

Digital Time Switch

SEH62.1

Digital time switch used to switch plant on and off, or for the control of setback periods at night or at weekends.

- Integrated countdown timer
- Suitable for mounting on DIN rail
- Simple programming with large and easy - to-understand LCD
- Manual on/off control
- Quick Daylight Saving (DS) adjustment
- Backup of 72 hours

Functions

The microprocessor automatically stores the programmed times in chronological order.

The time switch operates in one of 4 modes:

- Manual continuously on
- Manual continuously off
- Adjustable count down timer on, or
- Automatic operation via the time program

A switch with momentary contact closure across M-D1 activates the countdown timer.

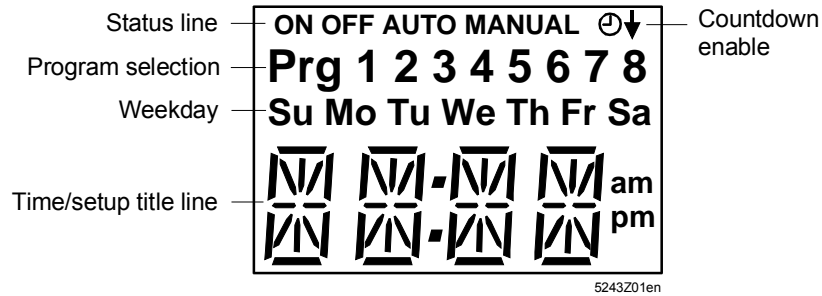
The power supply is buffered by a memory backup capacitor. In the event of a power failure, the time switch will continue to run, with the program retained, for 72 hours.

However, the relay will assume (or remain in) the normal position.

Programming

The SEH62.1 allows up to 8 programmed on/off periods. Each of these periods can be assigned to a single day or blocks of days as displayed on screen.

LCD



Operating buttons

The controller has 3 operating buttons for the following functions:

SEL ○

The SEL button is used to enter or save the settings. This button also acts as a manual on/off button.

+ ◡

The + / - buttons are used for selecting and adjusting parameters.

- ◢

The screen will default back to the main screen if no entry is made for 60 seconds while in setting mode.

For more detailed information about technical features and functions, please refer to the Installation Instructions CE2G5243X.

Engineering notes

Use

Use this time switch only for applications as described in the description on the title page (bold print) and the section "Function". Additionally, observe all conditions and restrictions imposed in this section and in "Technical data".



The sections marked with a warning symbol contain technical safety requirements and restrictions. Observe all of these warnings as they relate directly to the protection of personnel and equipment.

Installation notes

Mounting

Although the microprocessor is protected, unusually strong electromagnetic fields could cause interference.

To avoid interference:

- The device should not be installed close to inductive components
- Inductive components must be fitted with interference suppressors (varistor / RC unit)
- 2 mounting holes are provided for surface-mounting

Environment

- The connection terminals must be freely accessible
- Ensure adequate air circulation to dissipate the heat generated during operation

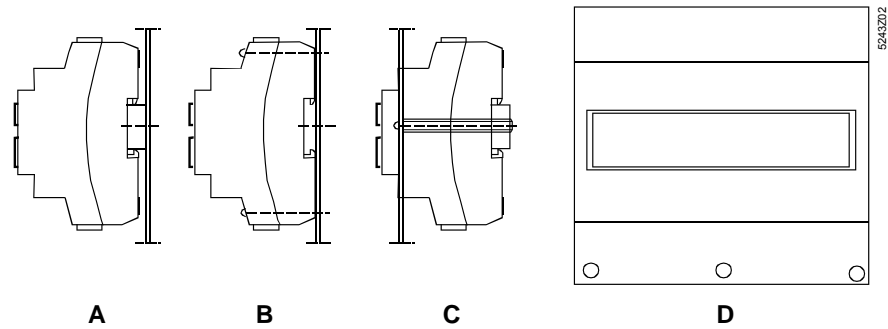
The SEH62.1 can be mounted as follows:

Observe all local installation and mounting regulations.

- A On a DIN rail (EN 50 022-35 x 7.5) of least 60 mm length
- B Wall mounted with 2 screws
- C Front mounted using standard elements.
E.g. 1 x DIN rail 100 mm long 2 x hexagonal spacers 50 mm, washers and screws
- D In an ARG62.22 protective housing together with other devices



The SEH62.1 is for indoor use and must have all terminals well protected by a plastic cover or in a panel/enclosure.



Electrical installation



The SEH62.1 is designed for AC 230 V supply voltage.

There must be a minimum of 8 mm clearance between the terminals and the panel/enclosures in order to avoid electric shock. Under no circumstances should the front cover of the time switch be removed.

All local safety regulations must be observed.



Warning!

No internal line protection for supply lines to external consumers.

Risk of fire and injury due to short-circuits!

- Adapt the line diameters as per local regulations to the rated value of the installed overcurrent protection device.
- The AC 230 V mains supply line must have an external circuit breaker with a rated current of no more than 10 A.

Disposal



The device is considered an electronic device for disposal in terms of the European Directive 2012/19/EU and may not be disposed of as domestic garbage.

- Dispose of the device through channels provided for this purpose.
- Comply with all local and currently applicable laws and regulations.

Technical data

General data

 Power supply

Operating voltage	AC 230 V –15...+15 %
Frequency	50/60 Hz
Power consumption	3.0 VA



No internal fuse

External preliminary protection with max. C 10 A circuit breaker in the supply line required under all circumstances.

Environmental conditions

Operation	to IEC 60721-3-3
Climatic conditions	class 3 K5
Temperature	0...+50 °C
Humidity	<95 % r.h.

Transport	to IEC 60721-3-2
Climatic conditions	class 2 K3
Temperature	–25...+70 °C
Humidity	<95 % r.h.
Mechanical conditions	class 2M2

Storage	to IEC 60721-3-1
Climatic conditions	class 1K3
Temperature	–25...+70 °C
Humidity	<95 % r.h.

Norms and standards

EU Conformity (CE)	CE2T5243xx ^{*)}
RCM conformity	CE2T5243en_C1 ^{*)}
Devices of safety class	II to EN 60 730-1
Degree of protection of housing	IP 20 to EN 60 529
Color of housing	top light gray (RAL7035) bottom silver-gray (RAL 7001)

Environmental compatibility

The product environmental declaration CE1E5243^{*)} contains data on environmentally compatible product design and assessments (RoHS compliance, materials composition, packaging, environmental benefit, disposal).

Terminals

Screw terminals for cables with	min. 0.5 mm dia. max. 2 x 1.5 mm ² or 2.5 mm ²
---------------------------------	---

Functional data

Time clock

Time basis	quartz
Memory locations	8 for 7-day clock, with grouping into 13 different blocks of days for 24-hour clock
Minimum switching interval	1 min
Power reserve	nominal 72 hours after 24 hours of operation
Accuracy	± 1 s / day at 20 °C
Display	40 mm LCD

Digital input D1

Polling voltage for control commands (D...M)	DC 24 V
Current draw	8 mA

Required input momentary contact closure

Signal output Q

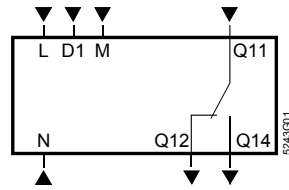
Relay contacts (potentialfree)	
Voltage	AC 24...250 V, DC 24 V
Contact rating	max. 6 A resistive max. 3 A inductive min. admissible load: 100 mA at DC 5 V

Weight

Weight including packaging	0.3 kg
----------------------------	--------

^{*)} The documents can be downloaded from <http://siemens.com/bt/download>.

Internal diagram



- L, N Input AC 230 V
M, D1 Digital input (momentary contact closure)
Q... Digital output, various voltages permissible (see Technical data, Signal output Q)

Dimensions

