english

theben®

TERMINA top2





Digital time switches with text-oriented user guidance

TERMINA TOP 2 theben

Technology at its best.
Very easy operation ...

Less is more: a very simple, text-oriented user guidance provides convenient programming



Clear: LCD display with large text line, easily legible time display and On/Off switch state information



Plain text: Improved user guidance thanks to new text ticker function

Optimised user guidance:
The usable key functions are shown in the display

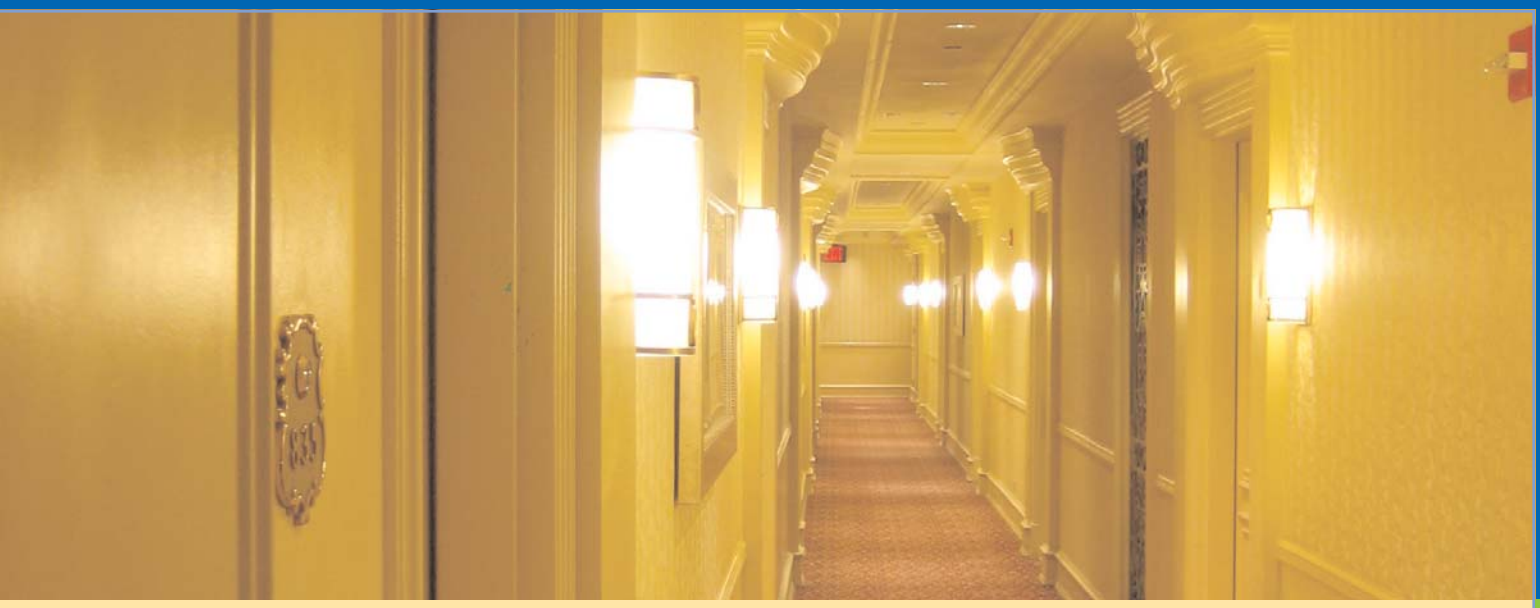


New possibilities: A menu bar displays the available operating functions



Ergonomic: 4 large keys arranged in one row with generous spaces

Easy to understand: Simple Yes/No questions are used for the individual programming steps, avoiding any superfluous and confusing information



Step-by-step text guidance with an illuminated display to make you enjoy programming even in a dark cellar.



Daily and weekly program

Theben's brilliant copy function allows quick setting of the daily or weekly program. The OK key can be used to add further weekdays with the same switching times by copying.



High flexibility in calling, changing and deleting data

.In addition to the easy calling, changing and deleting of data, it is also possible to extract individual weekdays from weekday blocks to change their switching times.



Service interval monitoring

The integrated running-time meter acquires per channel the operating hours of the connected consumers. Additional "SERVICE" display upon expiration of the defined maintenance interval.



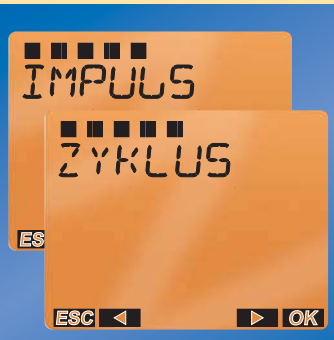
Countdown timer Time can be set between 1 min. and 23 hrs. 59 min.

Single setting of the switching duration (party switching function) as an overlay function of the switching program. The timer may also be used for laboratory applications.



Date-controlled holiday program ON/OFF/RANDOM

.Easy setting of the desired holiday program also during the turn of the year. Allows combination with 2 random programs (program time shifting or time-slot controlled random switching).



Split-second programming

Exact control of signal times as well as fast programming of cyclically repeated switching times (PULSE/PAUSE) within the desired time phase.

... the brilliant OBELISK top2 memory card ...





What to do if you need a different time switch program only once, e.g. on the occasion of an Open Day? The OBELISK top2 memory card enables the use of two alternative programs without reprogramming.



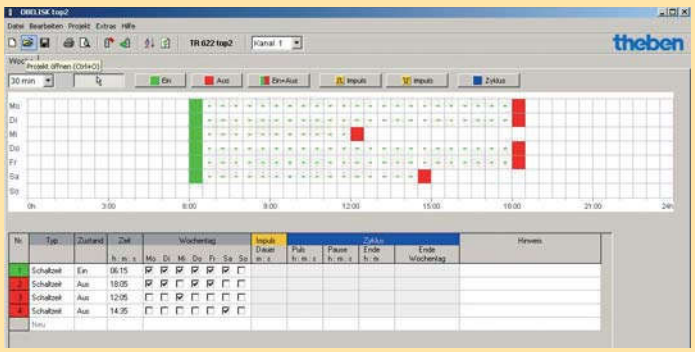
Dual programming
With the memory card plugged in, it is possible to execute an alternative program stored on it. Once the card is removed, the program stored in the time switch will again be executed.



Displaying the program
The time switch program stored on the card can be called for display at any time without rewriting the program stored in the time switch.



Safe storage of the program
The memory card can be stored under the hinged cover of the time switch, electrically separated from it and without requiring additional space in the switch box. The cover protecting the memory card can be sealed.



PC software
Clearly structured and easy to understand: The additional OBELISK top2 PC software allows to easily create switching programs on your own computer. Even complicated programs can be created within minutes by mouse click. The switch-on phases are clearly displayed in a chart and automatically recorded in a table. Thus it is possible to save, print or export the programs to Excel for the individual customers.



OBELISK top2 Programming kit
A program created on the PC by means of the convenient OBELISK top2 software can be transferred via USB interface to the OBELISK top2 memory card and from the card to the time switch (and vice versa). Thus no PC or laptop is required on-site. Programming as well as the program printout can be realised conveniently from the desk.

... easy connection method using plug-in terminals ...

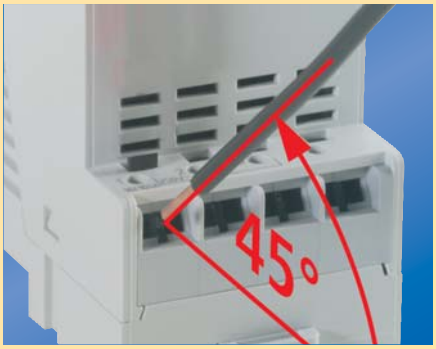




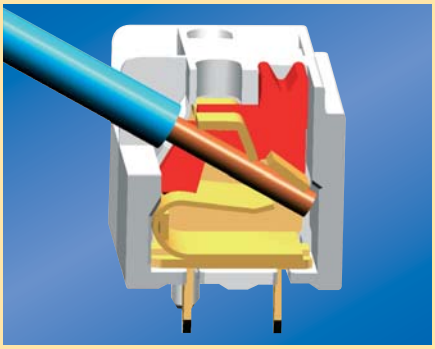
No more screws required in the switch cabinet: The convenient plug-in spring terminals ensure fast, clean and safe installation of the TERMINA top2.



Open for everything
The terminals accept wires with cross-section ranging from 0.5 to 2.5 mm² as well as rigid conductors and flexible cables with and without end sleeves.



Optimal insertion angle
An angle of 45 degrees allows easy insertion of the wire as the terminal openings are visible.



Fast, reliable, stable
Safe contact is ensured by a plug-in terminal that has been developed especially for Theben.



Single and double connection
Each terminal can accept 2 wires, each wire being held by a separate spring.

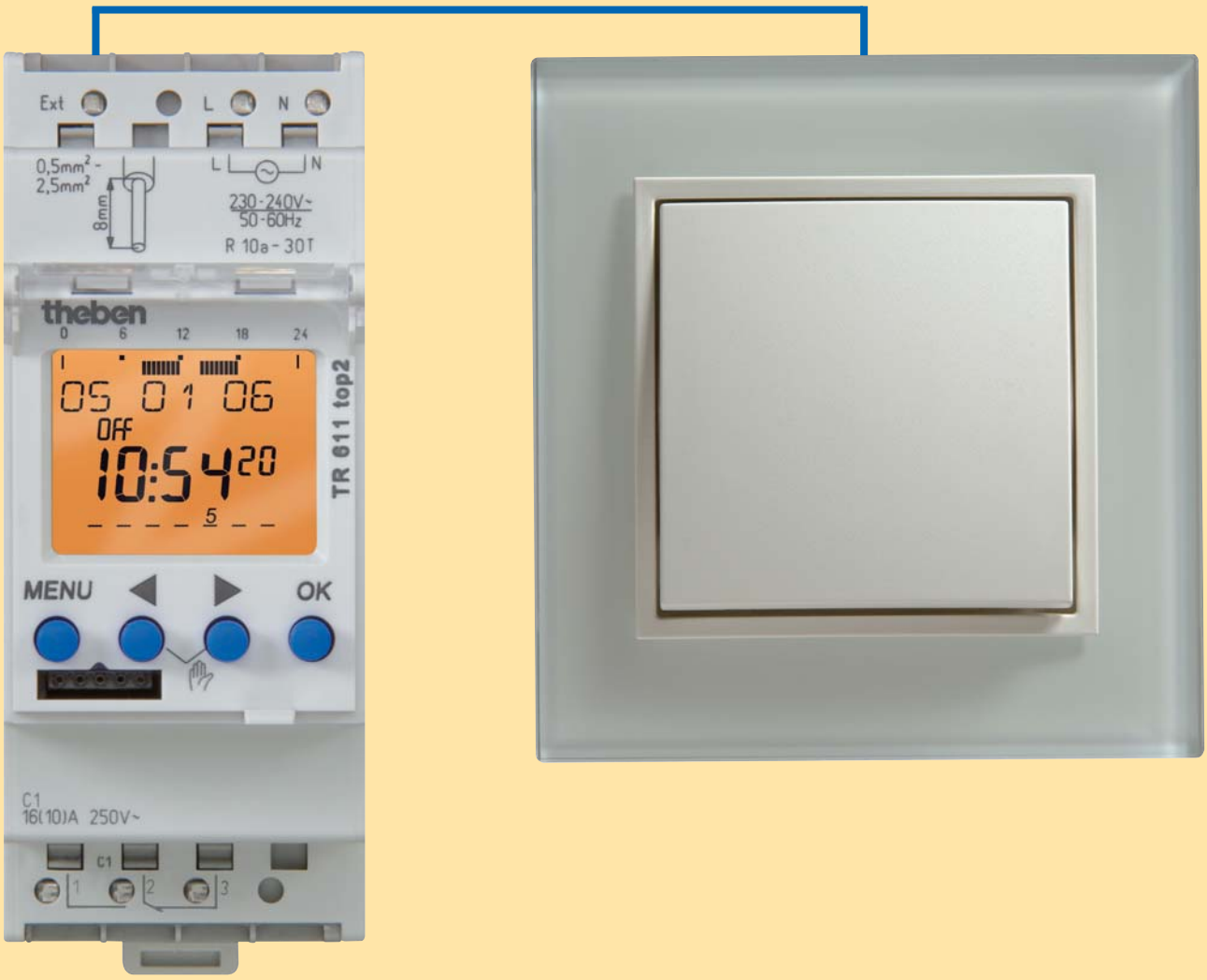


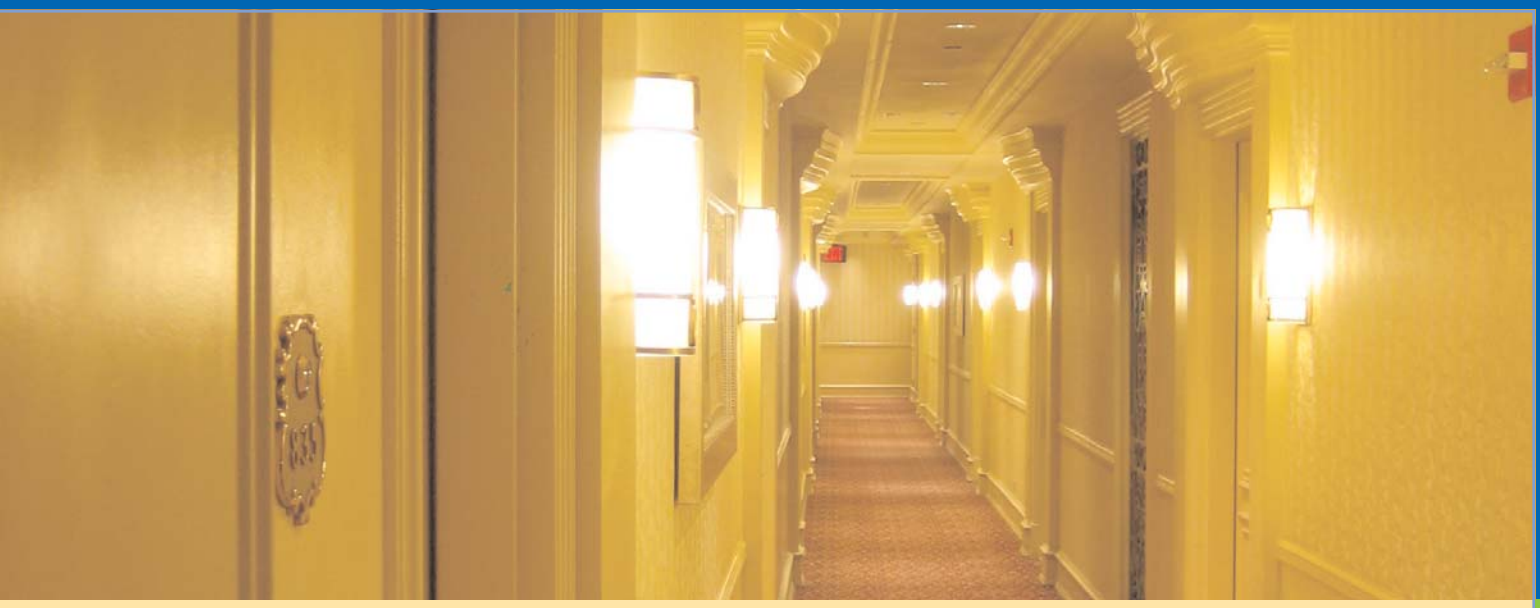
Easy checking
Once the wire is plugged in, the connection can be checked with a test point.



Easy loosening
By means of the phasing tester, the plug-in connection can easily be loosened via an integrated key.

... and finally, an external input for buttons or switches.





Even faster, even easier, even more convenient: The proven TERMINA top philosophy has been maintained and further optimised. The new TERMINA top2 now offers even more advantages.



External control input

For each channel, it is possible to connect a switch or several buttons to the external control input of the time switch. The control input allows calling the following five functions: Permanent ON, Permanent OFF, switching preselection, countdown timer (hour glass function) and channel release (activation of the time switch).



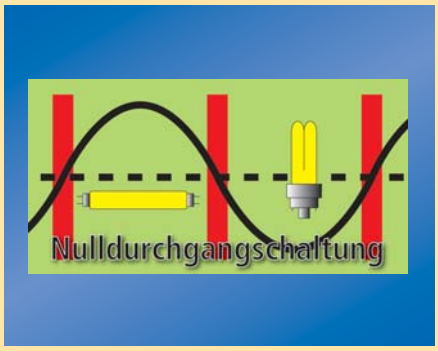
Stairway lighting

For corridor or stairway lighting with time-controlled permanent light phase, a button-controlled short-time lighting may be activated out of this permanent light phase. In the stairwell, several buttons can be connected in parallel to the input.



Household water control

The circulation pump for the household water is programmed in accordance with its use in the morning, at lunchtime and in the evening. Out of these periods, warm water circulation can be activated for some minutes by means of a button in the kitchen and bathroom, thus saving energy and increasing comfort.



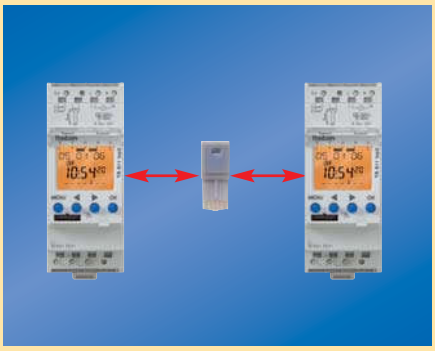
Zero cross switching

High switching power is achieved by an electronically controlled load connection in the zero cross switching of the mains alternating voltage. The service life of the contacts is considerably increased, particularly with respect to lamp and motor loads.



DCF77 radio control

Maximum time precision thanks to automatic time synchronization with the time signal transmitter DCF77 in Mainflingen near Frankfurt.



Copying from timer to timer

If a program is created directly on the time switch, it can easily be transferred from one time switch to the other using the OBELISK top2 memory card.

TR 610 top2, TR 612 top2

Digital time switches with text-oriented user guidance in the display, OBELISK interface and plug-in terminals.

top | 10:54 | 7d | 24 h | ±1h auto



TR 610 top2

Functions:

- Daily and weekly program
- Operation by means of 4 keys arranged in one row
- Integrated running-time meter for max. 500.000 hours with reset option and service function for monitoring of maintenance intervals and "Service" display, separately for each channel
- Plug-in spring terminals, each one accepting 2 conductors, wires or strands
- Display illumination (can be switched off)
- Interface for Obelisk top2 memory card for PC programming, 2nd switching program to be plugged in, copying of programs and safe storage of the program
- Date-controlled holiday program
- Extended temperature range –30 °C ... +55 °C
- High accuracy: ±0,5 s/day
- 10 years power reserve by lithium cell
- Zero cross switching for relay-saving switching and high lamp loads
- Switching preselection
- Permanent switching ON/OFF
- PIN encoding

TR 610 top2 TERMINA®

- 1 channel with 56 memory locations, EEPROM

TR 612 top2 TERMINA®

- 2 channels with 56 memory locations, EEPROM

Technical data:
Nominal voltage: 230–240 V~, ±10 %
Frequency: 50/-60 Hz
Device consumption: max. 6 VA
Contact: potential-free
Contact material: $AgSnO_2$
Switching power:
16 A, 250 V~, cos φ = 1;
10 A, 250 V~, cos φ = 0,6
Incandescent lamp load: 2600 W
Halogen lamp load: 2600 W
Fluorescent lamps:
non compensated, series comp. 1000 VA,
parallel compensated 730 VA (80 µF)
Compact fluorescent lamps: 22 x 7 W, 18 x 11 W, 16 x 15 W, 16 x 20 W, 14 x 23 W
Time basis: quartz
Accuracy: ≤ ±0,5 s/day at 20 °C
Shortest switching interval: 1 minute (pulse/cycle 1 s)
Switching accuracy: split-second
Display: back-lit LCD display with text line
Operating elements: 4 touch keys
Power reserve:
about 10 years with autosleep allowing full operation (temp. 20 °C) by non-polluting lithium cell
Admissible ambient temperature:
–30 °C...+55 °C
Housing and insulation material:
self-extinguishing thermoplasts with high temperature resistance
Protection class: II according EN 60730-1 subject to installation as intended
Protection type: IP 20 according to DIN EN 60 529
Weight: approx. 170 g

Type	Program	Memory locations	Power reserve (lithium)	Programming every ...	Control inputs	Switching cont.	Nom. current at 250 V ~	Order No.
TR 610 top2 1 channel	24 h/7 d, running time meter, holiday program	56	10 years	1 min	–	1 change-over	16 (10) A	**610 0 100**
TR 612 top2 2 channels		56	10 years	1 min	–	2 change-over	16 (10) A	**612 0 100**
OBELISK top2 programming kit (memory card, plug-in adapter, software)								**907 0 409**
OBELISK top2 memory card (single)								**907 0 404**
Terminal cover for top mounting, sealable								**907 0 064**

TR 611 top2, TR 611 top2 DCF, TR 622 top2

Digital time switches with text-oriented user guidance in the display, OBELISK interface, memory card and plug-in terminals.

top | 10:54 | 7d | 24 h | ±1h auto | Pulse | Cycle | DCF77 | PC



TR 622 top2

OBELISK top2 memory card included!



Aerial top2 RC – DCF

Functions:
- Daily and weekly program
- Operation by means of 4 keys arranged in one row
- Integrated running-time meter for max. 500.000 hours with reset option and service function for monitoring of maintenance intervals and "Service" display, separately for each channel
- Plug-in spring terminals, each one accepting 2 conductors, wires or strands
- Display illumination (can be switched off)
- Interface for Obelisk top2 memory card for PC programming, 2nd switching program to be plugged in, copying of programs and safe storage of the program
- Date-controlled holiday program
- Extended temperature range –30 °C ... +55 °C
- High accuracy: ±0,5 s/day
- 10 years power reserve by lithium cell
- Zero cross switching for relay-saving switching and high lamp loads
- Switching preselection
- Permanent switching ON/OFF
- PIN encoding

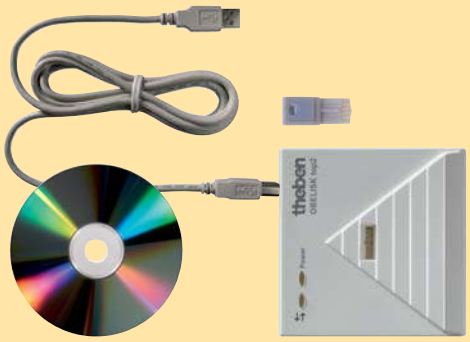
TR 611 top2 TERMINA®
- 1 channel with 84 memory locations, EEPROM
- Pulse program, cycle program, countdown timer
- Selection of 2 different random programs
- External control input (diff. functions can be selected)
- OBELISK top2 memory card included in the delivery

TR 611 top2 RC TERMINA®
identical with TR 611 top2, however:
- DCF77 radio-controlled via an external aerial
- Power supply unit for aerial integrated in the device
- Aerial connection with safety extra low voltage, protection class III
- OBELISK top2 memory card included in the delivery

TR 622 top2 TERMINA®
- 2 channels with 84 memory locations, EEPROM
- Pulse program, cycle program, countdown timer
- Selection of 2 different random programs
- 2 external control inputs (diff. functions can be selected)
- OBELISK top2 memory card included in the delivery

Technical data:
Nominal voltage: 230–240 V~, ±10 %
Frequency: 50/-60 Hz
Device consumption: max. 6 VA
Contact: potential-free
Contact material: $AgSnO_2$
Switching power:
16 A, 250 V~, cos φ = 1;
10 A, 250 V~, cos φ = 0,6
Incandescent lamp load: 2600 W
Halogen lamp load: 2600 W
Fluorescent lamps:
non compensated, series comp. 1000 VA,
parallel compensated 730 VA (80 µF)
Compact fluorescent lamps: 22 x 7 W, 18 x 11 W, 16 x 15 W, 16 x 20 W, 14 x 23 W
Time basis: quartz
Accuracy: ≤±0,5 s/day at 20 °C
Shortest switching interval: 1 minute (pulse/cycle 1 s)
Switching accuracy: split-second
Display: back-lit LCD display with text line
Operating elements: 4 touch keys
Power reserve:
about 10 years with autosleep allowing full operation (temp. 20 °C) by non-polluting lithium cell
Admissible ambient temperature:
–30 °C...+55 °C
Housing and insulation material:
self-extinguishing thermoplasts with high temperature resistance

Protection class: II according EN 60730-1 subject to installation as intended
Protection type: IP 20 according to DIN EN 60 529
Weight: approx. 170 g



OBELISK top2 PC Programming kit

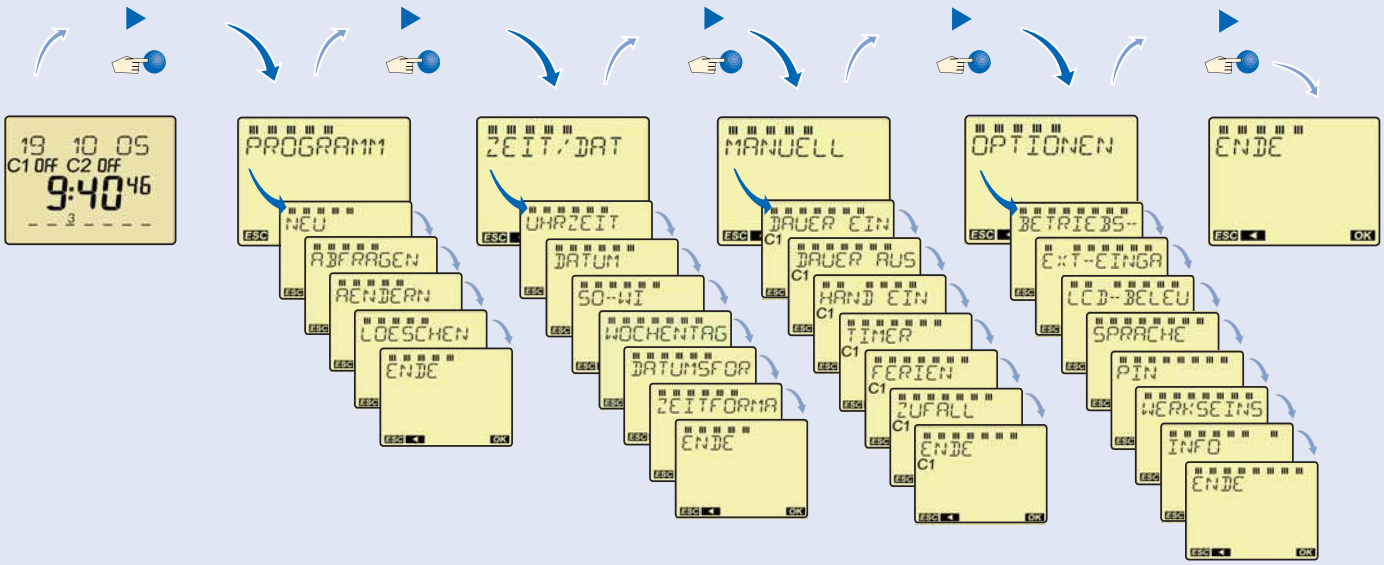
Type	Program	Memory locations	Power reserve (lithium)	Programming every ...	Control inputs	Switching cont.	Nom. current at 250 V ~	Order No.
TR 611 top2 1 channel	24 h/7 d, runng. time meter, holiday progr., pulse a. cycle progr., countdown timer, 2 random progr.	84	10 years	1 s	1	1 change-over	16 (10) A	**611 0 100**
TR 611 top2 RC 1 channel		84	10 years	1 s	1	1 change-over	16 (10) A	**611 0 300** Available as of 05/2007
TR 622 top2 2 channels		84	10 years	1 s	2	2 change-over	16 (10) A	**622 0 100**
OBELISK top2 programming kit (memory card, plug-in adapter, software)								**907 0 409**
OBELISK top2 memory card (single)								**907 0 404**
Aerial top2 RC – DCF max. 5 TERMINA top2 devices can be connected								**907 0 410**
Terminal cover for top mounting, sealable								**907 0 064**

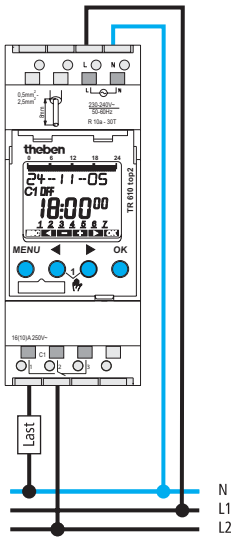
Selection table

Digital time switches TERMINA top2

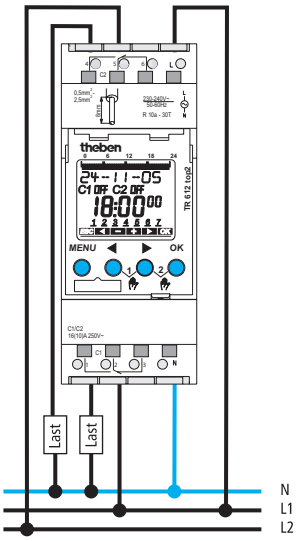
Device type	TR 610 top2	TR 612 top2	TR 611 top2	TR 611 top2 RC	TR 622 top2
Order No.	610 0 100	612 0 100	611 0 100	611 0 300	622 0 100
Daily / weekly program	•	•	•	•	•
Channels	1	2	1	1	2
Memory locations	56	56	84	84	84
Switching time program	•	•	•	•	•
Pulse program			•	•	•
Cycle program			•	•	•
Manual switching (switching preselection)	•	•	•	•	•
Permanent switching (Permanent)	•	•	•	•	•
Holiday program (Permanent ON/OFF)	•	•	•	•	•
Countdown timer (hour glass function)			•	•	•
Random switching			•	•	•
Holiday program (w. random function)			•	•	•
Running-time meter	•	•	•	•	•
PIN encoding	•	•	•	•	•
Zero cross switching	•	•	•	•	•
External control input			•	•	•
Permanent switching and channel release via external switch			•	•	•
Manual switching and timer function via external switch			•	•	•
Interface for OBELISK top2 Memory card	•	•	•	•	•
OBELISK top2 memory card included in the delivery			•	•	•
DCF time synchronization (external aerial required)				•	

Overview of the menu levels Example TR 611 top2/TR 622 top2

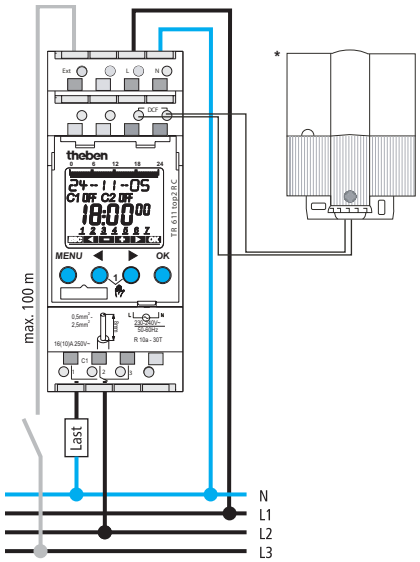




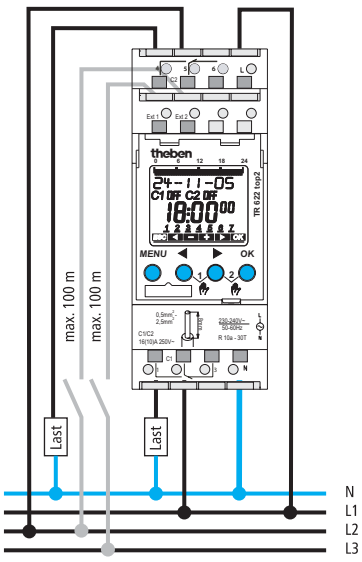
TERMINA TR 610 top2



TERMINA TR 612 top2



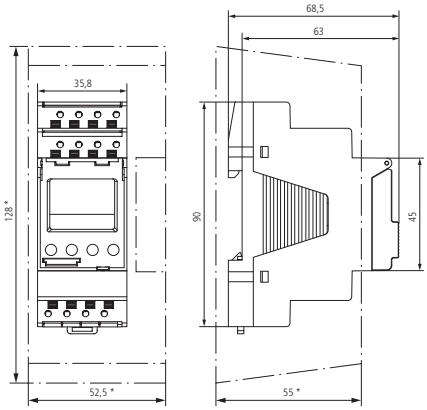
TERMINA TR 611 top2
* TR 611 top2 RC with additional aerial top2 RC – DCF



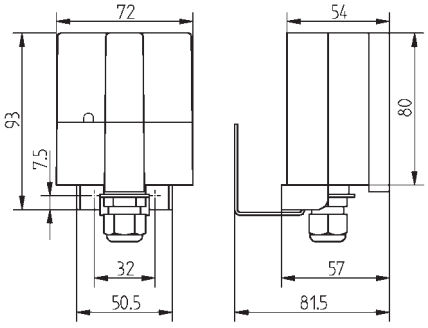
TERMINA TR 622 top2

Dimensional drawings according to DIN 43 880

*with terminal cover



Dimensional drawings Antenna top2 RC – DCF



Terminal cover



Design

- Standardized housing 45 x 35 x 60 mm according to DIN 43 880
- Quick fastening for 35 mm profile rail (DIN EN 50 022)
- Contact protection according to accident prevention regulation BGV A3
- Top mounting with additional terminal cover, sealable
- Control panel installation using mounting kit no. 907 0 001
- Undetachable hinged cover, sealable






from specialists theben for specialists

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