

Product and Applications Description

The load switch N 512 is a N-system DIN-rail mounted device. Via its eight outputs it can switch eight separate groups of electric devices. The power supply of the load switch N 512 is provided by the bus (i.e., it requires no additional power supply). All outputs can switch simultaneously.

The outputs may be operated manually via slide switches. These switches also show the actual switching state (when switching manually as well as when switching via the bus). Each of the outputs (relays) can be assigned various tasks depending on the application program used, i.e. the load switch N 512 consists of the device (hardware) and its application programs (software).

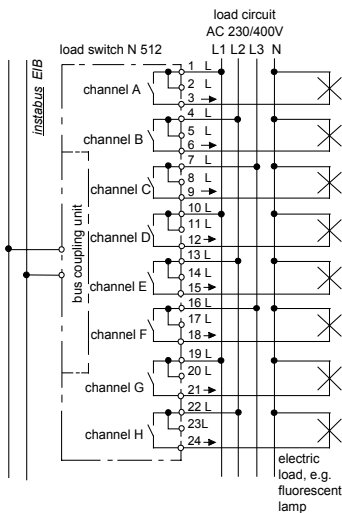
The load switch N 512 can handle different tasks; e.g. non-delayed on and off switching.

With the ETS (EIB Tool Software) the application program is selected, its parameters and addresses are assigned appropriately, and downloaded to the load switch N 512.

Additional Informations

<http://www.siemens.de/gamma>

Example of Operation



Technical Specifications

Power supply
via bus line

- Outputs**
- number: 8 (bistable relays, volt free contacts)
 - rated voltage: AC 230 V, 50 ... 60 Hz
 - rated current: 16 A resistive load
 - switching current at AC 230 V: 0,01...16 A resistive load
 - switching characteristic: set in parameter list according to application program

Connections

- load circuit, physical: strip insulation for 9 ... 10 mm permissible conductor types/cross sections:
 - 0,5 ... 4 mm² single core
 - 0,5 ... 2,5 mm² flexible conductor
- load circuit, electrical:
 - plain flexible conductor, min. 1 mm²: current carrying capacity max. 6 A
 - flexible conductor with terminal pin, crimped on gas tight, min. 1,5 mm²: current carrying capacity max. 10 A
 - all other conductors, min. 1,5 mm²: current carrying capacity max. 16 A

WARNING

When looping through the L-conductor (connection blocks 1 and 2, 4 and 5, 7 and 8, 10 and 11, 13 and 14, 16 and 17, 19 and 20, 22 and 23) take care that the maximum connection current of 20 A (as governed by the maximum permissible printed conductor load) is not exceeded!

- bus line
 - pressure contacts on data rail
 - screwless bus connection block 0,6...0,8 mm Ø single core
 - remove approx. 5mm of isolation

Physical specifications

- N-system DIN-rail mounted device, width: 8 SUs (1 SU = 18 mm)
- weight: approx. 560 g

Electrical safety

- protection (according to EN 60529): IP 20

Electromagnetic compatibility

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

Environmental specifications

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

Operator Elements

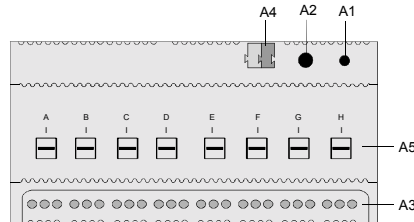


Figure 1: Location of the display and operator elements

- A1 LED for indicating normal operating mode (LED off) and addressing mode (LED on); 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 for receiving the physical address
- A3 screw blocks for connecting load circuits
- A4 screwless bus connection block
- A5 Slide switch for manual operation and for displaying the switching position.
Slide in upper position: relay contact closed
Slide in lower position: relay contact open

Important hint:

The manual operation of the sliding switches is only designated as an emergency operation. There is no telegram downloaded to the bus and the changed position is not recognised by the bus controller. In case of bus voltage failure/recurrence even the switching conditions of manually controlled relays resume the condition set in parameter list.

Mounting and Wiring

- 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 may be built into distribution boards (230/400 V) together with appropriate VDE-devices.
- The device must be mounted and commissioned by an authorised electrician.
- A safety disconnection of the device must be possible. Especially if the device is connected to different phases.
- Free DIN rail areas with stuck-in data rail must be covered with covers, order no. 5WG1 192-8AA01.
- The prevailing safety rules must be heeded.
- The device must not be opened.
- For planning and construction of electric installations, the relevant guidelines, regulations and standards of the respective country are to be considered.

If the connection is established via bus connection block (data rail not installed) the data rail connection system has to be covered with the enclosed insulation hood after removing the guiding hood e.g. with a screw driver to guarantee a sufficient insulation from the DIN rail. If the load switch N 512 is installed the conventional adapter is not necessary (also for other DIN-rail devices). The bus voltage is downloaded from the bus connection block to the data rail.

Removing the guiding top (Figure 2)

- The guiding top (D3) surrounds the contact system (D2) on the back side of the load switch N 512 (D1).
- Insert the screw driver between the DIN-rail device (D1) and the guiding hood (D3) and remove the guiding hood.

Inserting the insulation top (Figure 2)

- Put the insulation top (D4) onto the contact system and click it into place by a slight pressure.

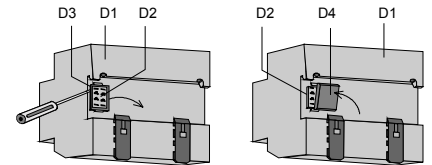


Figure 2: Mounting and dismounting a DIN-rail device

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
adsupport@siemens.com