Logic Module N 301 **5WG1 301-1AB01**

Product and Applications Description

The logic module N 301 is a N-system DIN-rail mounted device. It allows the use of logic operations on group addresses received. One or more results of such logic operations can be returned to the bus as group telegrams.

Appropriate application programs are available for the different tasks the logic module N 301 can handle; e.g. the number of logical inputs and outputs and specific logic operations can be selected, the sending may be controlled according to the outcome of a certain logic operation.

With the ETS (*EIB* Tool Software) the application program is selected, its parameters and addresses are assigned appropriately, and downloaded to the logic module N 301.

Application Programs

11 CO AND-8/2 720101
- 8 inputs, 2 outputs
- inverting mode
- allows any combinations of the logic operations AND, OR
- send conditions can be specified for each output

11 CO INV-4/4 740301
- 4 inputs, 4 outputs
- inverting mode
- send conditions can be specified for each output
- value on bus voltage recurrence can be specified

12 CO Binary 740A01
- allows re-allocation and/or multiplication of group addresses
- 2 groups with up to 4 different 1-bit group addresses each
- 4 select-inputs for allocating group addresses

12 CO Binary 740B01
- allows re-allocation and/or multiplication of group addresses
- 2 groups with up to 4 different 8-bit group addresses each
- 4 select-inputs for allocating group addresses

12 CO Binary 740C01
- allows re-allocation and/or multiplication of group addresses
- 1 group with up to 4 different 1-bit group addresses
- 1 group with up to 4 different 4-bit group addresses
- 4 select-inputs for allocating group addresses

12 CO PosDriv 740D01
- 4 channels
- send or receive positive drive object

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 with a data rail installed 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.

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

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Connections
bus line, pressure contacts on data rail

Physical specifications
- housing: plastic
- N-system DIN-rail mounted device, width: 1 SU (1 SU = 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 and IEC 664-1: 1992

Reliability
rate of failure: 424 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

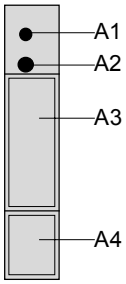


Figure 1: Location of the display and operator elements

A1 LED for indicating normal operating mode (LED off) and addressing mode (LED 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

Logic Module N 301	**5WG1 301-1AB01**

Mounting and Wiring

General description
The N-system DIN-rail device can be installed to N-system distribution boards 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).

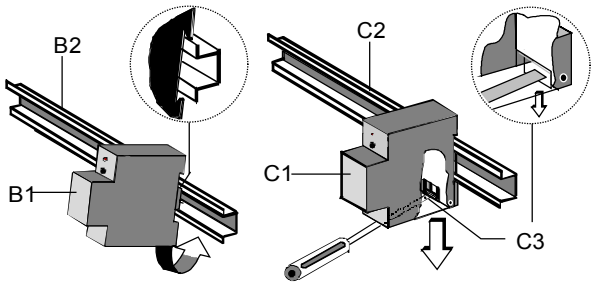
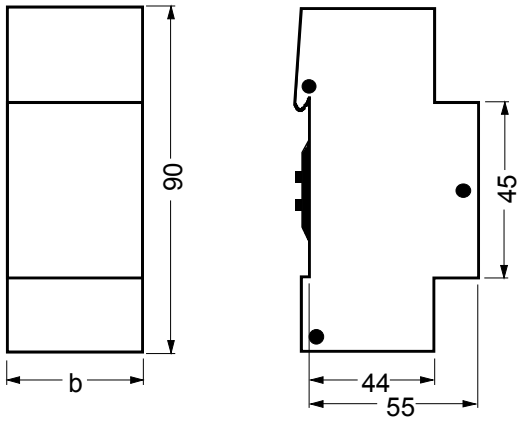


Figure 2: Mounting and dismounting a DIN-rail device

Dimension Diagram

Dimensions in mm



1 Spacer Unit (SU) = 18 mm

b = 1 SU

Logic Module N 301	**5WG1 301-1AB01**

Notes

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