

**Elapsed Time and Switching Cycles Counter N 343**

**5WG1 343-1AB01**

**Product and Applications Description**



The N-system DIN-rail mounted device allows to count operating hours and switching cycles for up to 36 detector / actor channels with 1 bit switching objects.

Limits can be set for all account values in order to transmit an appropriate alarm on the *instabus EIB* in case of exceeding respectively falling below the set value.

The N 343 bugs the switching telegrams for all configured channels on the bus or itself repetitively interrogates channels configured for this. If a switched-on channel (or a detector after transmitting an switch-on telegram) has been recognised the appropriate operating hours value is updated and if the transition from ON to OFF has been finished the switching cycle number is increased.

All accounting and limit values can be recalled during operation or can be replaced by a user determined new value. The maximum lifetime of the operating hours meter amounts to 136 years, up to 4,3 billion switching cycles can be seized.

To set and evaluate the account- and limit values the Siemens visualisation equipped with an appropriate additional function is required.

With the ETS (*EIB Tool Software*) the application program is selected, its parameters and addresses are assigned appropriately, and downloaded to operating hours and switching cycles meter N 343.

**Application Programs**

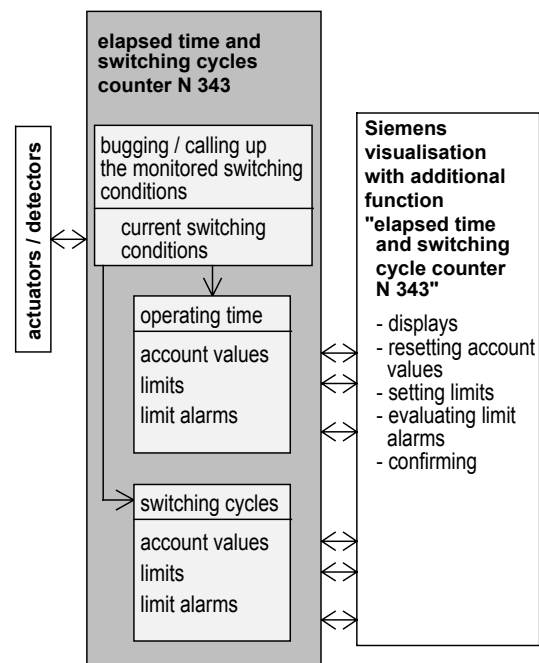
**07 CO Elapsed Time Counter 800B01**

- counts number of switching cycles (max. 4,3 billions) of max. 36 sensor/actuator channels
- allows operating time measurement of electric loads (136 years, resolution 1 second)
- allows monitoring limit values
- 36 separate channels available each providing 7 communication objects
- allows reading the individual switching condition via the bus
- allows evaluation and control by visualisation

**Example of Application**

**Note**

To set and evaluate the account- and limit values the Siemens visualisation equipped with an appropriate additional function is required.



## 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 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

### 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 50 090 and IEC 664-1: 1992

## Reliability

rate of failure: 522 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

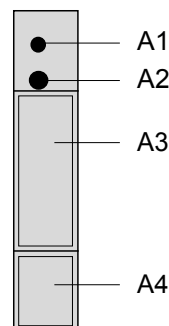


Figure 1: Location of the display and operator elements

- A1 LED1 for indicating normal operating mode (LED 1 off) and addressing mode (LED 1 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

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**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).

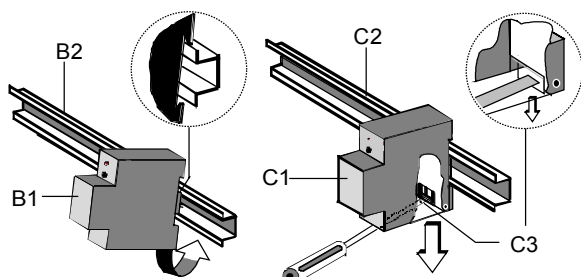
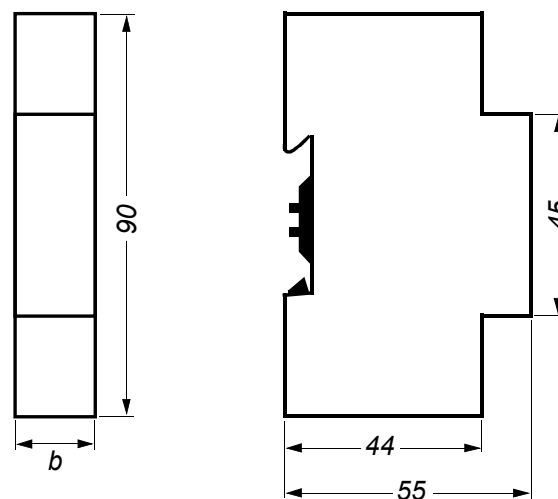


Figure 2: Mounting and dismounting a DIN-rail device

**Dimension Diagram**

Dimensions in mm



b = 1 SU

1 Spacer unit (1 SU) = 18 mm

*instabus EIB*

**Technical Product Information**

September 2001

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**Notes**