Binary Input N 261

4 x 24V AC/DC

5WG1 261-1CB01

Product and Applications Description

The binary input N 261 is a DIN-rail mounted N-system device with four inputs for volt free signalling contacts. The required scanning voltage must be provided by an additional AC 24 V or DC 24 V power supply unit.

Each of the inputs can be assigned various tasks depending on the application program used, i.e. the binary input N 261 consists of the device (hardware) and its application programs (software).

Appropriate application programs are available for the different tasks the binary input N 261 can handle; e.g. sending of on and off telegrams at different edges of the input signal either event-controlled or cyclic with parametrizable repetition intervals.

Application Programs

11 S4 BinCycl 240504
- 4 binary inputs
- allows to switch on/off/over at rising or trailing edge for each input
- cyclic send mode
- allows sending on bus voltage recurrence
- send conditions can be specified

11 S4 Binary 240E01
- 4 binary inputs
- switch on/off/over on short or long switch operation for each input
- period for producing long switch operation adjustable
- type of contact can be specified

11 S4 Dimmer 220502
- 4 binary inputs
- dimming or switching on/off
- default setting: 2 x dimming
- period for producing long switch operation can be specified
- type of contact can be specified

11 S4 Blinds 220602
- 4 binary inputs
- blinds control or switching on/off
- default setting: 2 x blinds control
- period for producing long switch operation can be specified
- type of contact can be specified

11 S4 DimBInd 220702
- 4 binary inputs
- dimming/blinds control or switching on/off
- default setting: 1 x dimming / 1 x blinds control
- period for producing long switch operation can be specified
- type of contact can be specified

11 S4 BinVal 240A01
- 4 binary inputs
- allows send-value on rising or trailing edge for each input
- cyclic send mode
- delay mode
- interlocking of send-value provided

11 S4 Dim/I0 241001
- 4 binary inputs
- 1x dimming
- 2 x switching on/off/over on short or long switch operation can be specified
- period for producing long switch operation adjustable
- type of contact can be specified

11 S4 BInd/I0 241101
- 4 binary inputs
- 1 x blinds control
- 2 x switching on/off/over on short or long switch operation
- period for producing long switch operation can be specified
- type of contact can be specified

Technical Specifications

Power supply
via bus cable

Inputs
- 4 inputs
- input signal voltage :
  - rated value: AC/DC 24 V
  - frequency: 47 ... 63 Hz (at AC 24 V)
  - signal ''0'': DC -30 ... +5 V, AC 0 ... 5 V
  - signal ''1'': DC +10 ... +30 V, AC 10... 30 V
- input current:
  - at ''1'': usually 3,5 mA (at AC 24 V), usually 6 mA (at DC 24 V)
- delay of input signal:
  - at leading edge of input signal: max. 5 ms
  - at trailing edge of input signal: max. 30 ms
- duration of input signal: min. 50 ms
- input characteristic: set in parameter list according to application program
- length of input signal cable: max. 100 m (300') unshielded

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.
note: The second red LED is not used currently. If this LED is illuminated, this indicates an error while receiving the program data.

Connections
- signal inputs, screwless plug-in terminals
- load circuit, physical: AWG #20-14 solid or stranded Cu

Physical specifications
- polymer casing
- N-system DIN-rail mounted device, width: 2 SUs
- weight: approx. 150 g (6oz)
- installation: rapid mounting on DIN EN 50022-35 x 7,5 rail

Electrical safety
- bus: class 2 power
- fouling class: 2
- protection (according to EN 60529): IP 20
- protection class: III (according to IEC1140)
- overvoltage class : III
- insulation rating: according to IEC 664: 1992, complies with prEN 50178.
- rated insulation voltage: Ui = 250 V
- casing: basic insulation for Ui
- bus: safety separation for Ui
- inputs mutually: basic insulation for 100 V

Electromagnetic compatibility
complies with Part 15 of the FCC rules pursuant to the limits for a Class A digital device

Environmental specifications
- ambient temperature operating: - 5 ... + 45°C (23...113°F)
- ambient temperature non-op.: - 25 ... + 70° C (-13... 158°F)
- relative humidity (non-condensing): 5 % to 93 %

Listings and Certifications

UL listed
UL 916, Open Energy Management Equipment

CSA certified
(pending)

CE marked
complies with EMC regulations (residential and non-residential buildings), and low voltage regulations

EIB certified

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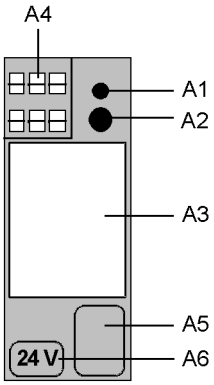
Location and Function of the Display and Control Elements



A1 LED for indicating normal operating mode (LED off) and addressing mode (LED on); upon receiving the physical address the device automatically returns to normal operating mode
A2 Learning button for switching between normal operating mode and addressing mode
A3 Type plate
A4 Screwless plug-in terminals for connecting input circuits
A5 Label for noting the physical address
A6 "24 V" operating voltage label

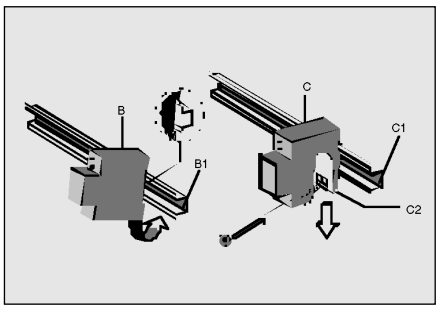
Installation Instructions
The device may be used for permanent interior installations in dry locations within distribution boards.

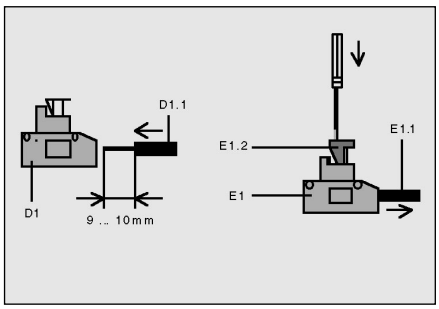
WARNING

Hazardous voltage.
Can cause death, serious injury or property damage.

The device must not be opened.
A faulty device should be returned to the local Siemens sales office or distributor.

The device must be mounted and commissioned by a factory trained person.
The prevailing safety rules must be observed!
Mount in dry locations only!





Mounting

General description
The N-system Din-rail device can be installed to N-system distribution boards, surface or flush mounted, or to any DIN-rail EN 500022-35 x 7,5 available that has a data rail glued to it.

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

Mounting the Binary Input unit N 261 to a DIN-rail
- Slide the DIN-rail device (B) onto the DIN-rail (B1) and
- swivel back the DIN-rail device until the slide clicks into place audibly.

Dismounting DIN-rail devices
- Remove all connected wires,
- press down the slide (C2) with a screw-driver and
- swivel the DIN-rail device (C) from the DIN-rail (C1).

Wiring

Connecting the mains voltage
- The mains voltage is connected via screwless plug-in terminals (D1).
- Remove approx. ⅜" of insulation from the wire (D1.1) and connect it to the terminal (D1).

Disconnecting the mains voltage
- Press the terminal lock (E1.2) of the terminal (E1) with a screw-driver and
- remove the wire (E1.1) from the terminal (E1).

Typical circuit