

Binary Output N 562
2 x 230 V AC / 10 A
5WG1 562-1AB01

Product and Applications Description



The binary output N 562 is a N-system DIN-rail mounted device. It has two outputs to switch on/off two separate groups of electric loads.

Each of the outputs can be assigned various tasks depending on the application program used, i.e. the binary output N 562 consists of the device (hardware) and its application programs (software).

Appropriate application programs are available for the different tasks the binary output N 562 can handle; e.g. for direct on/off switching, time switch (non-delayed on, delayed off), delayed on/off switching or for controlling electrothermal actuators.

With the ETS (*EIB Tool Software*) the application program is selected, its parameters and addresses are assigned appropriately, and downloaded to the binary output N 562.

Application Programs

11 A2 Binary 520401

- 2 binary outputs
- 1 logic operation each
- on/off-delay mode
- timer function
- allows switching on bus voltage failure
- relay mode

11 A2 Binary 520501

- 2 binary outputs
- 1 positive drive each
- allows switching on bus voltage failure
- allows switching on bus voltage recurrence
- relay mode

11 A2 Thermo 520802

- 2 binary outputs for controlling electrothermal actuators and monitoring temperature sensors
- 3 window contacts each
- 1 alarm message each
- allows switching on bus voltage failure
- allows adjustment of electrothermal actuator characteristic

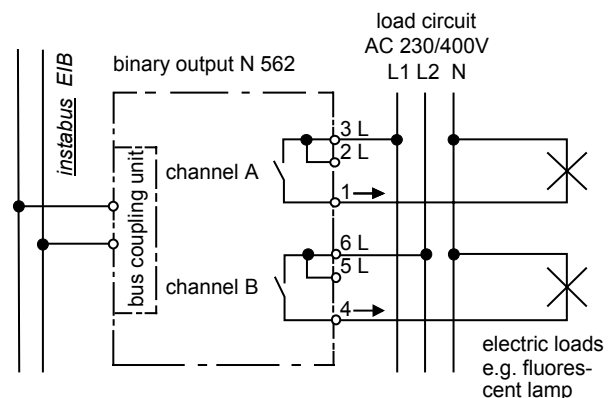
11 A2 Binary 520901

- 2 binary outputs
- allows state to be read via bus
- on/off-delay mode
- timer function
- allows switching on bus voltage failure
- allows switching on bus voltage recurrence
- relay mode

11 A2 Binary 520B01

- 2 binary outputs
- allows state to be read via bus
- 1 logic operation
- allows switching on bus voltage failure
- allows switching on bus voltage recurrence
- relay mode

Example of Operation



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Installation Instructions

- 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.
- A safety disconnection of the device must be possible. Especially if the device is connected to different phases.
- Free DIN rail areas with stucked-in data rails 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.

Technical Specifications

Power supply

via bus line

Outputs

- number: 2 outputs (volt free contacts)
- rated voltage: AC 230 V, 47 ... 63 Hz
- rated current: 10 A resistive load
- switching current at AC 230 V:
0,01 ... 10 A resistive load
- switching current at DC 24 V:
 - 10 A resistive load,
 - 4 A inductive load (L/R = 7 ms)
- switching characteristic: set in parameter list according to application program

Switching power at AC 230 V

- at incandescent lamp load: max. 1000 W
- at fluorescent lamp (FL) load:
 - uncorrected FL, $\cos \varphi = 0,5$: max. 500 W
 - parallel corrected FL, $\cos \varphi = 1$ (at $C_{tot} \leq 14 \mu\text{F}$):
2 x 58 W or 3 x 36 W or 6 x 18 W
 - twin-lamp circuit, $\cos \varphi = 1$: max. 1000 W
 - OSRAM ECG for 58 W FL: max. 10 units
 - OSRAM ECG for 36 W FL: max. 15 units
 - OSRAM ECG for 18 W FL: max. 20 units

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

- load circuit, physical:
 - strip insulation for 9 ... 10 mm
 - permissible conductor types/cross sections:
 - 0,5 ... 2,5 mm² single core or flexible conductor, 8 mm ultrasonically compacted
 - 0,5 ... 2,5 mm² flexible conductor with terminal pin, crimped on gas tight
 - 0,5 ... 1,5 mm² flexible conductor with connector sleeve
 - 1,0 and 1,5 mm² plain flexible conductor
- load circuit, electrical:
 - plain flexible conductor, min. 1 mm²:
current carrying capacity max. 6 A
 - all other conductors, min. 1,5 mm²:
current carrying capacity max. 10 A
 - the load circuits have to be saved by a circuit breaker with A or B characteristic with a maximum nominal current of 10 A!



WARNING

When looping through the L-conductor (connection blocks 3 and 2, 6 and 5), take care that the maximum connection current of 10 A (as governed by the maximum permissible printed conductor load) is not exceeded!

- bus line, pressure contacts on data rail

Physical specifications

- housing: plastic
- N-system DIN-rail mounted device, width: 2 SUs (1SU = 18mm)
- weight: approx. 160 g
- fire load: approx. 2350 kJ \pm 10 %
- installation: rapid mounting on DIN rail EN 60715-TH35-7,5

Electrical safety

- Degree of pollution (according to IEC 60664-1): 2
- protection (according to EN 60529): IP 20
- overvoltage class (according to IEC 60664-1): III
- bus: safety extra low voltage SELV DC 24 V

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- relay with μ -contact
- the device complies with EN 50090-2-2 and EN 60669-2-1

Reliability

rate of failure: 667 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

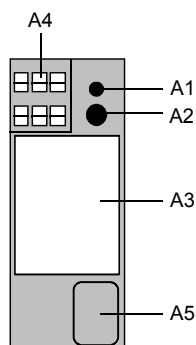


Figure 1: Location of the display and operator elements

- A1 LED for indicating normal operating mode (LED off) and addressing mode (LED on); 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 and for receiving the physical address.
- A3 Type plate
- A4 Screwless plug-in terminals for connecting load circuits
- A5 Label for noting the physical address

Mounting and Wiring

General description

The N-system DIN-rail device (2 SUs) can be installed to N-system distribution boards, or to any DIN-rail EN 60715-TH35-7,5 available that has a data rail stucked in.

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 until the slide clicks into place audibly.

Dismounting DIN-rail devices (Figure 2)

- Remove all connected wires,
- press down the slide (C3) with a screw-driver and
- swivel the device (C1) from the DIN-rail (C2).

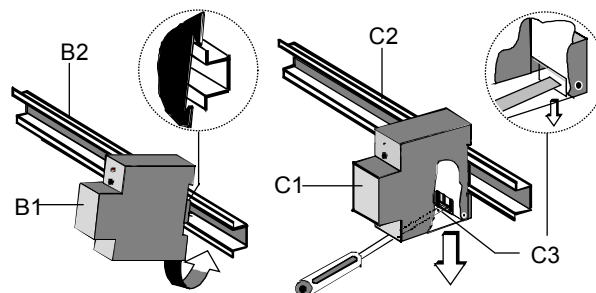


Figure 2: Mounting and dismounting a DIN-rail device

Connecting load circuits (Figure 3)

- The load circuits are connected via screwless plug-in terminals (D1).
- Remove approx. 9 to 10 mm of insulation from the wire (D1.1) and plug it into the terminal (D1).

Conductor cross sections:

- load circuit, physical:
 - strip insulation for 9 ... 10 mm
 - permissible conductor types/cross sections:
 - 0,5 ... 2,5 mm² single core or flexible conductor, 8 mm ultrasonically compacted
 - 0,5 ... 2,5 mm² flexible conductor with terminal pin, crimped on gas tight
 - 0,5 ... 1,5 mm² flexible conductor with connector sleeve
 - 1,0 and 1,5 mm² plain flexible conductor
- load circuit, electrical:
 - plain flexible conductor, min. 1 mm²: current carrying capacity max. 6 A
 - all other conductors, min. 1,5 mm²: current carrying capacity max. 10 A

Disconnect load circuits (Figure 3)

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

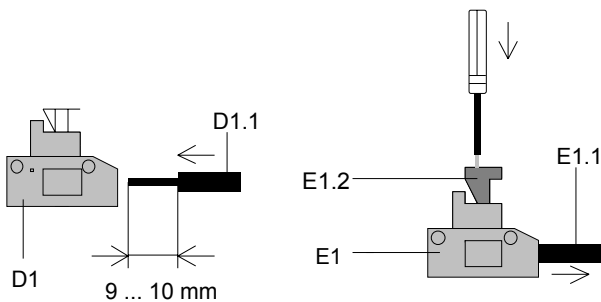
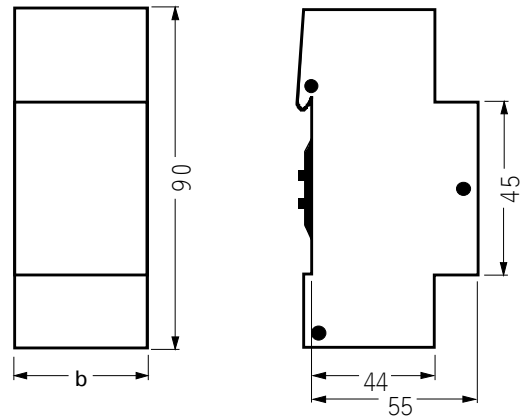


Figure 3: Connecting and disconnecting wires

Dimension Diagram

Dimensions in mm



1 Spacer Unit (SU) = 18 mm

b = 2 SU

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:

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