theben

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TR
TR 635 top2 6350100
TR 636 top2 6360100
Installation and operating instructions
Digital time switch
with weekly program
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TR 635 top2

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## Basic safety instructions



## WARNING

## Danger of death through electric shock or fire!

> Installation should only be carried out by a qualified electrician!

- The device is intended for wall and front panel installation
- Corresponds to type 1 BSTU in accordance with IEC/EN 60730-2-7
- Power reserve (10 years) is reduced if memory card is inserted (in battery operation)


## Designated use

- The time switch can be used for lighting, bell systems, ventilation etc.
- Only use in enclosed dry spaces
- Do not use on safety devices, e.g. escape route doors, fire safety equipment etc.


## Disposal

Dispose of device separately in an environmentally sound manner

## Screen display and keys



## Overview of menu selection

## MENU



## Connection

## $\triangle$ WARNING

$\Delta$
Warning, danger of death through electric shock!
$>$ Must be installed by qualified electrician!
> Disconnect power source.
$>$ Cover or shield any adjacent live components.
> Ensure device cannot be switched on!
$>$ Check power supply is disconnected.
$>$ Earth and bypass.


## Installation

Distributor installation (wall)

- for installation on DIN top hat rails (in accordance with EN 60715) with accessories (9070071)



9070071

Front panel installation

- for installation in front frame and transparent cover (in accordance with DIN 43700)



## Initial start-up

Set date, time and summer/ winter time rule
> Press required key and display follows on screen (see figure).

## RESET



## PROGRAM

## Program switching time

Example: Switch on sports hall lighting from Mon-Fri, 7:30 to 12:00 hrs
$>$ Press MENU. PROGRAM is displayed.
$>$ Confirm by pressing OK. NEW is displayed.
$>$ Confirm by pressing OK. SWITCHING TIME is displayed.
$>$ Confirm by pressing OK. Select ON (for switch-on times).
$>$ Confirm by pressing OK. The display shows HOUR.
$>$ Use the + or - keys to enter hour, minute, (07:30) and confirm by pressing OK. MONDAY is displayed.
$>$ Confirm by pressing OK. COPY is displayed.
$>$ Confirm by pressing OK. ADD TUESDAY is displayed.
> Confirm by pressing OK and also confirm the days Wed, Thurs, Fri by pressing OK.
$>$ Continue with $>$ to SAVE is displayed. Confirm by pressing OK.
Repeat all steps for the switch-off time however instead of selecting ON with $>$ select OFF and enter 12:00 for hour and minute.


## Request/change/delete switching time

$>$ Press MENU. PROGRAM is displayed.
$>$ Confirm by pressing OK. NEW is displayed.
$>$ Use to select CHECK.
$>$ Confirm by pressing OK.
$>$ Confirm SWITCH TIME by pressing OK. The first of the entered switching times is displayed.
$>$ Confirm by pressing OK. NEXT is displayed.
Change or delete individual switching times

$>$ Press $>$ to select MODIFY (or DELETE).
$>$ Confirm MODIFY HOUR by pressing OK.
> Confirm by pressing OK. The first of the entered switching times is displayed.
> Use the+ or - keys to enter hour and minute and confirm by pressing OK.

## Pulse time programming

Example: Switch on pause signal on Monday 8:05 hrs for 5 sec
$>$ Press MENU. PROGRAM is displayed.
> Confirm by pressing OK. NEW is displayed.
$>$ Confirm by pressing OK. SWITCH TIME is displayed.
$>$ Select PULSE by pressing $>$.
$>$ Confirm by pressing OK. ON is displayed.
$>$ Confirm by pressing OK. The display shows HOUR.
> Use the + or - keys to enter hour, minute, second (8:05) and confirm by pressing OK. PULSE LENGTH is displayed.
> Use the + or - keys to enter the duration of the pulse in minutes and seconds ( 5 sec ). MONDAY is displayed.
$>$ Confirm by pressing OK. COPY is displayed.
$>$ Press to select SAVE.
$>$ Confirm by pressing OK.

## Cycle time programming

In addition to switch-on and switch-off times (switching time) and short time pulses (pulse) cycle times (cycle) can also be programmed. The pulse length (+ pulse pause) is limited to 17 hrs, $59 \mathrm{~min}, 59 \mathrm{sec}$

- Cycle times refers to cyclically repetitive time functions such as fan controls, urinal rinses etc.

Example: Switch on water rinsing Monday from 8:00 to 20:30 hrs every 15 min for 20 sec (8:00 $0^{00}-8: 00^{20} \mathrm{On} ; 8: 15^{00}-8: 15^{20} \mathrm{On} ; 8: 30^{00}-8: 30^{20} \mathrm{On}$ etc.)

## Cycle programming

- Start cycle: Monday 8:00 hrs
- Pulse length: 20 sec
- Pause length: 14 min 40 sec
- Cycle end: Monday 20:30:00 hrs
> Observe the number of maximum electrical switching cycles when using the ,cycle' function.


## Manual and permanent switching

Manual and permanent switching can be set using the menu in MANUAL or (in the automatic screen) by key combination (see fig.).


Activate manual switching
> Briefly press both keys simultaneously.
Activate permanent switching
> Simultaneously press both keys for 2 seconds.
Cancelling manual/permanent switching
> Press both keys simultaneously.

## Enter PIN code

The PIN code can be set using the OPTIONS menu item (see fig.). If you forget the PIN call the Theben hotline.


## OBELISK top2 memory card

Use memory card
$>$ Insert memory card in the time switch.
> Read / read out saved switching times and device settings in the time switch or start Obelisk program.
> Remove memory card OBELISK top2
(No. 9070404) after copying.
> Avoid mechanical stress or dirtying with other storage/transport methods.

## Serviceadresse/Hotline

Service address
Theben AG
Hohenbergstr. 32
72401 Haigerloch
GERMANY
Telephone +49 (0) 74746920
Fax $\quad+49$ (0) $7474 / 6$ 92-150
Hotline
Telephone +49 (0) 7474692 -369
Fax $\quad+49$ (0) $7474 / 6$ 92-207
hotline@theben.de
Addresses, telephone numbers etc.
www.theben.de

## Technical data

- Operating voltage: $230-240 \mathrm{~V} \sim,+10 \% /-15 \%$
- Frequency: $50-60 \mathrm{~Hz}$
- Power consumption: 0,8 W (TR 635 top2), 0,9 W (TR 636 top2)
- Standby: 0,9 W (TR 635 top2), 1,1 W (TR 636 top2)
- Switch output: switching of choice of external wires is permitted
- Contact: two way switch
- Gap: $\quad<3 \mathrm{~mm}(\mu)$
- Contact material: $\mathrm{AgSnO}_{2}$
- Max switching capacity: TR 635 top2:
$16 \mathrm{~A}, 250 \mathrm{~V} \sim, \cos \varphi=1$
$10 \mathrm{~A}, 250 \mathrm{~V} \sim, \cos \varphi=0,6$
TR 636 top2:
$6 \mathrm{~A}, 250 \mathrm{~V} \sim, \cos \varphi=1$
$6 \mathrm{~A}, 250 \mathrm{~V} \sim, \cos \varphi=0,6$
- Min. switching capacity: $10 \mathrm{~mA} / 230 \mathrm{~V} \mathrm{AC}$ $100 \mathrm{~mA} / 12 \mathrm{~V}$ AC/DC
- Incandescent lamp load + Halogen lamp load:

2300 W (TR 635 top2)
1200 W (TR 636 top2)

- Fluorescent lamp load: uncorrected + (VVG) series corrected 1000 VA parallel correction $400 \mathrm{VA}(42 \mu \mathrm{~F})$
- Compact fluorescent lamps: 90 W
- LED lamps: <2 W output, max. connection total of 20 W , $>2 \mathrm{~W}<8 \mathrm{~W}$ output, max. connection total of 50 W
- Permissible ambient temperature: $-30^{\circ} \mathrm{C} . . .+55^{\circ} \mathrm{C}$
- Protection class: II in accordance with EN 60730-1 subject to designated installation
- Protection rating: IP 20 in accordance with EN 60529
- Time accuracy: $\leq \pm 0,5$ s/day at $+20^{\circ} \mathrm{C}$
- Power reserve: 10 years (lithium call) at $+25^{\circ} \mathrm{C}$
- Pollution degree: 2
- Rated impulse withstand voltage: 4 kV
- TR 635 top2: max. switching cycles with 16 A resistive load: 50,000
- TR 636 top2:
max. switching cycles with 6 A resistive load: 50,000

