions can be defined individually for all the outputs. The functions of ON delay, OFF delay and time switch can be selected. It is possible to set the time periods between 0.1 seconds and 24 hours and if required they can be retriggered by further input signals.
  With the time switch function, it is possible to simulate a staircase lighting switch for example.

Notes for installation

- The device may be used for permanent interior installations in dry locations within distribution boards or small casings with DIN rail EN 60715-TH35-7,5.

⚠ WARNING

- The device must be mounted and commissioned by an authorised electrician.
- Unoccupied areas of data rail must be covered using a cover 5WG1 192-8AA01
- The prevailing safety and accident regulations must be observed.
- The device may not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

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Technical specifications

Power supply
via the bus line

Operating elements
1 learning button: for toggling between normal mode/addressing mode

Display elements
1 red LED: for monitoring the bus voltage and for displaying normal mode/addressing mode

Connections
Bus line, pressure contacts on data rail

Physical Specifications
- Housing: plastic
- Dimensions: DIN rail mounted device with N-system dimensions
  Width: 1 module (1 module = 18 mm)
- Weight: approx. 100 g
- Fire load: approx. 1100 kJ ± 10 %
- Mounting: clip-on mounting onto DIN rail
  DIN EN 50022-35 x 7.5

Electrical safety
- Degree of pollution (according to IEC 664-1): 2
- Type of protection (according to EN 60529): IP 20
- Overvoltage category (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
- Failure rate: 480 fit at 40 °C

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

Environmental conditions
- Climatic withstand capability: EN 50090-2-2
- Ambient operating temperature: - 5 ... + 45 °C
- Storage temperature: - 25 ... + 70 °C
- Relative humidity (not condensing): 5 % ... 93 %

Markings
KNX / EIB

CE mark
in accordance with the EMC guideline (residential and functional buildings) and the low voltage guideline

Location and function of the display and operating elements

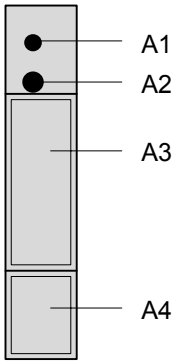

Figure 1: Location of display and operating elements

A1 LED for displaying normal mode (LED off) or addressing mode (LED on); it is extinguished automatically once the physical address has been transferred.
A2 Learning button for toggling between normal mode and addressing mode for transfer of the physical address.
A3 Name plate
A4 Label for the physical address

Mounting and wiring

General description
The N-system DIN rail mounted device can be inserted in N-system distribution boards and wherever EN 50022-35 x 7.5 DIN rails are available. However the data rail must first be glued into the DIN rail.
Contact with the bus line is achieved by clipping the device onto the DIN rail. It should be noted that the labelling on the new device can be read in the same direction as the rest of the devices on the DIN rail. This ensures that the polarity of the device is correct.

Mounting DIN-rail device (Diagram 2)
- Place the device (B1) on the DIN rail (B2) and
- rotate the device (B1) downwards until the slide switch audibly clicks into position.

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Dismounting DIN-rail device (Diagram 2)
- Press the slide switch (C3) down with a screwdriver, lock it home by pressing gently and
- remove the device (C1) from the DIN rail (C2) with a swivel action.

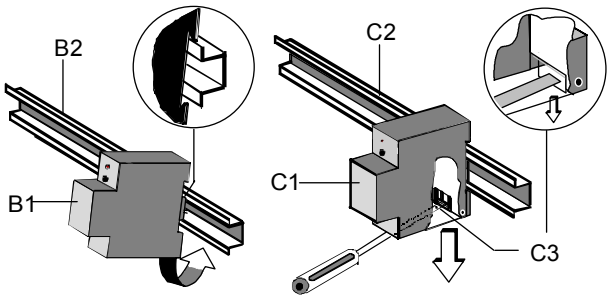
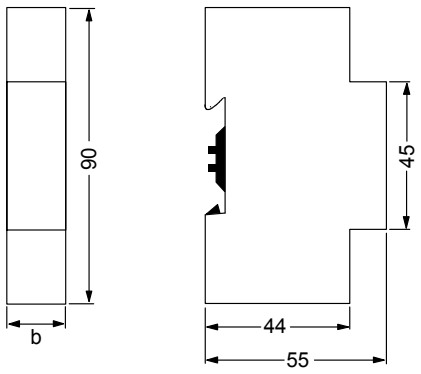


Figure 2: Installing and dismantling the DIN rail mounted device

Dimension drawing

Dimensions in mm



b = 1 SU

1 Spacer unit (1 SU) = 18 mm

General Notes

- Any faulty devices should be returned to the local Siemens office.
- If you have further questions about the product, please contact our Technical Support:
  ☎ +49 (0) 180 50 50-222
  🖷 +49 (0) 180 50 50-223
  🗐 www.siemens.com/automation/support-request

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Notes

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