INTERMATIC®

EN Operating manual

eco CI7 and CG7

This manual ensures safe and efficient use of the “eco CI7” and “eco CG7” timers (referred to as “device” in the following). This manual is a component of the devices and must remain accessible at all times for everyone who uses the devices.

Everyone who uses the devices must have read and understood this manual before commencing any work. The basic prerequisite for working safely is compliance with all safety instructions and usage instructions specified in this manual. Furthermore, the local accident prevention regulations and the general safety regulations in the area in which the devices are operated apply.

Illustrations in this manual are intended to provide a general understanding and may differ from the actual design.

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Declaration of conformity and download instructions

The declaration of conformity for the devices described in this manual, a download of the manual, and the technical data can be found at *www.intermatic.com*.

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Overview

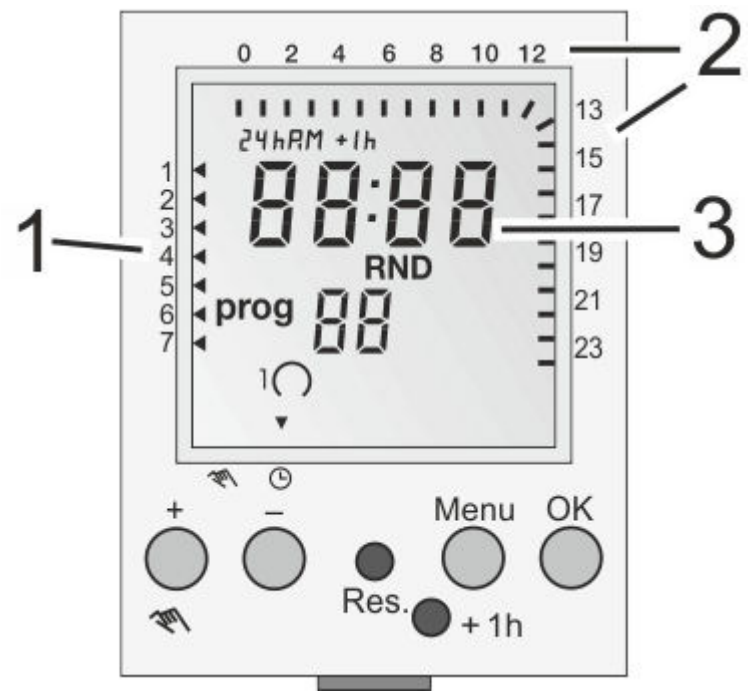

Fig. 1: Insert

1 Display of day blocks/days
2 Display of on/off times
3 Display of the current time

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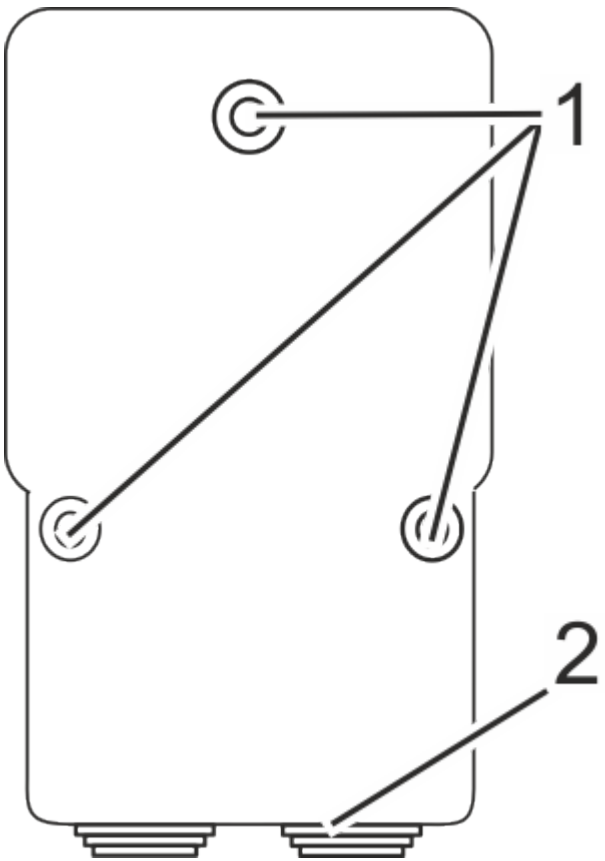

Fig. 2: Rear view of “eco CI7”

1 Mounting holes
2 Flexible union fittings for cable feed-through

Display	Function
24hAM	Set the time format (24 h or 12 h)
+1h	Set summer or winter time
	On/off time memory space
	Switch between automatic mode, permanently on, permanently off
	Automatic mode
Prog.	Switching programme is displayed
▼	Lights up in automatic mode via  and when permanently ON via 

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Button	Function
+	Press briefly to increase value by 1 Press and hold to increase value by 5
	**Only in operating mode:** Switch between automatic mode, permanently on, permanently off
–	Press briefly to reduce value by 1 Press and hold to reduce value by 5
Menu	Start/exit programming mode; return to automatic mode
OK	Confirm programming

Button	Function
Res.	Reset device to factory settings
+1 h	Switch between summer and winter time

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Description of function

The “eco CI7” and “eco CG7” timers are digital single-channel synchronous timers that switch connected loads on and off at defined times. The times are either set by means of a predefined switching programme or in an individually defined switching pro-gramme. There are 20 memory spaces available for all switching programmes, both predefined or individual; 10 of these are switch-on times and 10 are switch-off times.

On delivery, three profiles – P01, P02 and P03 – are predefined on the device, each with different switching times. The times of these profiles can be copied, adjusted and/or amended. All three profiles apply to all seven days of the week. The following profiles are predefined:

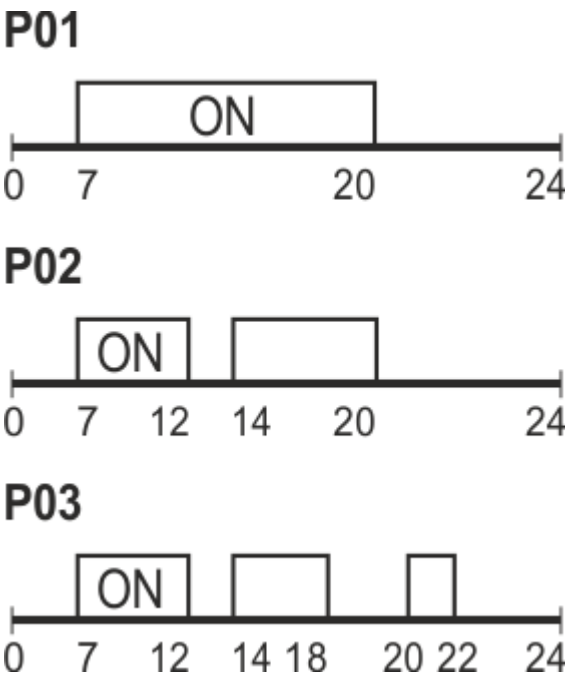

Fig. 3: Predefined profiles P01, P02, P03

P01 07:00 – 20:00 (Mon – Sun)
P02 07:00 – 12:00 and 14:00 – 20:00 (Mon – Sun)
P03 07:00 – 12:00, 14:00 – 18:00 and 20:00 – 22:00 (Mon – Sun)

In addition, you can use the P-- individually programmable switching programme. Here, you define all the times individually.

Each changed or individual time is assigned to the seven days of the week in the form of day blocks or individual days:

Day blocks or days

	Mon – Sun	Mon – Sat	Mon – Fri	Sat – Sun	Indiv. days
Mon 1	◀	◀	◀		◀
Tue 2	◀	◀	◀		◀
Wed 3	◀	◀	◀		◀
Thu 4	◀	◀	◀		◀
Fri 5	◀	◀	◀		◀

	Mon – Sun	Mon – Sat	Mon – Fri	Sat – Sun	Indiv. days
Sat 6	◀	◀		◀	◀
Sun 7	◀			◀	◀

Contents

The following components are included in the contents:

Number	Designation
1	“eco CI7” or “eco CG7”
4	Screws

Number	Designation
2	Strain relief clamps
4	Wire end sleeves

Safety

Intended use

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The device is used exclusively for switching connected loads e.g. heating systems, pumps, motors and machines with a resistance load of up to 16 A. The connected devices must comply with the limits specified in the technical data.

The “eco CI7” and “eco CG7” timers may only be used in private and commercial areas at ambient temperatures from -10 °C to +55 °C.

The intended use also includes compliance with all information specified in this manual. Any use other than the intended use is considered incorrect use.

Residual risks

WARNING!

Danger to life due to electric shock!

Improper assembly and installation of the device may result in life-threatening electrical voltages.

– Have assembly and connection performed by a qualified electrician only.

WARNING!

Danger due to insufficient wire cross-section!

If wires with an insufficiently large cross-section are used, short circuits or fires may occur.

– Only use terminals with a cross-section between 0.5 mm² and 2.5 mm² for flexible wires.

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Installation

The “eco CI7” is mounted on the wall. The “eco CG7” is installed on a mounting socket (BS 4662 or BS 5733).

In general, the following instructions apply to both models. Where there are differences, the corresponding model number is specified before the instructions.

NOTICE!

Danger of material damage to wires in the wall!

Selecting the wrong installation position can result in material damage to any wires in the wall.

– Make sure that there are no wires in the wall at the installation position.

Personnel:

- Qualified electrician

Special tool:

- Power drill

- Drill
- Phillips screwdriver
- Crimping pliers for wire end sleeves
- Cutting tool

Materials:

- Wire end sleeves (4 pieces)
- Strain relief clamps (2 pieces)
- Screws (2 pieces)

Installing the housing base

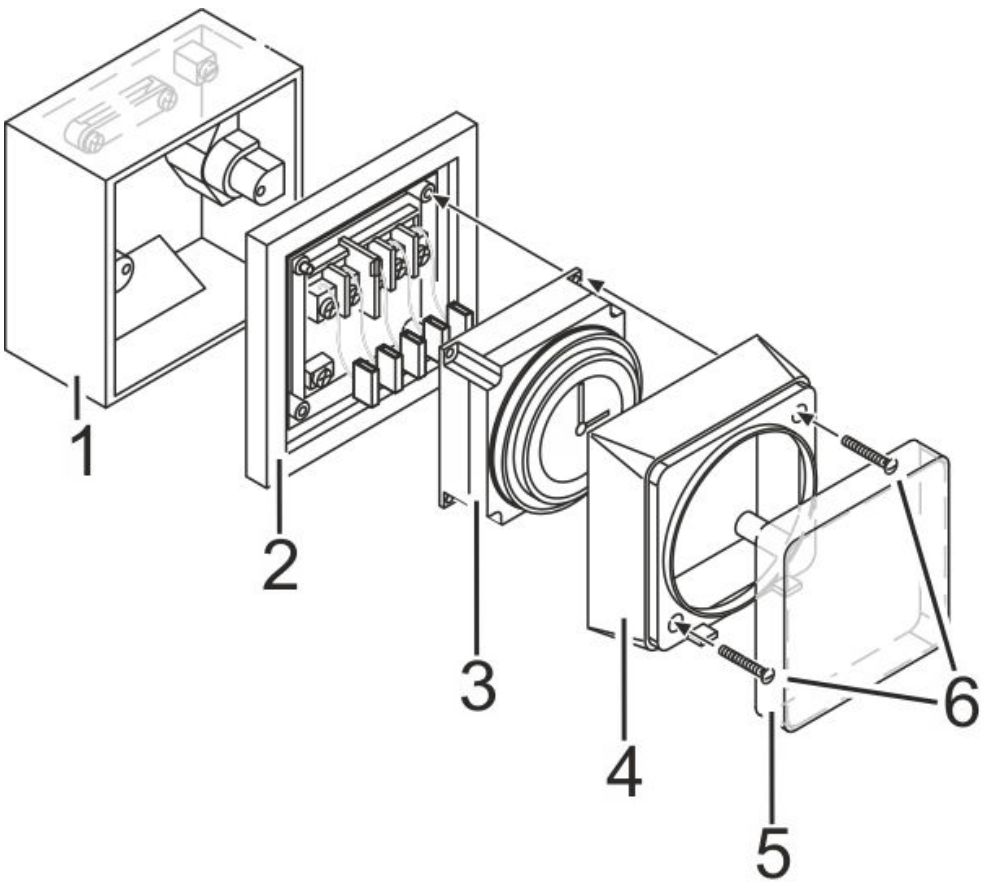

Fig. 4: Installing eco CG7 on a mounting socket (Fig. 4/1)

1	Mounting socket (BS4662 or BS5733)	3	Dial
		4	Housing cover
		5	Plastic cover
2	Housing base	6	Screws

1. For “eco CI7”: Remove the plastic cover.
2. For “eco CG7”: Remove the plastic cover (Fig. 4/5).
3. For “eco CI7”: Undo the screws on the housing cover.
4. For “eco CG7”: Undo the screws (Fig. 4/6) on the housing cover (Fig. 4/4) using a Phillips screwdriver.
5. For “eco CI7”: Remove the housing cover.

6.

The dial is connected to the housing base by blue connection wires.

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NOTICE!

Danger of material damage!

When the dial is lifted up, the connection wires may be damaged.

– Lift up the dial carefully.
– Do not remove the dial from the housing base.

For “eco CG7”: Remove the housing cover (Fig. 4/4) and the dial together with the con-nected housing base (Fig. 4/3).

7. For “eco CI7”: Fasten the housing base to the wall.
8. For “eco CG7”: Install the housing base (Fig. 4/2) on the mounting socket (Fig. 4/1).

Preparing the electrical connection

9. Strip the insulation from the connection wire.
    - Stripping length: 8 mm
10. Insert the wire end sleeves onto the connection wires.

11. Crimp the wire end sleeves using the crimping pliers.

Electric connections

To ensure that the wiring is correct, consult the operating manual for the heating system in use.

The devices have protection class 1, so earthing is essential. Connect the earth correctly.

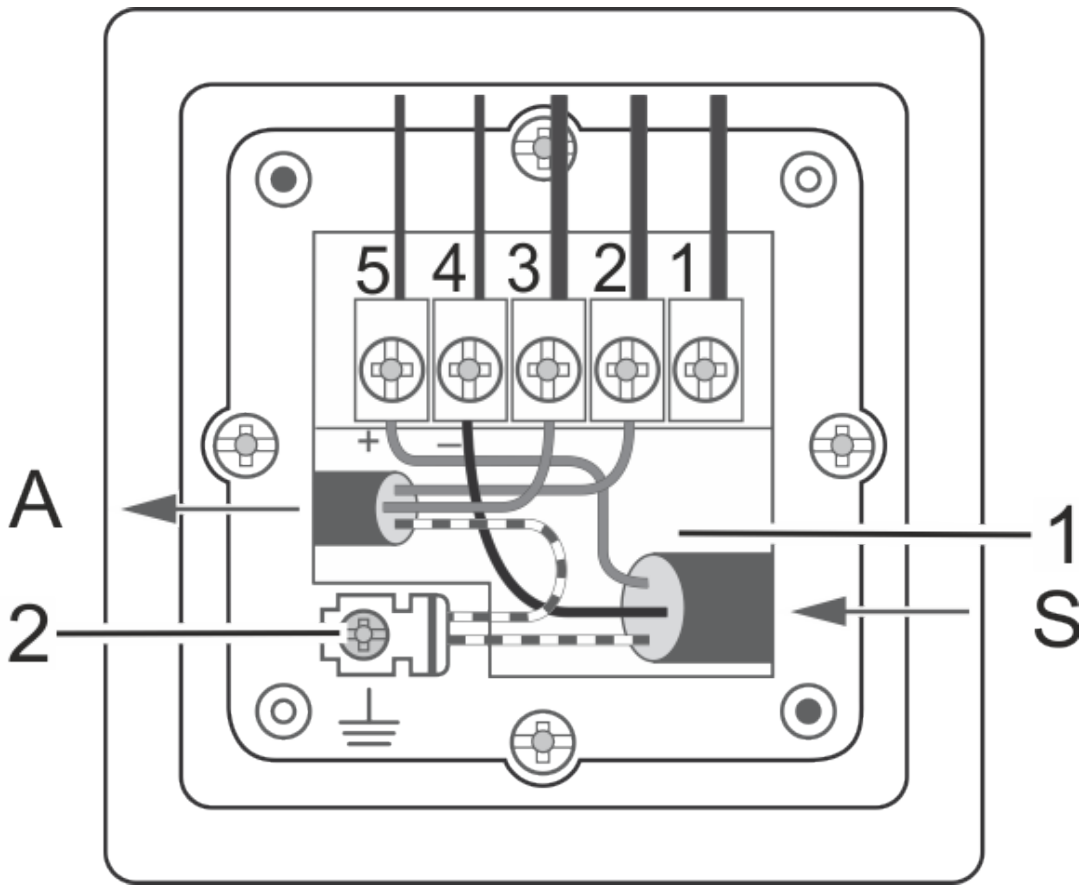

Fig. 5: Housing base CG7

12. Insert the earth connection wire into the earth contact (Fig. 5/2).

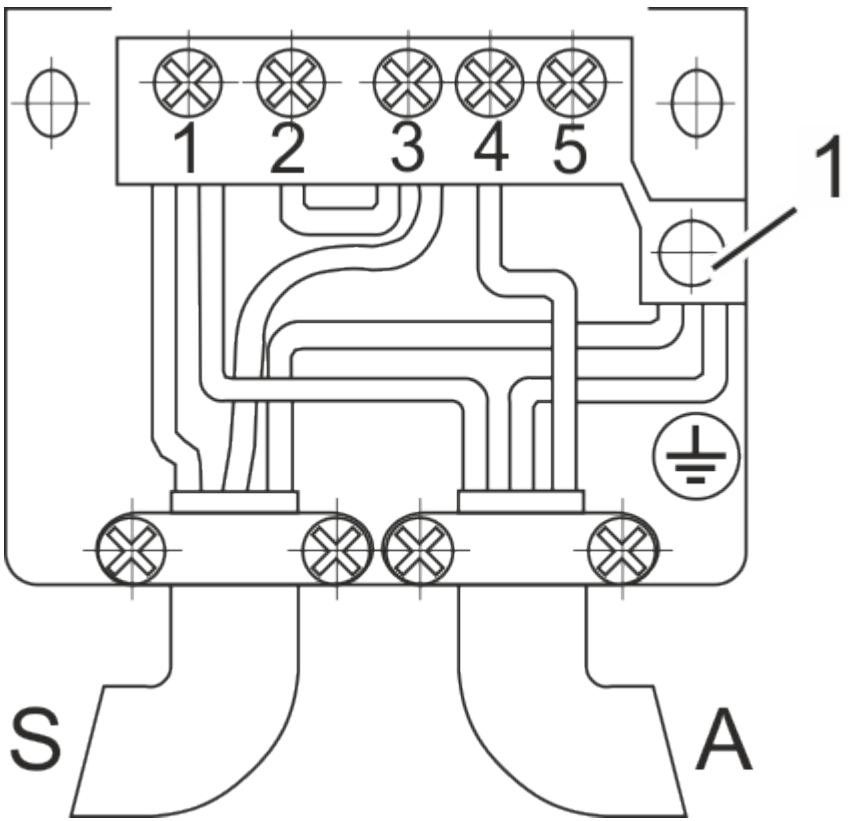

Fig. 6: Housing base CI7

13. Insert the earth connection wire into the earth contact (Fig. 6/1).

14. For “eco CG7”: Thread the connection wires into the device through the cable feed-through (Fig. 5/1).

Mains connection CG7

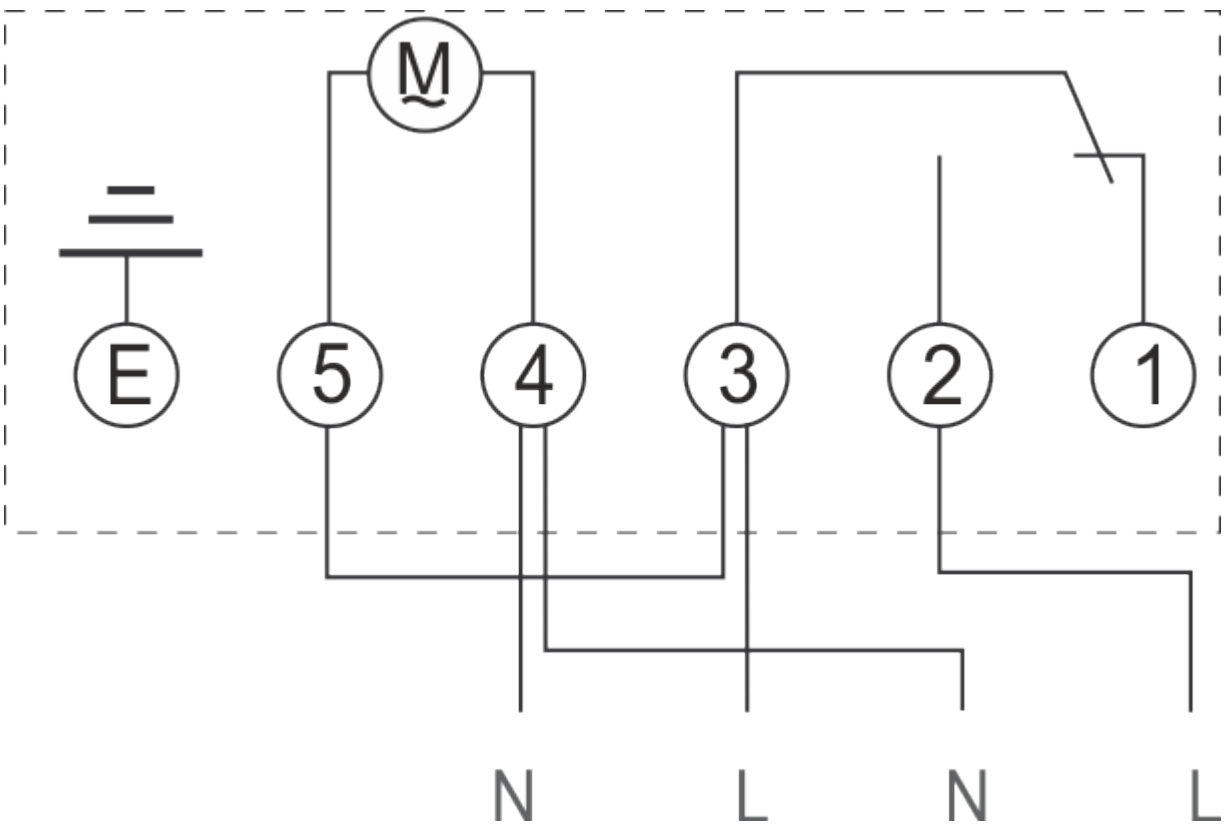

Fig. 7: Mains connection CG7

15. For mains connection CG7: Insert the connection wires into the corresponding terminals in accordance with the relevant wiring diagram (Fig. 7) (N = neutral conductor; L = live conductor) (Fig. 7).

Voltage-free connection CG7

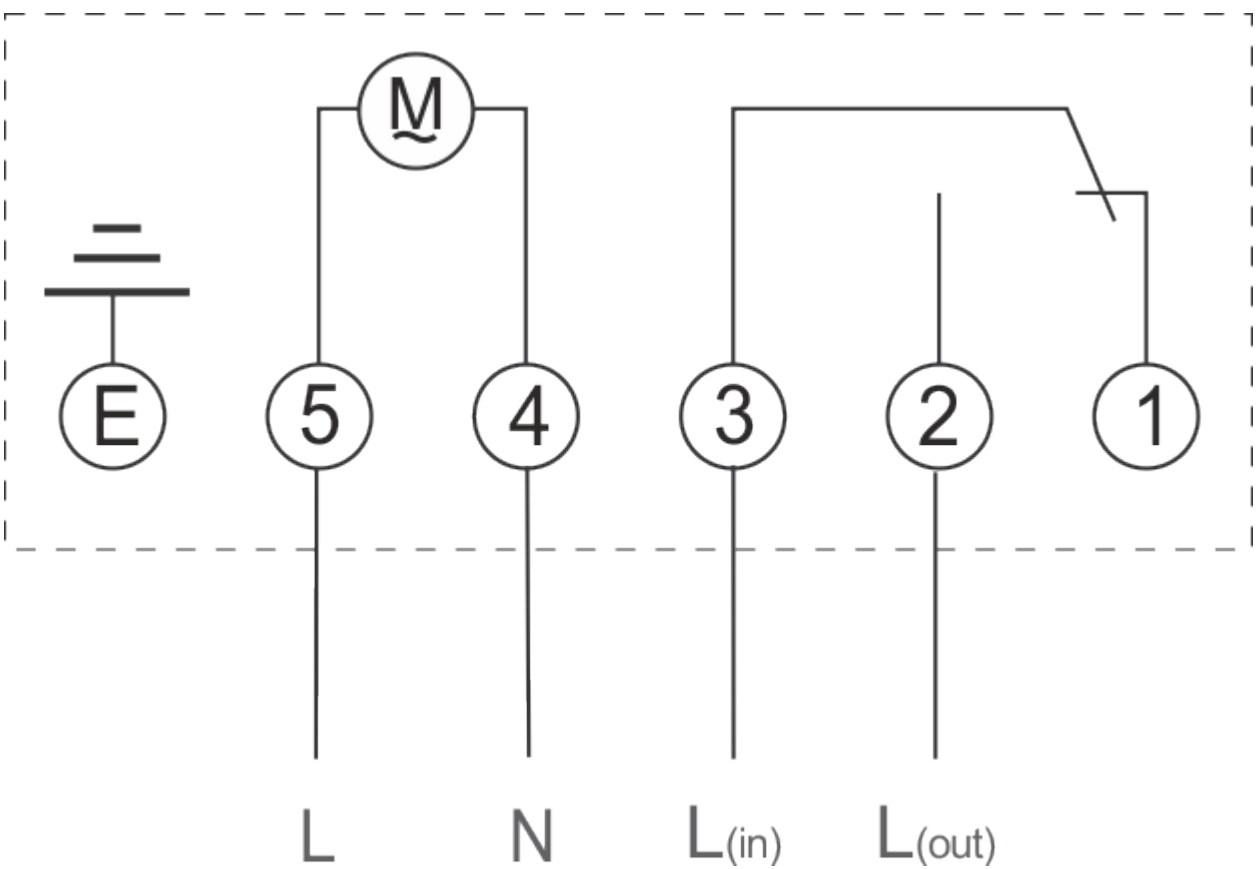

Fig. 8: Voltage-free connection CG7

16. For voltage-free connection CG7: Insert the connection wires into the corresponding terminals in accordance with the relevant wiring diagram (Fig. 8) (N = neutral conductor; L = live conductor) (Fig. 8).

Mains connection CI7

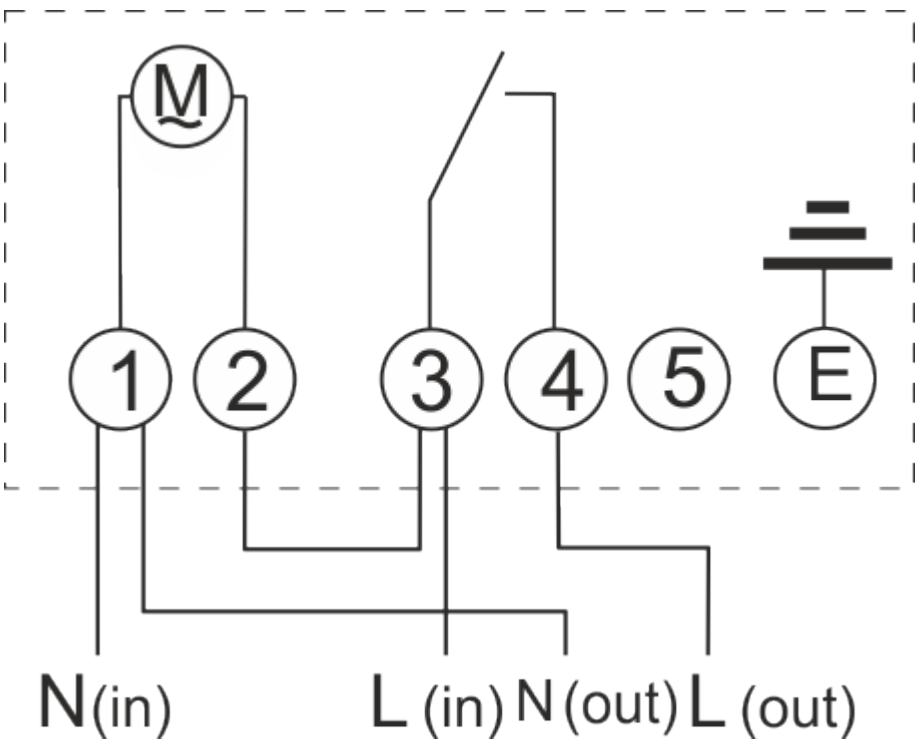

Fig. 9: Mains connection CI7

17. For mains connection CI7: Insert the connection wires into the corresponding terminals in accordance with the relevant wiring diagram (Fig. 9) (N = neutral conductor; L = live conductor) (Fig. 9).

Voltage-free connection CI7

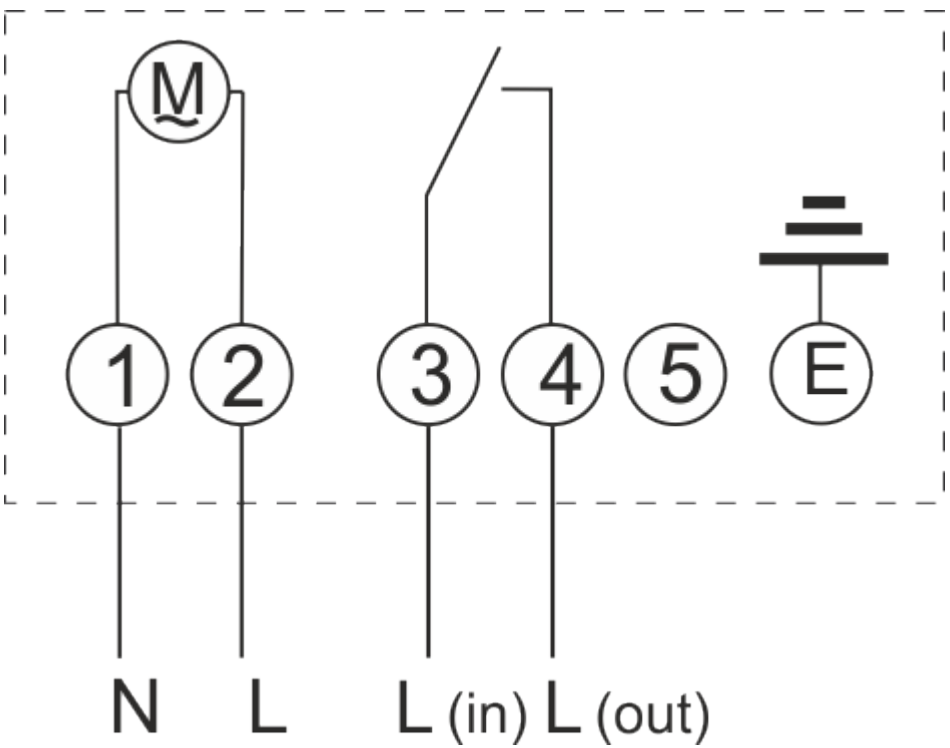

Fig. 10: Voltage-free connection CI7

18. For voltage-free connection CI7: Insert the connection wires into the corresponding terminals in accordance with the relevant wiring diagram (Fig. 10) (N = neutral conductor; L = live conductor) (Fig. 10).

19. NOTICE!

Tightening torques

To avoid damage and faulty contacts, tighten the terminals using a torque of **0.75 Nm**.

Tighten all terminals using a Phillips screwdriver.

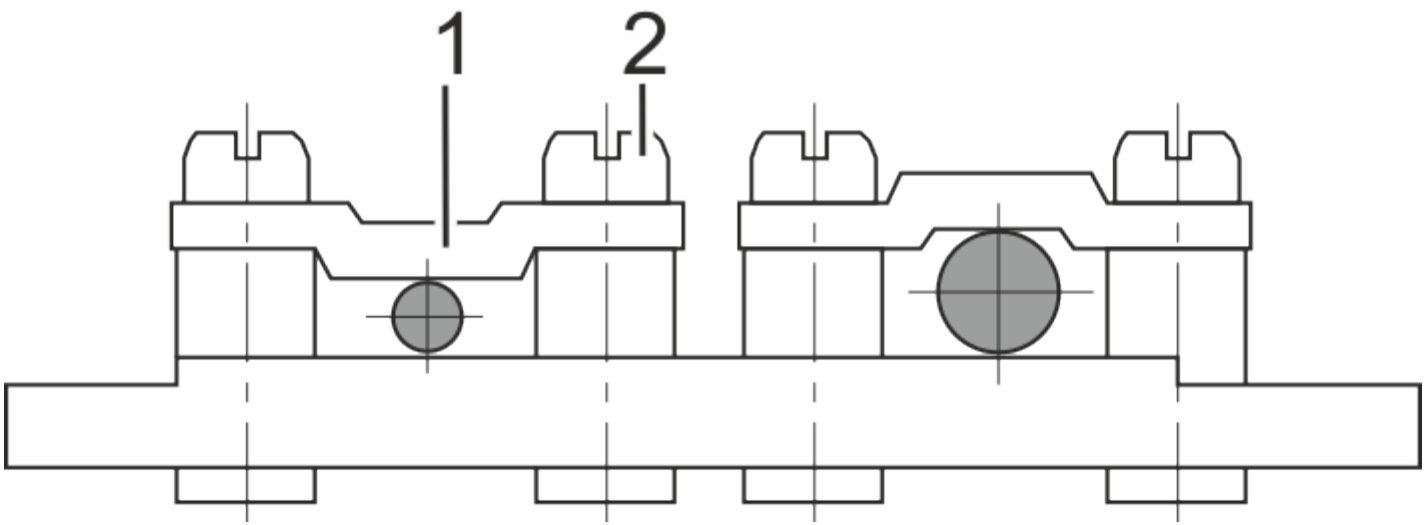

Fig. 11: Installing the strain relief clamps

20. For “eco CI7”: Screw on the strain relief clamps (Fig. 11/1) using the screws provided (Fig. 11/2).

21.

The housing has two flexible union fittings for the cable feed-through, each with three different possible sizes for different diameters of connection wire.

For “eco CI7”: Use a cutting tool to cut the flexible union fittings to the correct size for the connection wires.

Closing the housing

NOTICE!

Danger of material damage to the wires!

When closing the housing, there is a risk of pinching wires. This results in material damage to the wires and faulty contacts.

– Make sure that the wires are not pinched when the you close the housing.

22. For “eco CI7”: Screw the housing cover onto the housing base using a Phillips screwdriver.

23. For “eco CG7”: Screw the dial (Fig. 4/3) and housing cover (Fig. 4/4) onto the housing base (Fig. 4/2) using a flat-head screwdriver.
24. For “eco CI7”: Replace the plastic cover.
25. For “eco CG7”: Replace the plastic cover (Fig. 4/5).

Configuration

Menu structure

EN

Initial installation (reset)	Read/setting (menu)
⇩	⇩
24 h flashes. Press *[+/–]* to set the time format (24 h or AM), then confirm with *[OK]*.	
⇩	⇩

Initial installation (reset)	Read/setting (menu)
The hour flashes. Press *[+/–]* to set the hours, then confirm with *[OK]*.	
⇩	⇩
The minute flashes. Press *[+/–]* to set the minutes, then confirm with *[OK]*.	
⇩	⇩
Monday (1) flashes. Press *[+/–]* to set the day, then confirm with *[OK]*.	

Initial installation (reset)	Read/setting (menu)
⇩	⇩
Setting the programme: P01, P02, P03, P-- Press *[+/–]* to set the on/off times, then confirm with *[OK]* or end programming with *[Menu]*.	⇩
⇩	⇩

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Initial installation (reset)	Read/setting (menu)
Setting the switching times:	Setting the switching times:
First free memory space flashes.	First free memory space flashes.
Press *[-]* to go back one memory space or press *[OK]* to confirm the setting.	Press *[OK]* to confirm the settings.
⇩	⇩

Initial installation (reset)	Read/setting (menu)

EN

Setting the switch-on time:

The hour flashes.

Press *[+/–]* to set the hours, then confirm with *[OK]*.

⇩ ⇩

Setting the switch-on time:

The minute flashes.

Press *[+/–]* to set the minutes, then confirm with *[OK]*.

⇩ ⇩

Initial installation (reset)	Read/setting (menu)

Setting the switch-on time:

Days flash.

Press *[+/–]* to set the day (Mon 1 to Sun 7), then confirm with *[OK]*.

⇩ ⇩

Setting the switch-off time:

The hour flashes.

Press *[+/–]* to set the hours, then confirm with *[OK]*.

⇩ ⇩

Initial installation (reset)	Read/setting (menu)

EN

Setting the switch-off time:

The minute flashes.

Press *[+/–]* to set the minutes, then confirm with *[OK]* and press *[Menu]* to end programming.

⇩ ⇩

A maximum of 20 memory spaces can be assigned: 10 switch-on times and 10 switch-off times

⇩

Menu

Initial installation (reset)	Read/setting (menu)

⇩

Operation

Setting the time and date

For the device to use the defined switching times correctly and to control the connected loads at the correct time of day, the time and date have to be set before operation.

Selecting the time format

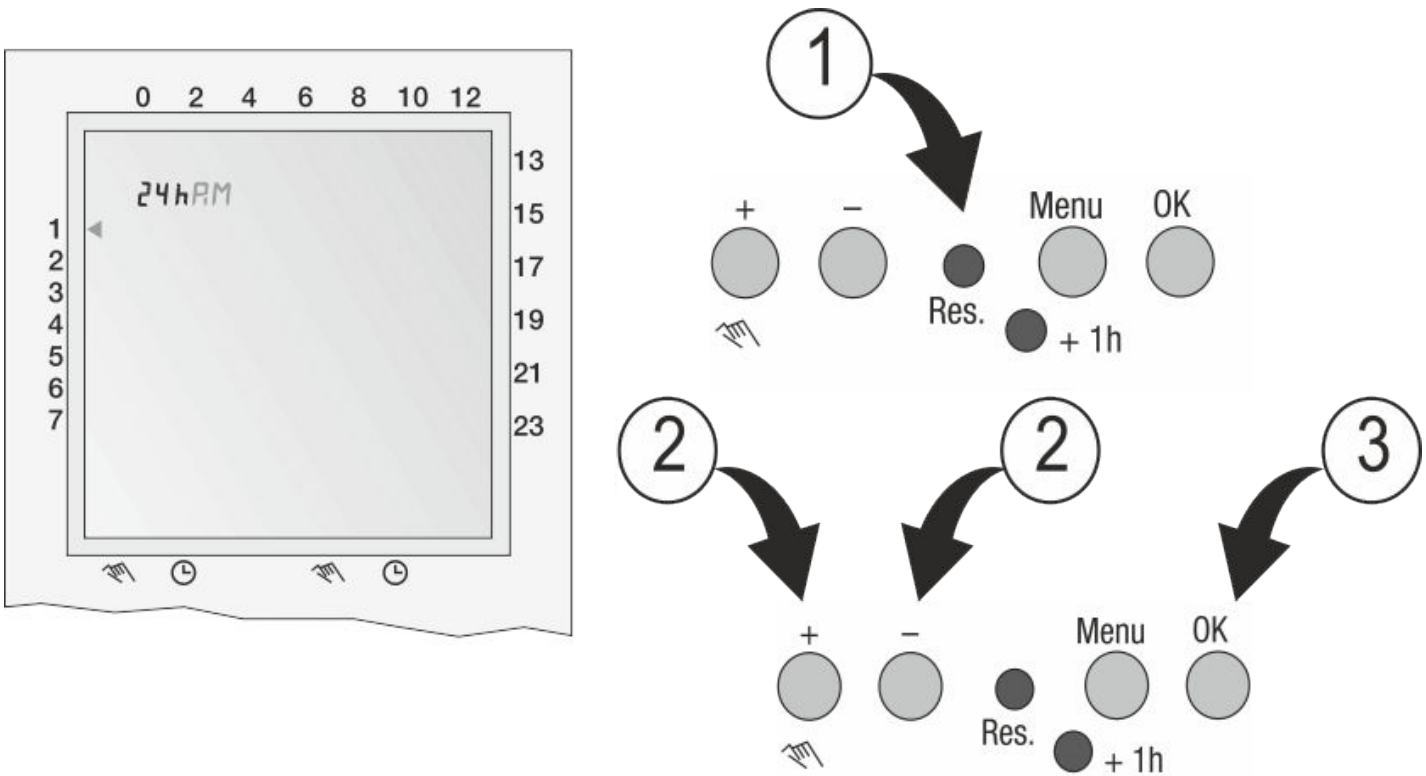

Fig. 12: Selecting the time format

Setting the hours and minutes

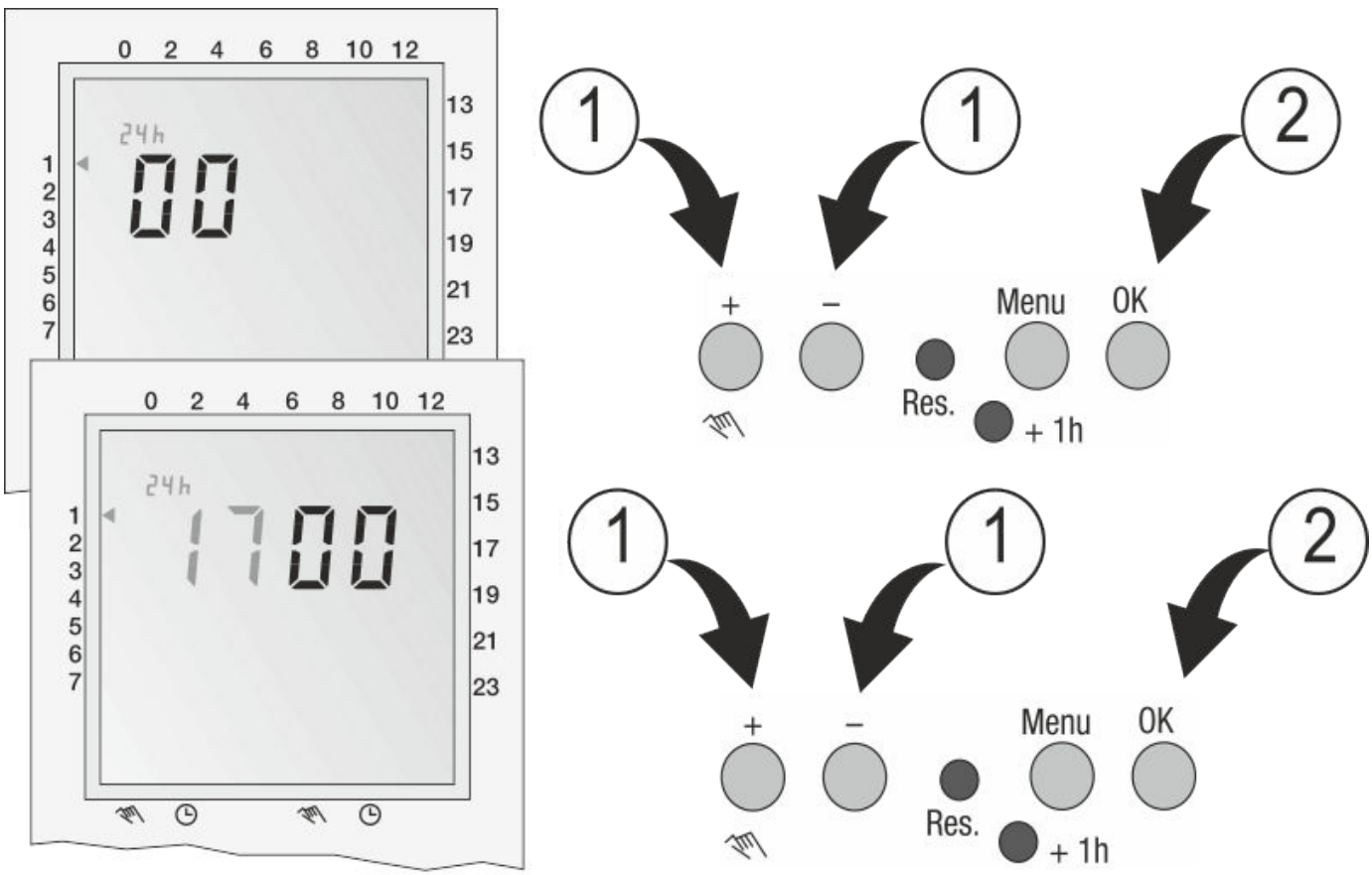

Fig. 13: Setting the hours and minutes

Setting the day of the week

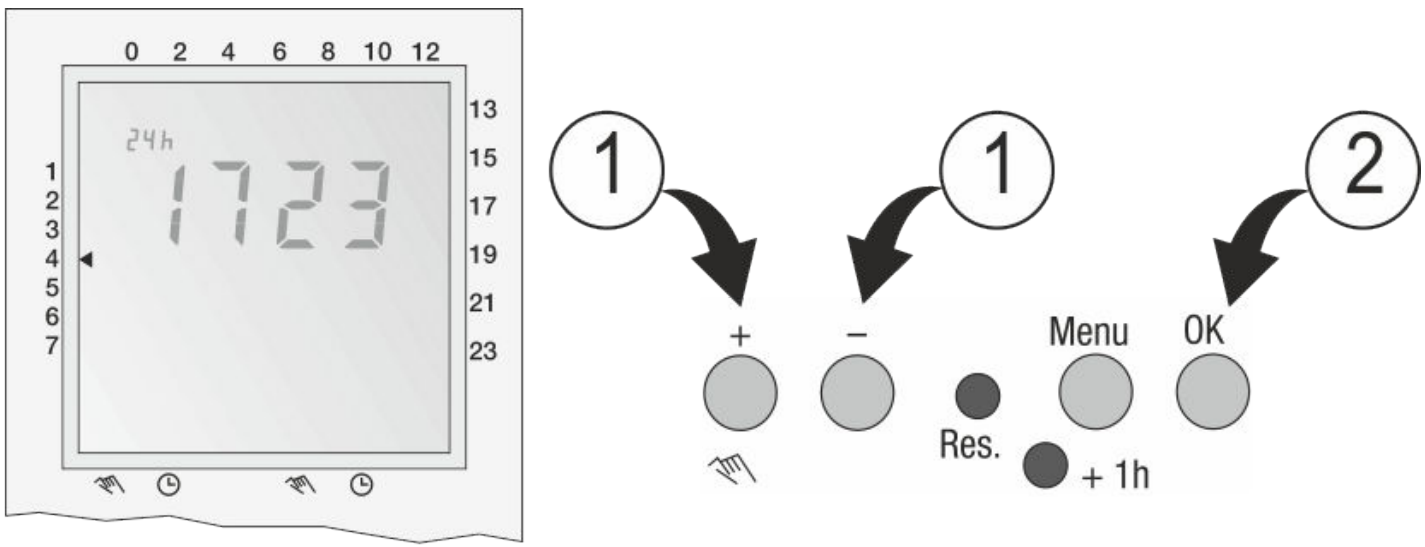

Fig. 14: Setting the day of the week

1	Monday	5	Friday
2	Tuesday	6	Saturday
3	Wednesday	7	Sunday
4	Thursday		

Programming

Selecting the predefined programmes

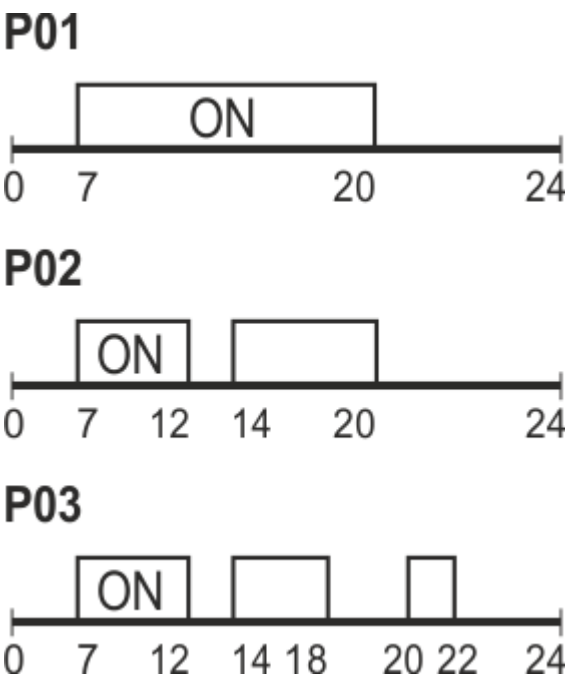

Fig. 15: Predefined profiles P01, P02, P03

P01 07:00 – 20:00 (Mon – Sun)
P02 07:00 – 12:00 and 14:00 – 20:00 (Mon – Sun)
P03 07:00 – 12:00, 14:00 – 18:00 and 20:00 – 22:00 (Mon – Sun)

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In addition, you can use the P-- individually programmable switching programme. Here, you define all the times individually ↳ Chapter " Creating an individual switching program" on page 70.

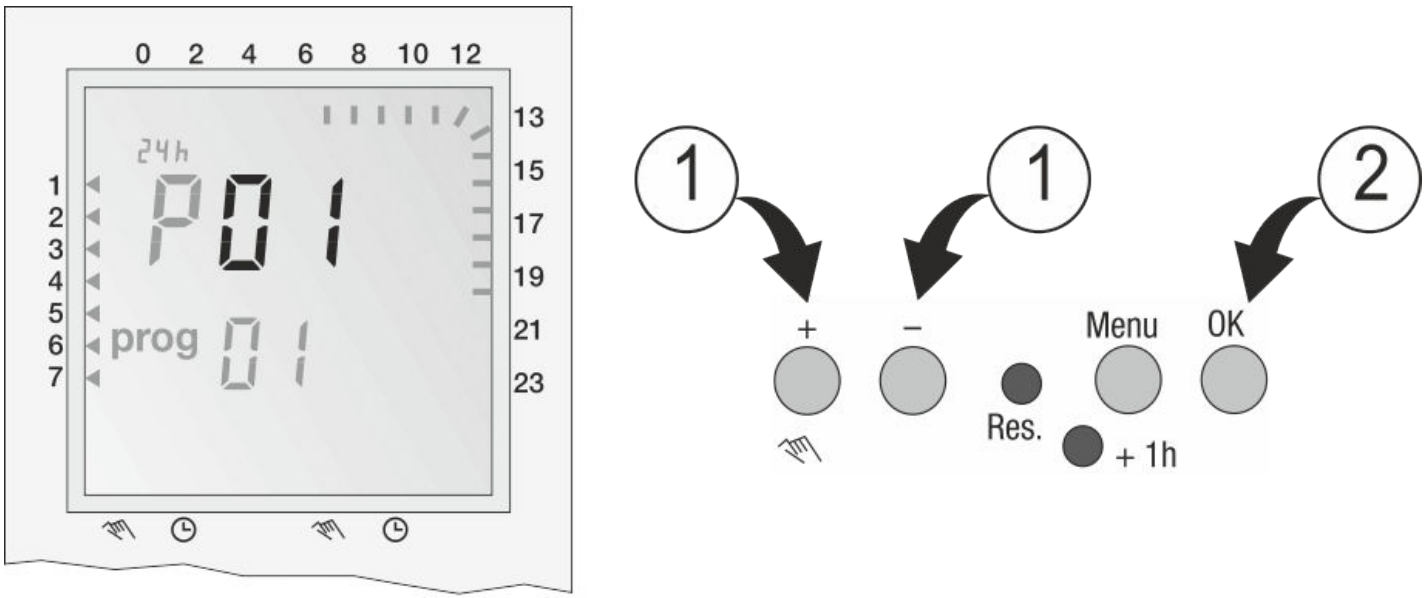

Fig. 16: Selecting the predefined programmes

Changing the predefined programmes

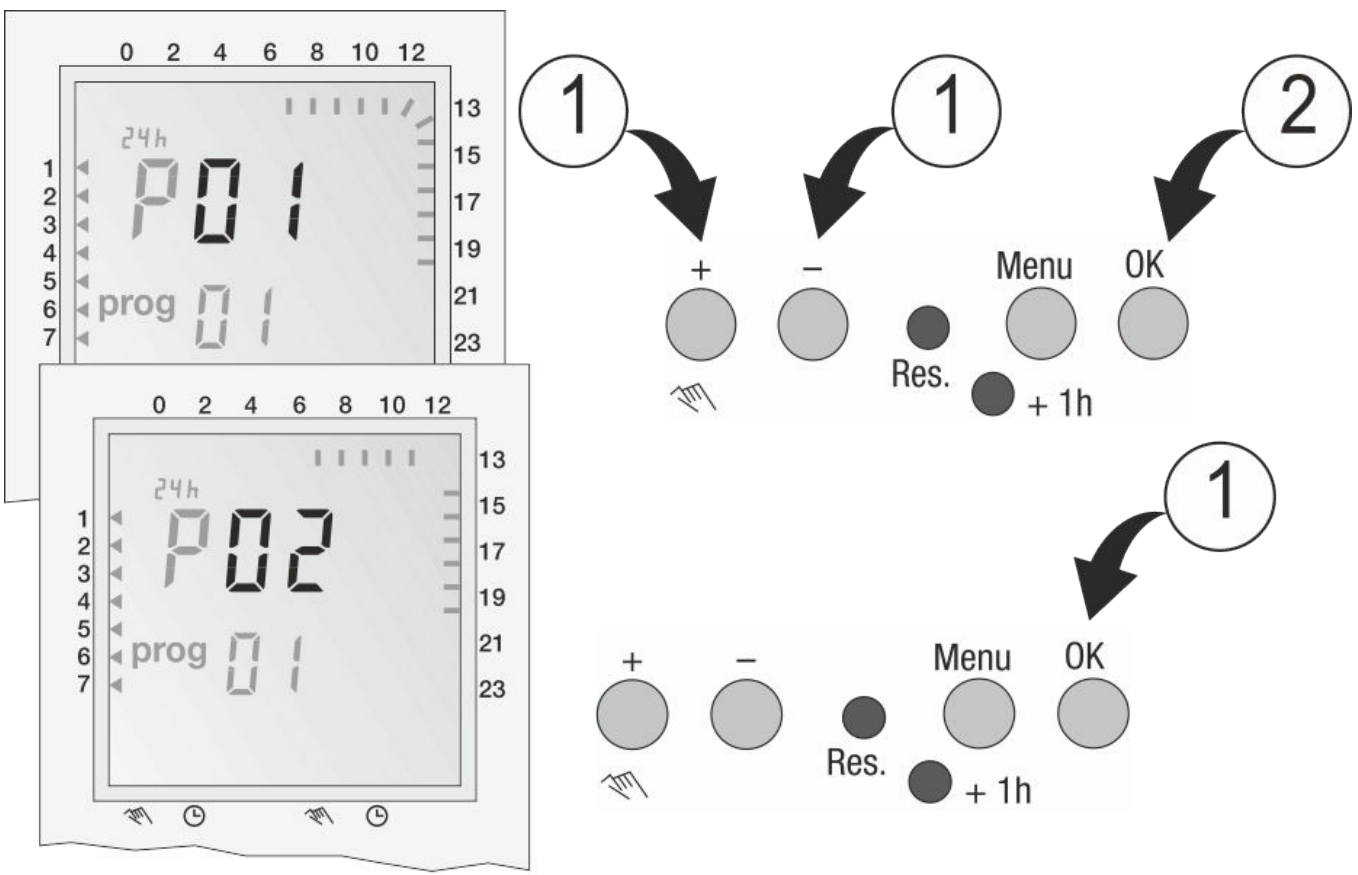

Fig. 17: Selecting the programme

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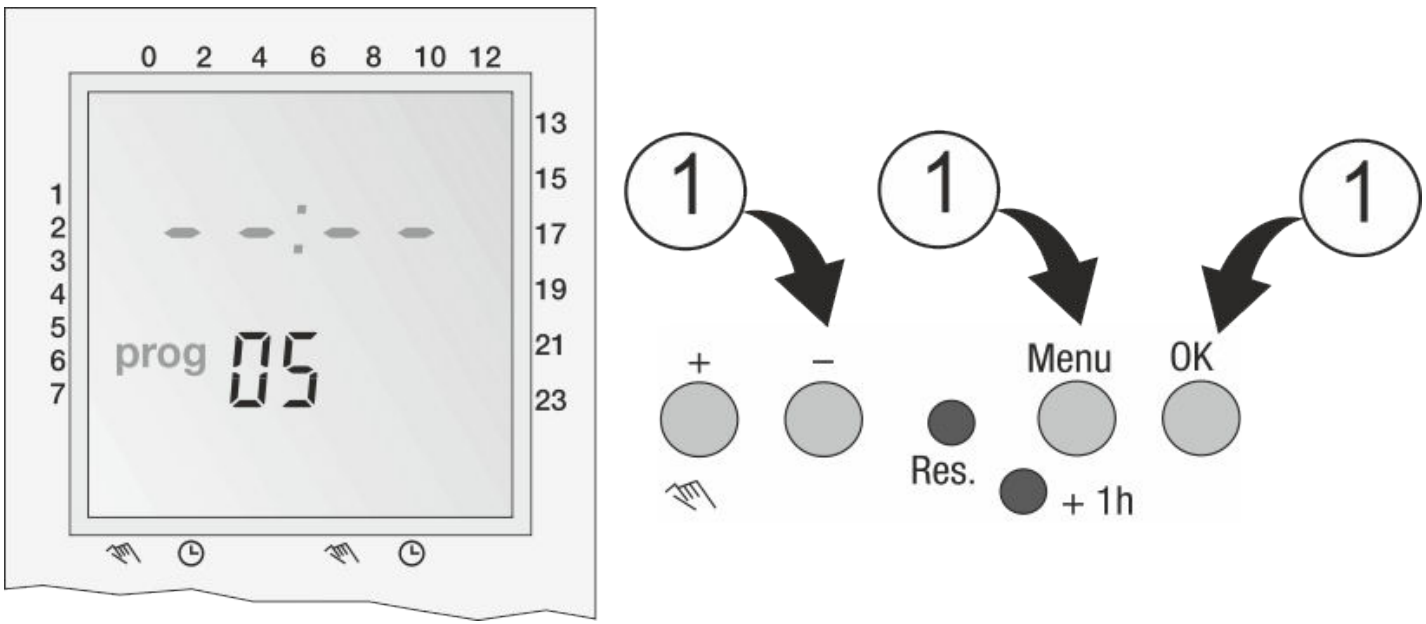

Fig. 18: Changing fixed programmes

Effects of the buttons (Fig. 18)

[–]	Programming the predefined programs: (e.g. the memory spaces Prog01 – Prog04 for P02)
[OK]	Programming the next free memory space, e.g.: • Sat – Sun 22:30 (p.m.) ON (Prog05) • 23:00 (p.m.) OFF (Prog06)
[Menu]	Ending programming

Setting the time

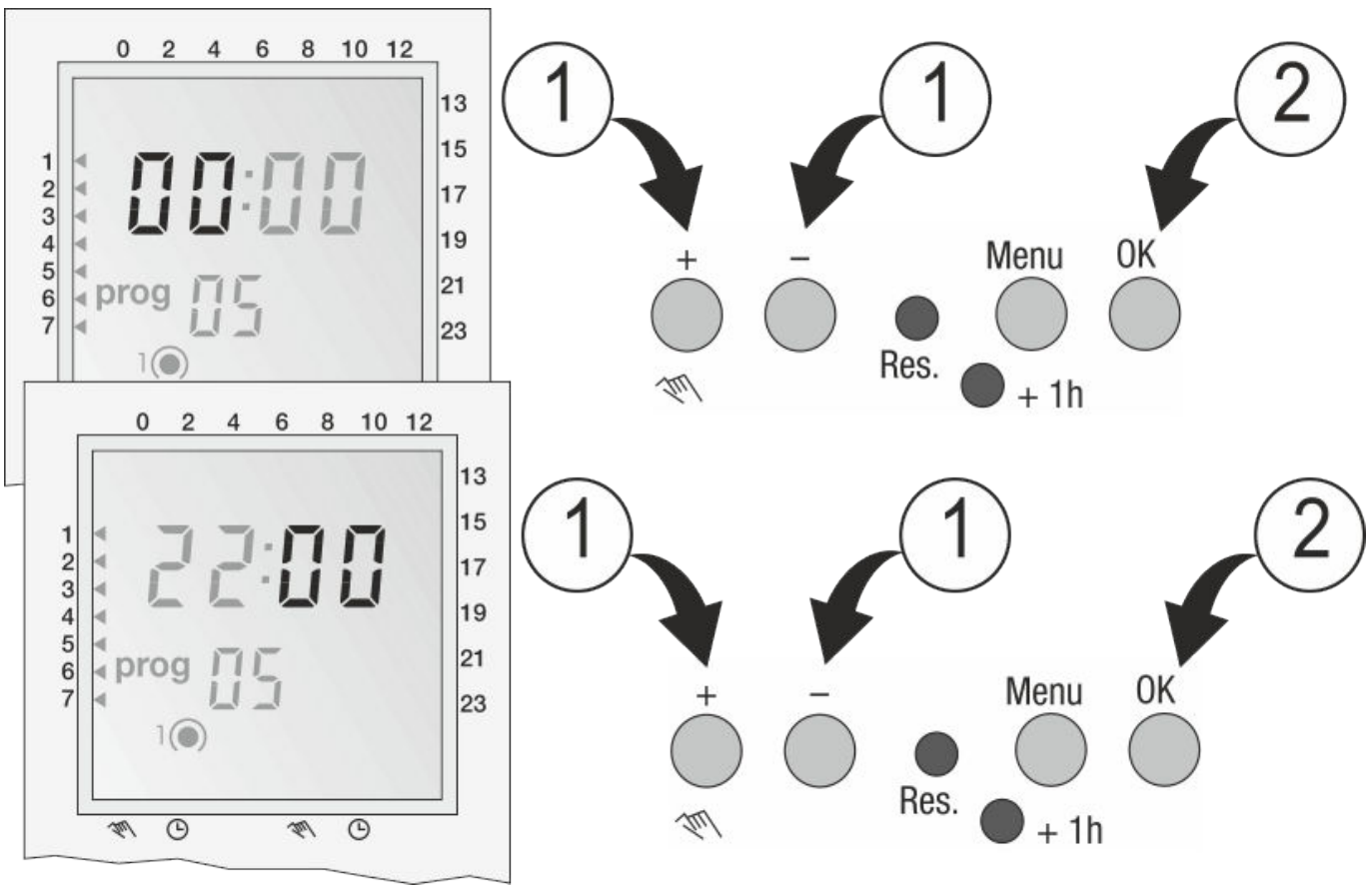

Fig. 19: Setting the time

Press *[–]* to return to the previous or the pre-defined memory spaces.

Press *[OK]* to jump to the next free memory space.

◉ indicates that the memory space is an ON time.

◯ indicates that the memory space is an OFF time.

EN

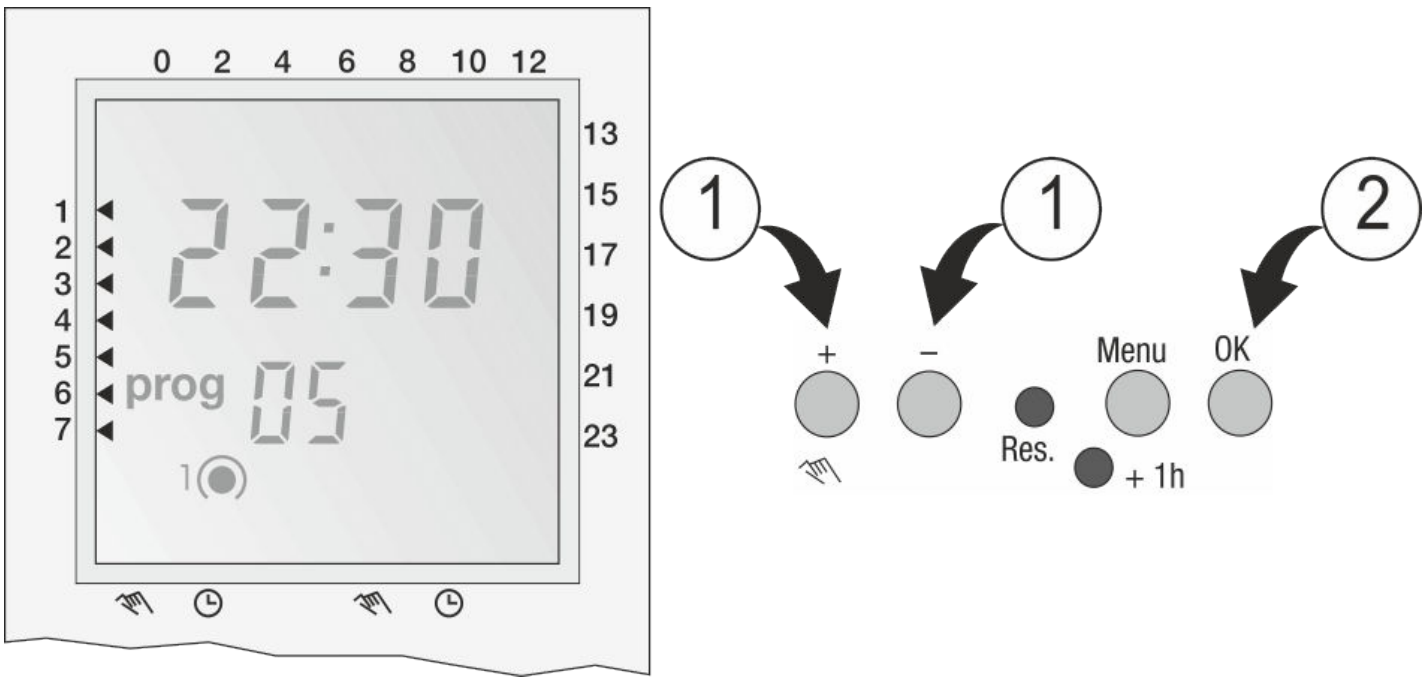

Fig. 20: Setting the day blocks or days

Day blocks or days

	Mon – Sun	Mon – Sat	Mon – Fri	Sat – Sun	Indiv. days
Mon 1	◀	◀	◀		◀
Tue 2	◀	◀	◀		◀
Wed 3	◀	◀	◀		◀
Thu 4	◀	◀	◀		◀
Fri 5	◀	◀	◀		◀

	Mon – Sun	Mon – Sat	Mon – Fri	Sat – Sun	Indiv. days
Sat 6	◀	◀		◀	◀
Sun 7	◀			◀	◀

Shifting the time

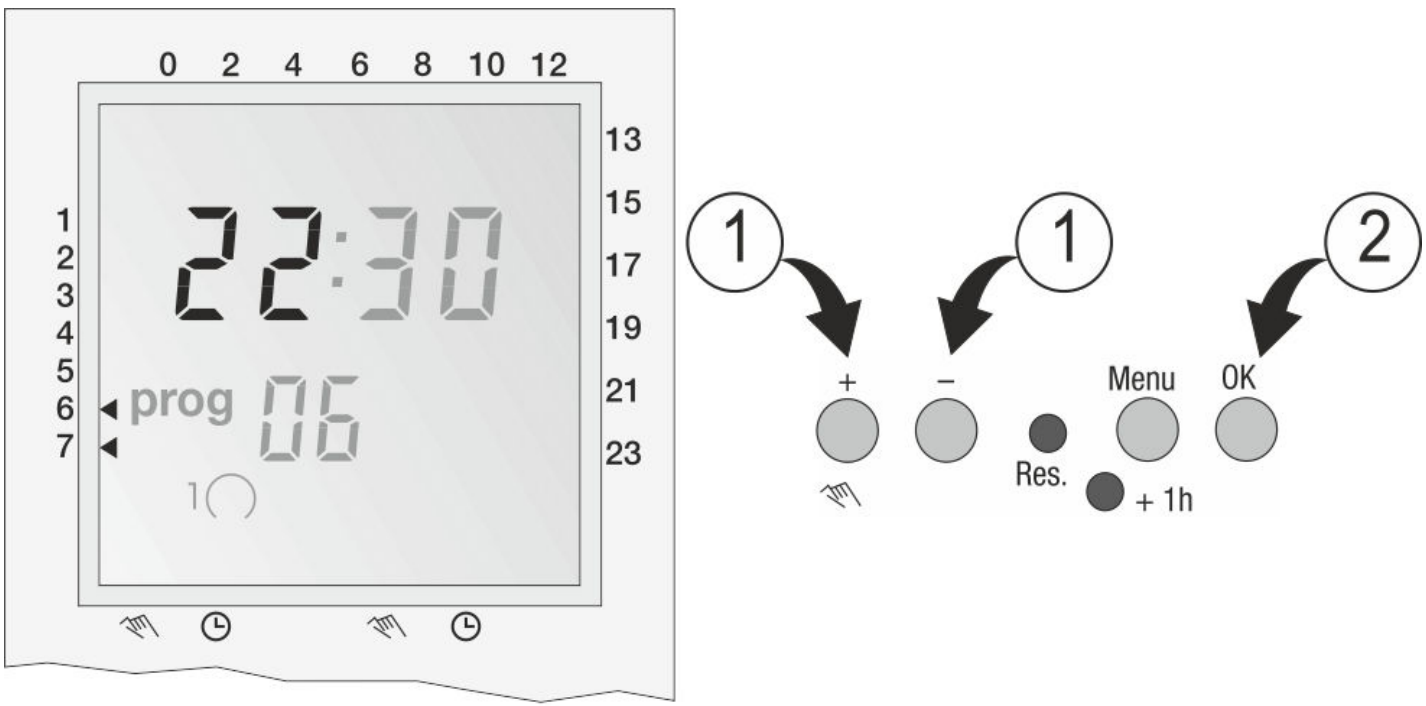

Fig. 21: Shifting the time

If you want the connected load to switch off the next day, you can shift the off time by 24 hours.

– CI7: Press *[–]* and *[OK]* to enter the next time, or press *[–]* and *[Menu]* to exit the mode.

– CG7: Press *[+]* and *[OK]* to enter the next time, or press *[+]* and *[Menu]* to exit the mode.

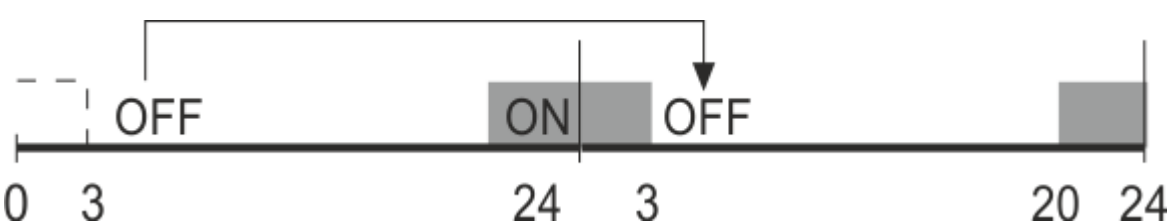

Fig. 22: Shifting the time

1. To make further changes or add new times, repeat the steps as shown in ↳ Chapter " Creating an individual switching program" on page 70. Otherwise exit the mode by pressing *[Menu]*.
2. If the device is in an ON period when you finish setting the times, press *[+]* multiple times until automatic mode is activated.

   ⇨ 🕒 appears on the display.

Creating an individual switching program

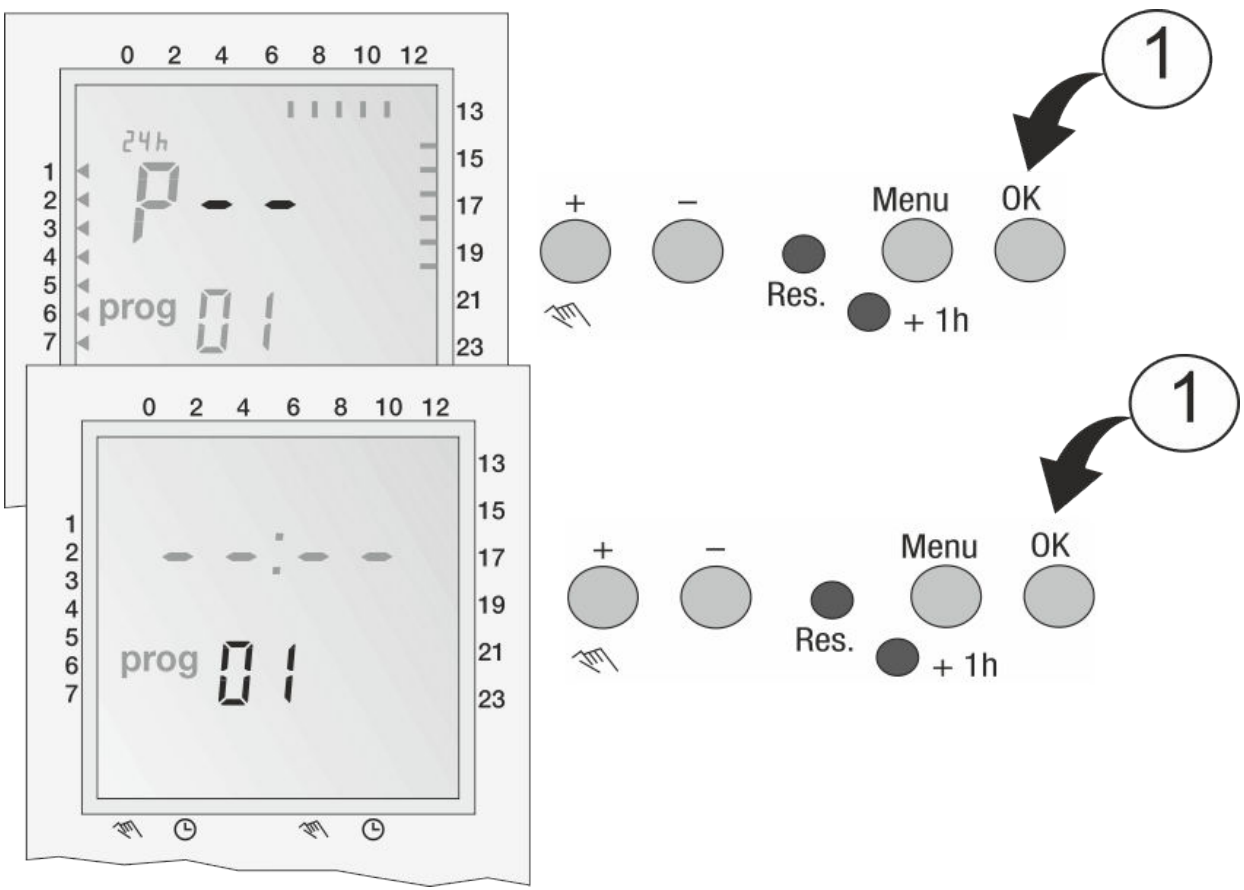

Fig. 23: Creating an individual switching program

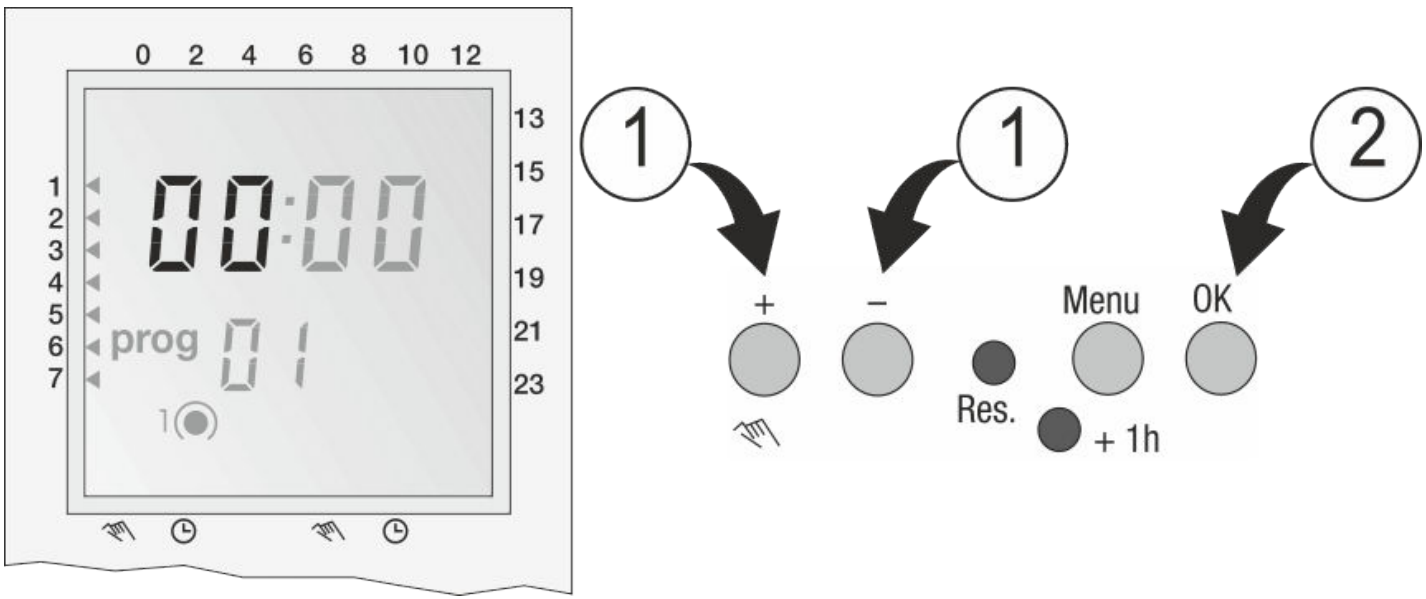

Fig. 24: Creating an individual switching program

1. After the last step, set the hours, minutes and day of the week (↳ Chapter "Setting the time and date" on page 52) and confirm with *[OK]*.

Deleting a programme

Times are saved as pairs (on time and off time). If you want to delete a time period, you only have to delete the ON time manually – the corresponding OFF time is deleted automatically.

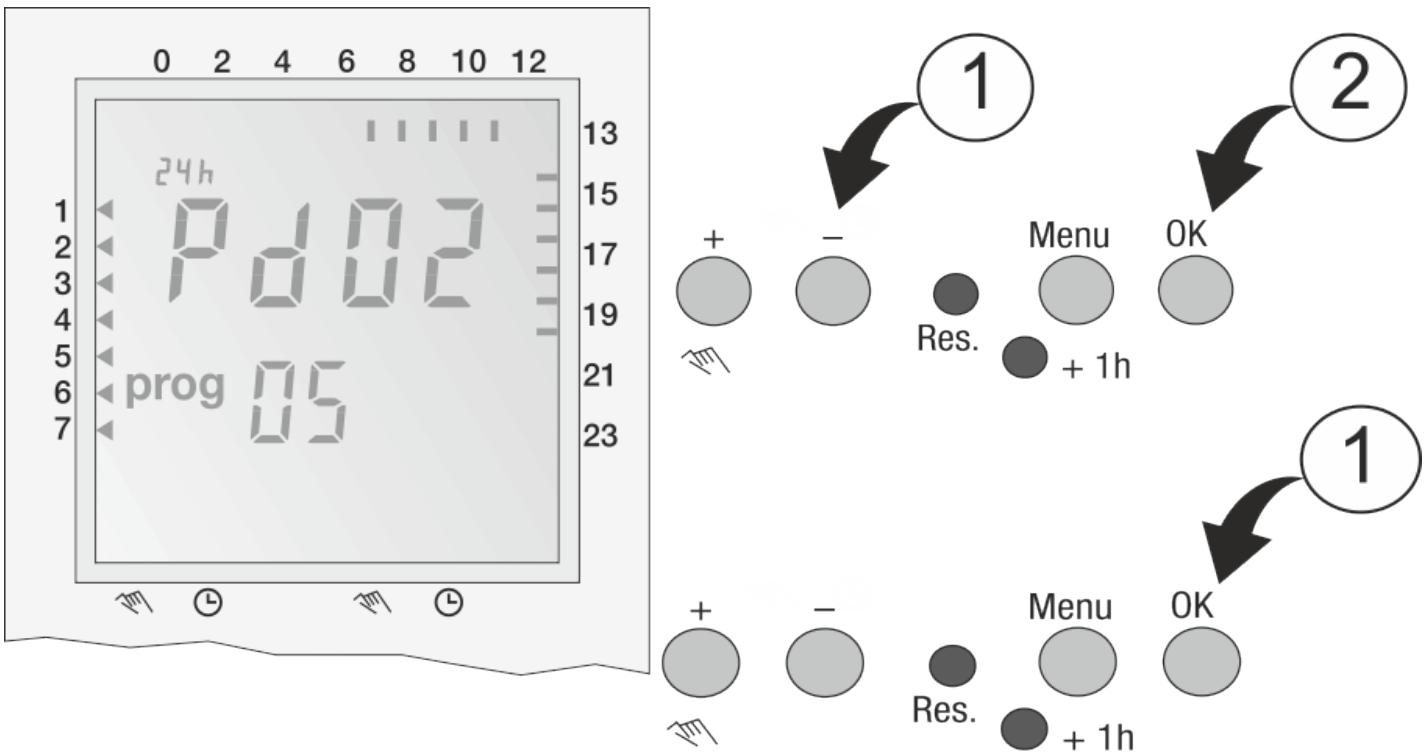

Fig. 25: Selecting the programme

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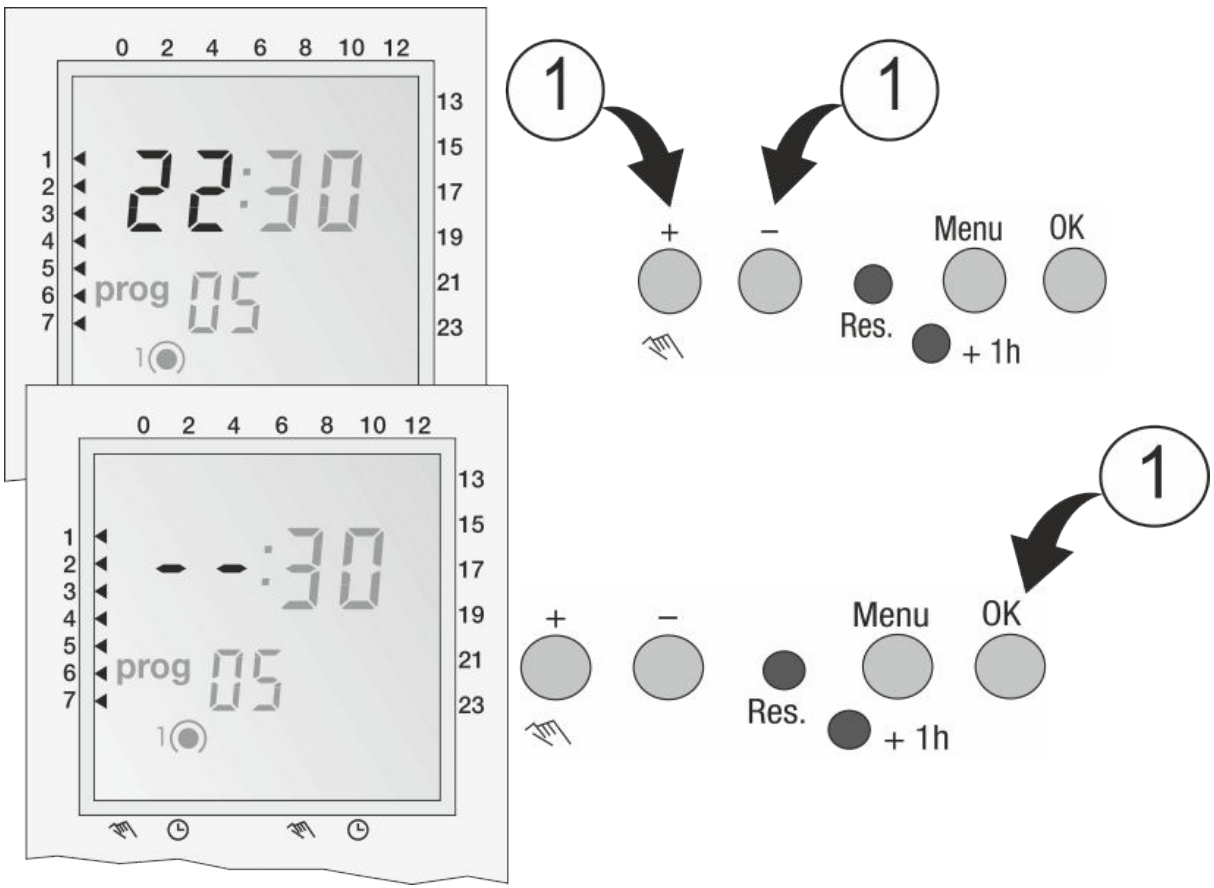


Fig. 26: Deleting time periods

Selecting summer/winter time

Personnel:

- User

Prerequisite:

- The time has been set.

Press *[+1 h]* to switch between summer and winter time.

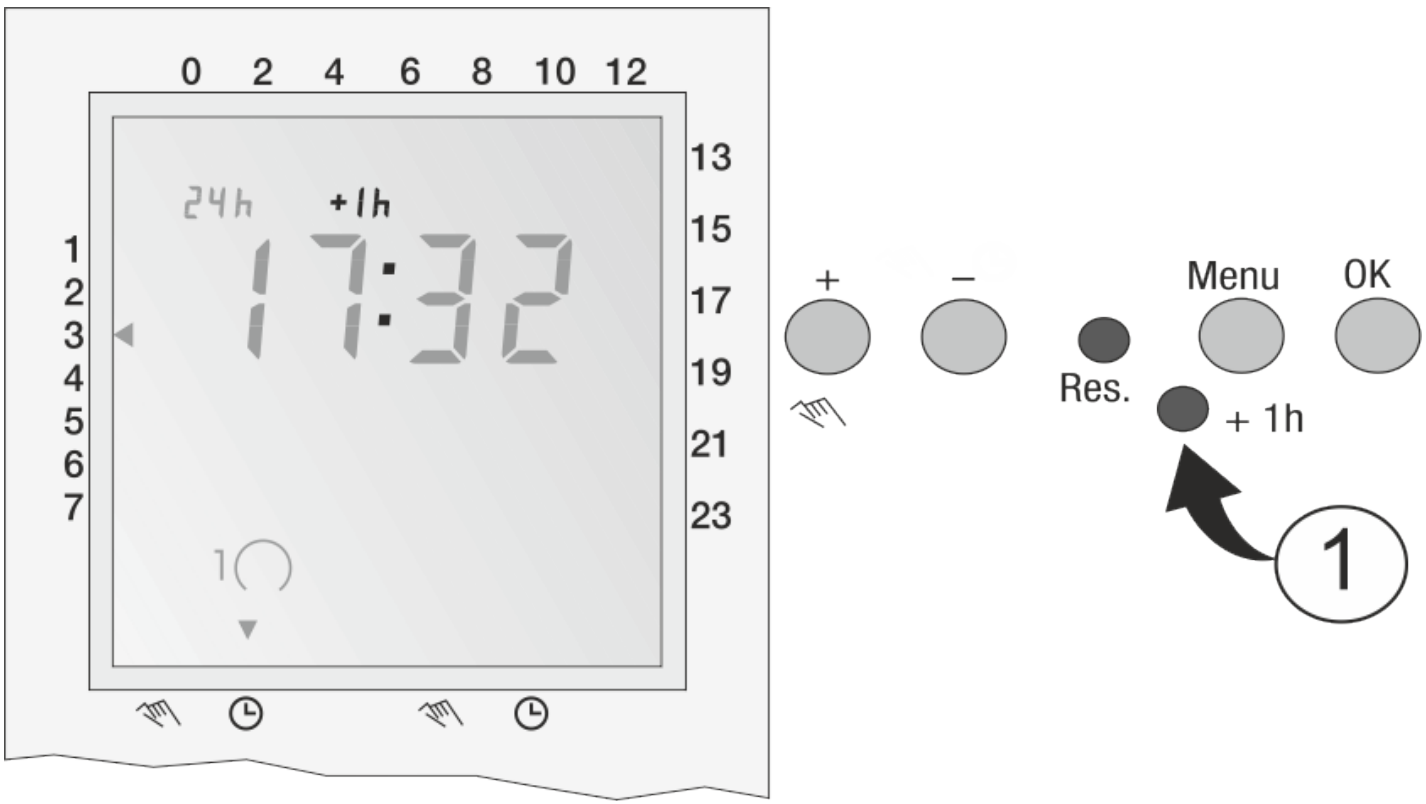


Fig. 27: Selecting summer/winter time

1. Press *[+1 h]* to add an hour to the current time (summer time).

   ⇨ +1 h appears on the display.

2. Press *[+1 h]* again to subtract an hour from the current time (winter time).

   ⇨ +1 h disappears from the display.

EN

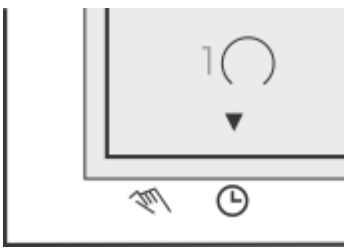
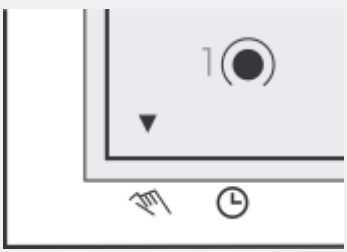
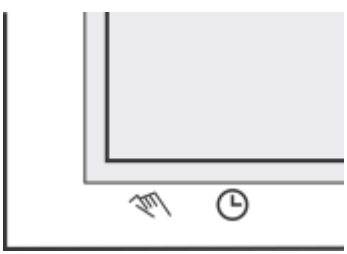
Selecting the operating mode

In addition to automatic mode, which switches according to the defined switching times, the device can also be switched permanently on or off.

Personnel:

- User

1. Press *[+]* repeatedly until the desired mode appears on the display.

Display	Mode
	Automatic mode
	Permanently on
	Permanently off

Disposal

ENVIRONMENT!
Environmental hazard!

Incorrect disposal could result in environmental dangers.

– Electric scrap and electronic components must be disposed of correctly, i.e. the parts for disposal must be sorted into material groups.

EN

- Batteries/rechargeable batteries (Directive 2006/66/EC) and electrical or electronic scrap must under no circumstances be disposed of with general waste. If in doubt, please obtain information about environmentally responsible disposal from specialist disposal companies.
- Disposal must be environmentally responsible and must employ state-of-the-art environmental protection, recycling and disposal technology.

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