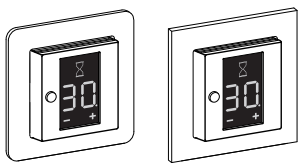ELKO

Countdown timer 16A with display

Operating instructions

EKO05986, EKO05987, EKO05988, EKO05989

For your safety

⚠️ **DANGER**

Risk of serious damage to property and personal injury, e.g. from fire or electric shock, due to incorrect electrical installation.

Safe electrical installation can only be ensured if the person in question can prove basic knowledge in the following areas:

- Connecting to installation networks
- Connecting several electrical devices
- Laying electric cables

These skills and experience are normally only possessed by skilled professionals who are trained in the field of electrical installation technology. If these minimum requirements are not met or are disregarded in any way, you will be solely liable for any damage to property or personal injury.
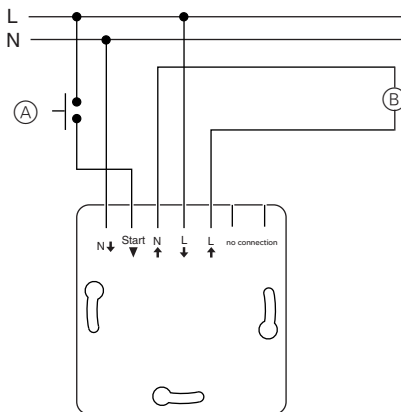
Getting to know the timer

You can use the countdown timer 16A with display (referred to below as the **timer**) to switch loads on for an adjustable time. The device will switch the loads back off once the set overtravel time has elapsed. The overtravel time can range from one minute to eight hours.

A 2-pole switch can be used to switch off the timer and the connected loads.

The operating keys are used for setting and operation. You can also connect an external push-button. The external push-button can be used to start or end the overtravel time from a different location.
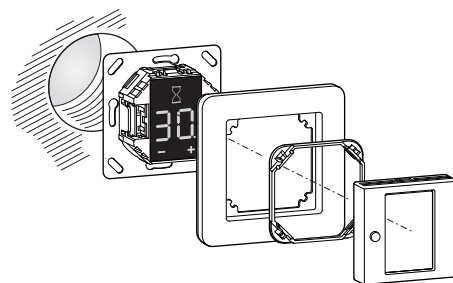
Mounting the timer
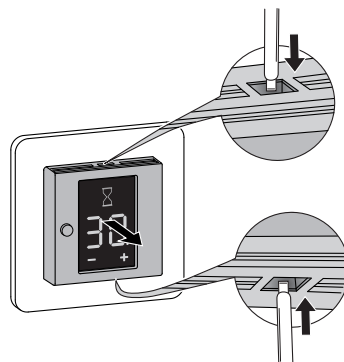
Wiring the timer

Ⓐ External push-button
Ⓑ Load

Mounting the timer

① Install the timer in a flush-mounted box.
② Place the frame on the insert.
③ Press in the snap ring until it presses against the frame.
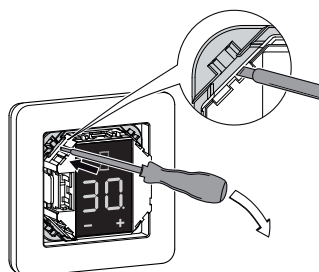④ Press on the central plate until it audibly clicks into place.

Removing the covers

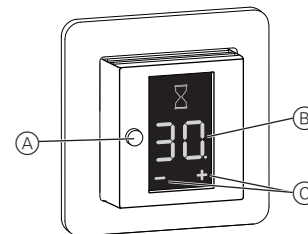① Using a suitable screwdriver, press on the marked points to loosen the engagement of the central plate.

② Tilt the central plate forward and remove it.
③ Lift out the snap ring using a suitable screwdriver and remove it.

④ Remove the frame.

Displays and operating elements

Ⓐ Switch

Top:	Timer switched off
Bottom:	Timer switched on

Ⓑ Overtravel time

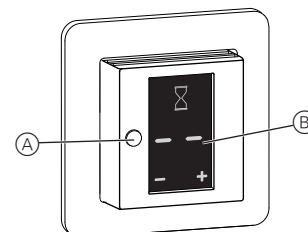| Display dimmed	Overtravel time ended, load off
--	0 minutes
Display bright	Overtravel time activated, load on
01.; 02.; 03.; ...20.	1; 2; 3; ...20 minutes
20.; 30.; 40.; 50.	20; 30; 40; 50 minutes
1.0; 1.5; 2.0; ...8.0	1; 1.5; 2; ...8 hours

Ⓒ Operating keys

Press briefly:	Overtravel time:
	• "-" reduce in steps
	• "+" increase in steps
Press and hold:	Overtravel time:
	• "-" reduce steplessly
	• "+" increase steplessly
Press both push-buttons (> 3 s):	Enter settings menu

Commissioning the timer

Use the push-button for two-pole switch-on of the timer.

Timer on / display in OFF status

Ⓐ Switch pushed down
Ⓑ Overtravel time not activated, display dimmed

ℹ️ In order to be able to use an additionally connected external push-button, the function must be set after commissioning. Afterwards, the overtravel time can be started and ended externally (see chapter "Changing settings").

Operating the timer

Activating the display

Pressing an operating key activates the display.

The display lights up and the most recently set overtravel time (A) is displayed.

At the time of the first activation, "--" (overtravel time not activated) is displayed.

Setting the overtravel time

① Alter the overtravel time:
a) In steps by briefly pressing "+" or "-" repeatedly or
b) Steplessly by pressing and holding down either "+" or "-"

The overtravel time displayed flashes for as long as you continue to actuate the operating keys (A).

② Complete your input with the desired overtravel time.

If no input takes place within three seconds, the overtravel time will start up automatically. The load is switched on.

The status display (B) flashes while the overtravel time (A) is running down step-by-step.

> ℹ You can change the value of the overtravel time even when the overtravel time is activated. The load remains switched on for as long as the overtravel time displayed is greater than 0.

Ending the overtravel time

Once the overtravel time has expired, the load is automatically switched off. The display switches into OFF status (dimmed, overtravel time "--").

To switch off the load before expiration of the overtravel time, set the overtravel time to "--".

Operating the timer via external push-button

The timer can be operated via an externally connected mechanical push-button. This function is disabled by default. Activate the desired function of the external push-button in the settings menu (see chapter "Changing settings").

• Trigger function (ON): Pressing the external push-button starts the most recently set overtravel time. An already activated overtravel time is restarted.
The activated overtravel time cannot be ended with the external push-button in this mode.

• Toggling function (OFF): Pressing the external push-button starts one of two functions in rotation. The first time the external push-button is pressed, the most recently set overtravel time is started. The next time it is pressed, the overtravel time is ended and the load is switched off.

> ℹ After an external signal input, the timer disables for 2 seconds.

Changing settings

The maximum and minimum overtravel time and function of the external push-button can be changed:

• Minimum overtravel time (LO):
1 Minute (01.) to 8 hours (8.0)
Default: 1 minute (01.)

• Maximum overtravel time (HI):
minimum overtravel time up to 8 hours (8.0)
Default: 4 hours (4.0)

• Function of external push-buttons (Input):
disabled (--), Trigger (ON), Toggle (OFF)
Default: disabled (--)

Adjust the settings one after the other.

> ℹ The menu is exited automatically if no input in the settings menu takes place within one minute. Changes that have been made are saved.

① Hold down "+" and "-" together for three seconds to enter the settings menu.

② Press "+" or "-" to change the setting that is displayed.

③ Press "+" or "-" simultaneously to confirm the input and to switch to the next setting.

The menu is exited automatically when the last setting is confirmed.

What should I do if there is a problem?

Error messages on the display

Display	Meaning
Error HEAt	Internal overheating of the timer

Connected load does not switch on:

• Observe the message on the display:
Switch timer off and back on again with "Error HEAt". If the error message "Error HEAt" recurs, have cause of error investigated by a specialist.

• Check the power supply.

• Switch the timer off and back on again.

• Check the load.

• Check wiring with external push-button.

No message on the display:

• Check the power supply.

• Switch the timer off and back on again.

Technical data

Nominal voltage:	230 V AC, 50 Hz
Nominal load (ohmic):	16 A
Nominal load (inductive):	1 A, cos φ = 0.6
Switching capacity:	
Ohmic load:	3600 W
Fluorescent lamps with electronic ballasts:	35 µF
LV halogen lamps with wound or electronic transformer:	1000 VA
Motors:	500 VA
230 V halogen lamps:	1000 W
LED lamps:	100 W
Switch:	2-pole
Relay:	1-pole, 16 A
Adjustable overtravel time	1, 2, 3, ...20 min 30, 40, ...50 min 1, 1.5, 2, ...8 h
Type of housing protection:	IP 20
Rated surge voltage:	4 kV
Connecting terminals:	max. 2.5 mm²
Operating temperature:	-10°C to +35°C
Overvoltage/ overheating protection:	electronic
Accuracy of time specification:	+/- 1.5%

Dispose of the device separately from household waste at an official collection point. Professional recycling protects people and the environment against potential negative effects.

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