



24 HOUR & 7 DAY TIME CONTROLS

Series 16000 • Built in Timeswitch

Features

- Driven by quartz controlled stepper motor, with or without power reserve
- Program disc with 144 nondetachable switch actuators in the daily version and 168 nondetachable actuators in the weekly version
- Programmable every
 - 10 minutes (daily version)
 - 1 hour (weekly version)
- Shortest switching interval
 - 20 minutes (daily version)
 - 2 hours (weekly version)
- Simple and fast setting
- Indication of switch-on period by red disc section
- Connection by tab terminals 6.3 x 0.8 mm

Programming

- Set actual time-of-day and weekday by rotating the glass. Time-of-day is shown by the hands. Rotate either direction.
- Manual switch with indication of contact position
- Programming by moving the shift actuators
- Visible part of the red disc section shows switch-on period

Applications

Electric appliances and installations with periodically recurring working cycles, e.g., heating systems, furnaces, drying and annealing ovens, automatic feeders, laboratory and test equipment, security and alarm systems, etc.



BORG GENERAL CONTROLS

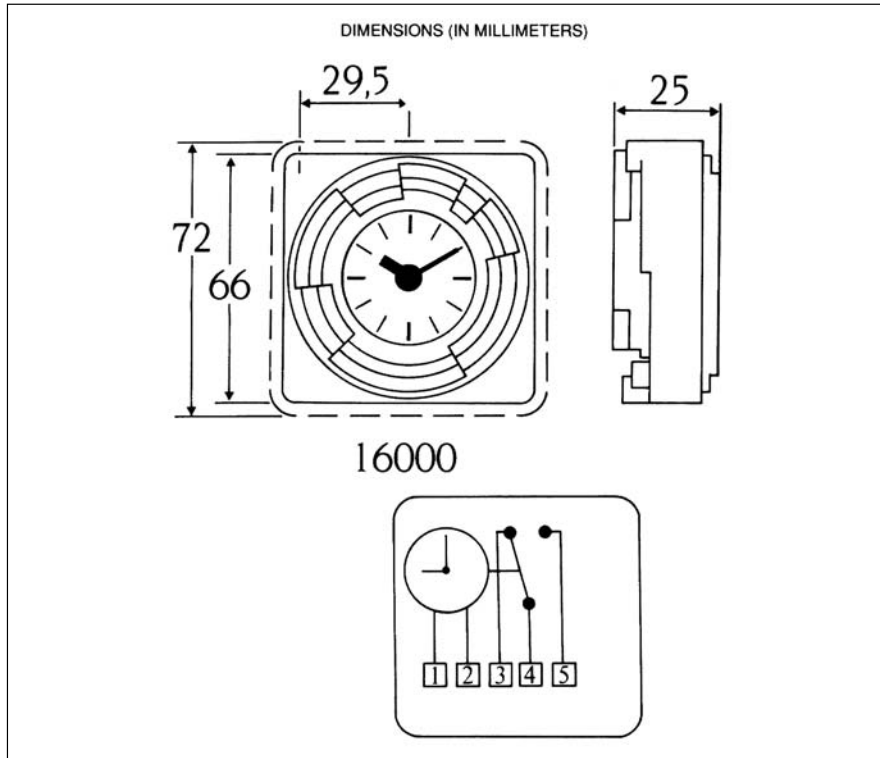
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24 HOUR & 7 DAY TIME CONTROLS

Series 16000 • Built in Timeswitch



Technical Data

- Rated voltage 110V, 220V, 260VAC, 6-26 VDC. Other voltages upon request.
- Rated frequency 50/60 Hz.
- Power reserve 72 hours on *Models 16001 and 16701 only
- Rated power 0.5 VA
- Changeover contact
- Switch rating 16 Amp/250V~
- Connections tab terminals 6.3 x 0.8mm to comply with DIN 46244
- Ambient temperature range: -10°C to +50°C (T50)

Approvals

ASE-SEV, BEMKO, NEMKO, SEMKO, SEI
CSA certified
UL recognized

Mounting

- Dimensions see above
- Flange for flush mounting (panel opening 68 x 68mm to comply with DIN 43700) or plug-in fitting piece for mounting on PC board or plug-in fitting piece for panel mounting
- Live parts must not be accessible

PROGRAM SETTING

Ref.	Cycle	Minimum Interval Between 2 Actions	Programming Interval	Actions Obtainable	Number Segment
16001* 16009	24 hr.	20 min.	10 min.	72	144
16701* 16710	7 days	2 hr.	1 hr.	84	168

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**Time switches
for incorporation
72 x 72 mm**



Features

- Programming by unlosable segments. A red zone is unmasked by the segment when put into the ON state; in the OFF state this red zone is masked.
- Indication of time by clock hands allowing time setting in both directions by simple rotation. Summer/winter time corrections are easily carried out
- Manual instant override control with automatic return to normal sequence of program, display of contact.
- Fitting
 - flush fitting on facade, fixation clamp from front type BR6 or clipped clamp from the rear type BR7, connection by flat connectors of 6.35 mm
 - on surface mounted base,
 - on printed circuit

Functional characteristics

Daily version:

- Programming in steps of 10 min
- Minimum interval between 2 switchings: 20 minutes
- 72 switchings per day
- Accuracy of switching: 1 min. 30 sec.

Weekly version:

- Programming in steps of 1 hour
- Minimum interval between 2 switchings: 2 hours
- 84 switchings per week
- Accuracy of switching: 10 min.

Technical characteristics

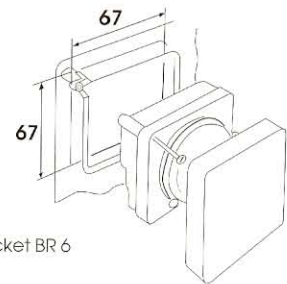
Supply voltage	230 V +10% -15%	
Frequency	50/60 Hz	
Power consumption	approx. 0.5 VA	
Changeover contact voltage free	Resistive load	16 A 250 V
	inductive load (cos φ = 0.6)	3 A 250 V
	incandescent lamps	1000 W 250 V
	squirrel-cage motor	350 W 250 V
Time base	quartz	
Accuracy of operation	1 s/24 h	
Operating temperature	-10°C to +50°C	
Storage temperature	-20°C to +60°C	
Insulation class (flush fitting)	II	
Protection index (flush fitting)	IP 20	
Conformity to standard EN 60.730	yes	

Different versions

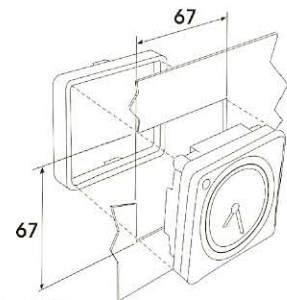
Reference	Type of fixation	Cycle	Power reserve	Contact
16001	BR6 - BR7	24 h	200 h	16 (3) A
16009	BR6 - BR7	24 h	—	16 (3) A
16701	BR6 - BR7	7 d	200 h	16 (3) A
16710	BR6 - BR7	7 d	—	16 (3) A
16061	BR7	24 h	200 h	16 (3) A
16062	BR7	24 h	—	16 (3) A
16761	BR7	7 d	200 h	16 (3) A
16762	BR7	7 d	—	16 (3) A

Also available in the following versions:
 - 100 to 250 V AC and 45V DC (cycle 24 h or 7 d with or without running reserve)
 - 6 to 24V AC/DC (cycle 24 h or 7 d with or without running reserve)

Performances indicated for an ambient temperature of 20°C

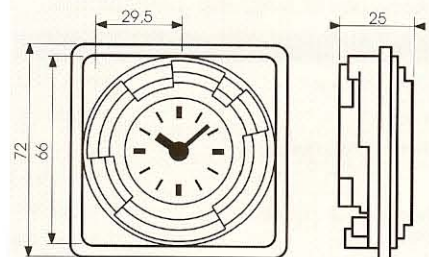


Fixation bracket BR 6
ref. 95583

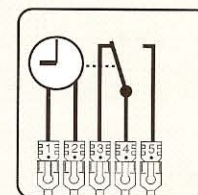


Fixation bracket BR 7
ref. 95588

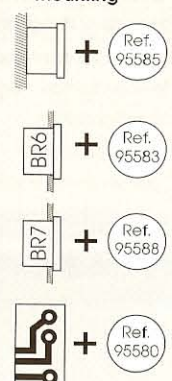
Dimensions



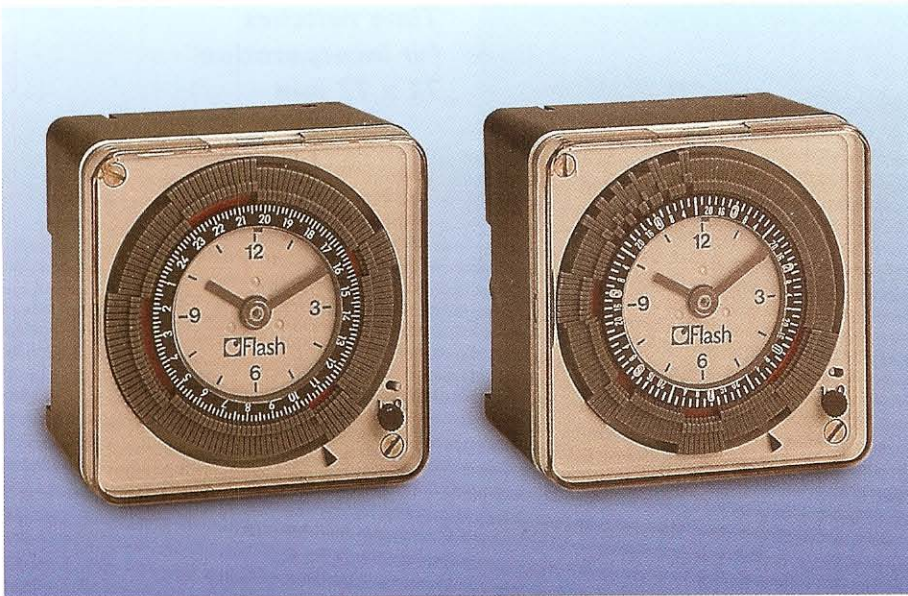
Electrical connections



Mounting



Time switches in surface mount case 72 x 72 mm installation version



Features

- Programming by unlosable segments. A red zone is unmasked by the segment when put into the ON state; in the OFF state this red zone is masked.
- Indication of time by clock hands allowing time setting in both directions by simple rotation. Summer/winter time corrections are easily carried out.
- Manual override control with automatic return to normal sequence of program.
- Display of condition of contact
- Plug-in time switch with stirrup terminals incorporated in the case
- Fixation without accessories
 - surface mounted
 - on symmetrical rail
 - flush mounted
- 16 A changeover contact without potential

Functional characteristics

Daily version:

- Programming in steps of 10 min
- Minimum interval between 2 switchings: 20 minutes
- 72 switchings per day
- Accuracy of switching: 1 min. 30 sec.

Weekly version:

- Programming in steps of 1 hour
- Minimum interval between 2 switchings: 2 hours
- 84 switchings per week
- Accuracy of switching: 10 min.

Technical characteristics

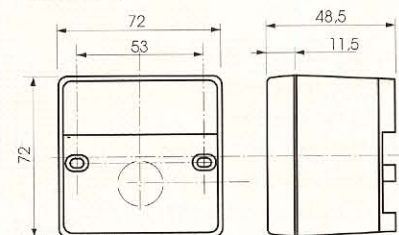
Supply voltage	6 to 24 V AC/DC or 100 - 250 V AC or 230 V +10% -15%	
Frequency	50/60 Hz or DC 50/60 Hz 50/60 Hz	
Power consumption	approx. 0,5 VA	
Changeover contact voltage free	Resistive load	16 A 250 V
	inductive load (cos φ = 0,6)	3 A 250 V
	incandescent lamps	1000 W 250 V
	squirrel-cage motor	350 W 250 V
Time base	quartz	
Accuracy of operation	1 s/24 h	
Operating temperature	-10°C to +50°C	
Storage temperature	-20°C to +60°C	
Connection by cage terminals, section of conductors	1 to 6 mm ²	
Insulation class	II	
Protection index	IP 20	
Conformity to standard EN 60.730	yes	

Different versions

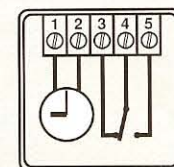
230 V	Reference	Cycle	Power reserve	Contact
16021	6 to 24 V AC/DC 100-250 V AC & 48 V DC	24 h	200 h	16 (3) A
16022	16027 16302	24 h	—	16 (3) A
16721	16017 16301	7 d	200 h	16 (3) A
16722	16720 16602	7 d	—	16 (3) A
	16715 16601			16 (3) A

Performances indicated for an ambient temperature of 20°C

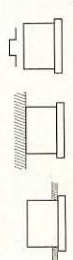
Dimensions



Electrical connections



Mounting



See technical guide page 58