

TR 644 top2

Article number: 6440100

Description



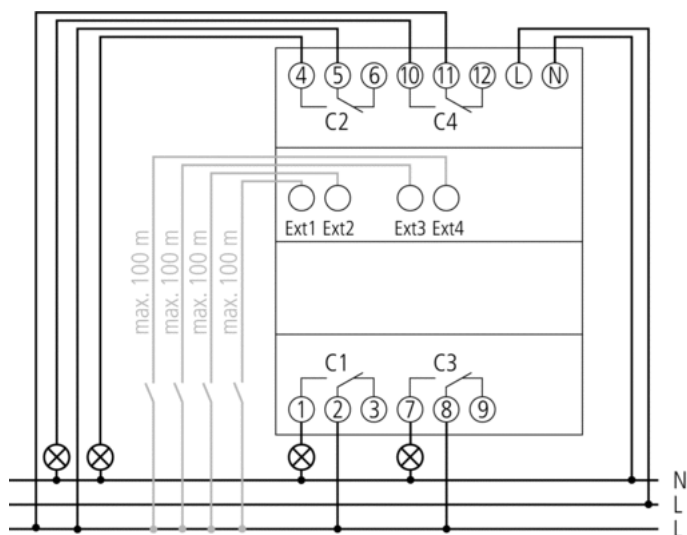
- Digital time switch with yearly and astronomical time program
- 4 channels
- 4 external control inputs
 - Connectable sensors (external selector switch, sequence timer)
 - Connectable switches (ON or OFF permanent switching)
- DuoFix spring terminals
 - For 2 conductors each
 - Wire or strand (with or without wire end sleeve)
 - Wire diameter: 0.5 - 2.5 mm²
 - Button for releasing plug-in connection
- Text-oriented user guidance in display
 - Preset date and time
 - fully operable without mains connection
- 800 memory locations
- Interface for OBELISK top2 memory card (PC programming)
- 2. insertable switching program
- Copying programs
- Storing programs
- OBELISK memory card included in delivery
- 10 year power reserve (lithium battery)
- Zero-cross switching for leay-saving switching and high lamp loads
- Automatic summer/winter time changeover
 - can be deactivated
 - Date rule options are already stored for Europe, the USA and other countries
 - own date rule options or changeover around set dates are available
- ON-OFF switching times
- Pulse program
- Cycle program
- Extensive yearly clock functions
 - Basic weekly program and 14 different weekly programs with priority levels and date ranges
 - Permanent ON / permanent OFF with highest priority via date range program option
 - fixed and variable public holidays, public holidays dependent on Easter, day and date ranges with serial pattern
 - Public holiday database for Germany including all Federal states, Switzerland, France etc.
 - Program simulation on clock display
- Graphic program simulation with 12 month overview for all channels on PC
- Astronomical time switch function (automatic calculation of sunrise and sunset times for the whole year)
 - Offset for adjusting of sunrise and sunset times
 - Position data via coordinates or country/city lists can be programmed
 - Optional production of own city list (favourites) and a table with own astronomical times on PC
 - Fixed ON-OFF switching times can be programmed (e.g. night time interruption)
 - Simulation of astronomical switching times (calculated astronomical times and programmed ON/OFF switching times) for the whole year
 - various astronomical setting options (evening ON - mornings OFF or evenings OFF - mornings ON, astronomical pulse)
- Switching preselection
- Permanent switching ON/OFF
- Count-down timer
- Integrated operating hour counter
 - Reset option
 - Service function for monitoring maintenance intervals
- Holiday program
- 2 random programs
- Display back light (can be turned off)
- PIN coding

Technical data

Operating voltage	110 – 240 V AC
Frequency	50 – 60 Hz
Width	4 modules
Installation type	DIN rail
Type of contact	4 two-way switches
Switching output	Phase-independent (Zero-cross switching)
Opening width	< 3 mm
Program	Yearly program, Astronomical program
Program functions	ON-OFF, Pulse, Cycle
Number of channels	4

External inputs	4
Number of memory locations	800
Power reserve	8 years
Switching capacity at 250 V AC, $\cos \varphi = 1$	16 A
Switching capacity channels 1+3	10 A
Switching capacity at 250 V AC, $\cos \varphi = 0,6$	10 A
Incandescent/halogen lamp load 230 V	2300 W
Incandescent/halogen lamp load 120 V	1150 W
Energy saving lamps 230 V	37 x 7 W, 30 x 11 W, 26 x 15 W, 26 x 20 W, 11 x 23 W
Energy saving lamps 120 V	18 x 7 W, 15 x 11 W, 13 x 15 W, 13 x 20 W, 11 x 23 W
Switching capacity min.	ca.10 mA
Shortest switching times	1 s
Time accuracy	$\leq \pm 0.5$ s/day (quartz)
Time basis	Quartz
Stand-by consumption	0,5 W
Memory card supplied	-
Type of connection	DuoFix spring terminals
Keyboards	4 touch buttons, 4 buttons for manual switching
Drive	Quartz-controlled stepper motor
Housing and insulation material	High-temperature resistant, self-extinguishing thermoplastic
Type of protection	IP 20
Protection class	II as per EN 60 730-1
Ambient temperature	-30 °C ... +45 °C

Connection example



Accessories

Wall mounting kit 70 mm

- Article number: 9070049
[Details ▶ www.theben.de](http://www.theben.de)



PC set OBELISK top2

- Article number: 9070409
[Details ▶ www.theben.de](http://www.theben.de)



Memory card OBELISK top2

- Article number: 9070404
[Details ▶ www.theben.de](http://www.theben.de)



Front panel kit

- Article number: 9070001
[Details ▶ www.theben.de](http://www.theben.de)

