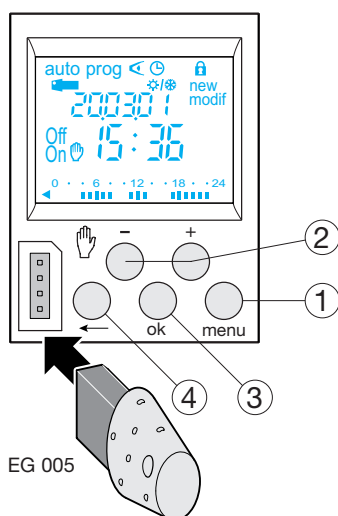


EG 103, EG 103B

1 channel electronic time switch weekly cycle

Major characteristics

- Product delivered with current time and date set.
- Automatic change of winter / summer time $\star/\oplus$.
- Programming key key .
 - for permanent waivers,
 - for program copy or save.
- Programming for day or group of days.
- 56 program steps On, Off.
- Permanent overrides On or Off (⓪ permanent light on).
- Temporary overrides On or Off (⓪ flashing).
- Display bar graph of daily profile.
- Keyboard locking possible key .
- Programmable with power off.



Keys:

- ① **menu** : selection of operating mode
auto : mode of running according to the program selected.
prog : **new** for programming mode.
prog : **modif** to modify an existing program.
 key : checking of the program.
 key : modification of time, date and selection of the winter / summer time change mode $\star/\oplus$.

- ② **+ and -** : navigation or setting of values.
 key : in **auto**, mode, selection of overrides, or waivers.

- ③ **ok** : to validate flashing information on display.

- ④ key : to return to the previous step.

You may return into **auto** mode at any moment using **menu**.

If no action is taken for 1 min, the switch returns into **auto** mode.

Reset:

- **Program reset:**
 the program may be completely cleared by simultaneously pressing the 3 following keys: **menu**, **ok**, key . The time and the date will be kept.
- **Total:**
 pressing simultaneously the **-**, **+**, **ok**, **menu**, keys lets you clear the entire contents of the product.
 Following a total reset it is necessary to reset the time and day of the device.

Technical specifications

Electrical characteristics

- Supply voltage: 230 V AC $\pm 15\%$
- Frequency: 50/60 Hz
- Power consumption : max. 0,5 VA à 50 Hz
- Output: 1 changeover volt free contacts
- Maximum load:
 - AC1 $\mu 16A$ 250 V~
 - DC1 $\mu 4A$ 12 V DC
 - Cos $\phi = 0,6$ $\mu 10A$ 250 V~
 - Incandescent lighting 2300 W
 - Halogen lighting 230 V 2300 W
 - Compensated fluorescent tubes // (max. 45 μF) 400 W
 - Non compensated fluorescent tubes, compensated in series 1000 W
 - Compact fluorescent lamps 500 W
- Minimum current.
 - AC1 100 mA 250 V~
 - DC1 100 mA 12 V DC
- Galvanic insulation between power supply and output = 4 kV

Functional characteristics

- Programming capacity: 56 pas
- Minimum time between 2 steps: 1 minute
- Running accuracy: $\pm 1,5$ sec / 24h
- Operating reserve: lithium battery provides 5 years of backup.
- The product is set into standby state (display switched-off) after 1 minute with power off.
 It switches back into **auto** mode as soon as power is back or when pressing any key.
- Protection degree: IP 20

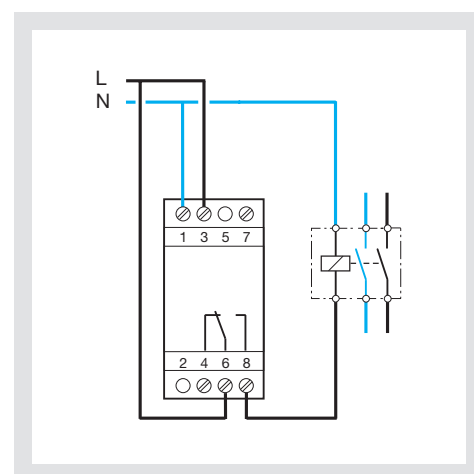
Environment

- Operating temperature: -5°C to $+45^\circ\text{C}$
- Storage temperature: -20°C to $+70^\circ\text{C}$

Connection

- Flexible capacity: 1 to 6 mm²
- Rigid capacity: 1,5 to 10 mm²

Connection diagram:



Programming: prog new

Programming may be done for each day or for a group of days. In this case instructions are common to several days.
Days: 1 = Monday, 2 = Tuesday, 3 = Wednesday...
7 = Sunday.



1. Select the **prog** mode using **menu**, then **ok**.
2. Select the day(s) using **+ ou -**. Validate with **ok**.
3. **ok** flashes. Use **ok** to validate the group.
4. Using **+ or -**, select the state of the instruction: On, Off.
5. Enter the time of switch-on using **+ or -**. Validate with **ok**.
6. Enter minutes with **+ ou -**. Validate with **ok**.

Program the other instructions of the group of days by repeating operations 3 to 7.

The day or the group of days may be modified at the during step 3 by pressing the **+ - ou ←**.

At the end of programming return to **auto** mode using the **menu** button.

In this mode it is also possible to add an instruction to the program set up.

Proceed as described above.

Display

To check the daily profile set up without the risk of modification or deletion:

Select the mode **←** using **menu** and press **ok**. The first step of Monday is displayed as well as the daily profile.

Two options available for display:

1. Pressing repeatedly **+ ou -**: lets you shift days. In this case only the first daily step is displayed as well as the daily profile.
2. Pressing **ok**: all steps of each day appear one after the other.

Modification or clearing of a program step: prog modif

Select the **prog** mode with **menu** and press **ok**. Select the **modif** mode with **+ or -**. Validate with **ok**.

The number of remaining program steps appears for a short time.

The first step of the first day or group of days appears. Repeatedly pressing the **ok** key displays all programmed steps one at a time.

Any flashing field (state, hour, minutes) may be modified using **+ ou -**, then validated with **ok**.

When the cursor is positioned on **ok** located behind the group of days, you may display successively the days or the groups of days and switch directly to the one that has to be modified using **+ or -**.

To remove a program step:

select the state of the channel (One, Off or **⏏**), press simultaneously **+ and -**.

Clear appears on the screen. Validate with **ok**.

Key

As soon as the key appears on the switch **⏏** appear on the screen.

Two types of operation:

A. Permanent override:

Insert the key into the switch.

After 10 seconds the program contained in the key will be executed without clearing the program contained in the time switch.

As soon as the key is removed the program of the time switch is again valid.

B. Copy (load) / Save (save):

The key makes it possible to save a program contained in the time switch.

It is also possible to copy the contents of the key into the clock.

1. Insert the key and wait for 2 sec.
2. Using menu select the mode:
save to save a program contained in the time switch,
load to load the program of the key into the time switch,
← to check the program contained in the key.
3. Validate the selection with **ok**.
4. For **save** and **load** reconfirm with **ok**.

The following error messages may appear on the screen:

no prog: the key is empty, it does not contain any program.

Error: the key is that of a one-channel switch.

In these two cases:

- Only the save **save** is possible.
- The error message remains on display as long as the key is present, but in this case the program of the time switch is executed.

Setting time and day

Winter / summer time change

Select the mode **⌚** with **menu** then **ok**.

Modify the day, month, year, the hour and the minutes using **+ or -** and **ok**.

The time switch next suggests the winter / summer time changes **⌚/⌚**.

Select the type of change desired using **+ or -**. Validate with **ok**.

The type of change depends on the geographical zone.

Types available:

Type	Start of time change Summer	Start of time change Winter	Zone of application
Euro *	Last Sunday of March	Last Sunday of October	European Union
USA	First Sunday of April	Last Sunday of October	North America
GB	Last Sunday of March	Fourth Sunday of October	Only for the United Kingdom
USER	Date freely programmed	Date freely programmed	
No	No change	No change	

* type according defect

The change always takes place between 2:00 and 3:00 a.m.

When the USER type is selected:

1. Enter the day then the month of the date of change of the summer time (+ 1hour) with **+ or -** and **ok**.
2. Enter the day then the month of the date of change of the winter time (- 1hour) with **+ or -** and **ok**.

The time switch will check which days of which weeks correspond to these dates and will apply changes to the same periods for the following years independently of the date.

Override

Pressing repeatedly **⏏ -**.

If the state of the output is **On**:

1st pressure: temporary waiver. **Off** and **⏏** flash. The next program step will let you return to the automatic mode.

2nd pressure: permanent override. **On** and **⏏** are permanent. This override must be cancelled manually.

3rd pressure: permanent override. **Off** and **⏏** are permanent. This override must be cancelled manually.

4th pressure: return to the automatic mode.

Locking

To prevent all undesirable actions, the keyboard of the time switch may be locked using a key EG 004.

Unlocking is done in the same way.

Waranty



A warranty period of 24 months is offered on hager products, from date of manufacture, relating to any material or manufacturing defect. If any product is found to be defective it must be returned via the installer and supplier (wholesaler).

The warranty is withdrawn if:

- after inspection by hager quality control dept the device is found to have been installed in a manner which is contrary to IEE wiring regulations and accepted practice within the industry at the time of installation.
- the procedure for the return of goods has not been followed.

Explanation of defect must be included when returning goods.