

## ZDR: Time-switch

### How energy efficiency is improved

Programmable switching times reduce stand-by losses with electrical loads.

Because of its bi-stable relay outputs, the device has minimal energy consumption of approx. 0.6 W.

### Areas of application

For the time-controlled activation of electrical loads such as lighting, heating, ventilation, pumps, chillers, alarm systems, etc.

### Features

- Microprocessor-controlled, fully-electronic daily and weekly time-switches
- Suitable for applications with high switching capacity
- Fully automatic switching of loads
- Integrated summertime/wintertime change-over and holiday function
- Easy to operate thanks to NUM keypad and illuminated LCD display
- The optional memory enables optimised switching times to be entered and exported for copying to another device
- Super-capacitor instead of batteries as back-up power supply
- Operating instructions stored safely in a separate compartment in the housing

### Technical description

- Power supply: 230 V~
- Maximum switching power: 16 A, 250 V~
- Back-up power supply: up to 36 hours
- Up to 58 memory addresses in two channels with up to 406 switching commands

Type	Power	Number of channels	Memory addresses <sup>1)</sup>	Weight kg
ZDR 101 F011	230 V~	1	57	0,41
ZDR 102 F021	230 V~	2	58	0,43

Power supply 230 V~	± 10%, 50...60 Hz	Permissible limit values:- Contact rating	16 (6) A, 250 V~
Power consumption	approx. 0,6 W (1,2 VA)		
Functional data:-		Ambient conditions:-	
Back-up power supply 20 °C	approx. 36 h	Permissible ambient temp.	-5...35 °C
Accuracy	± 0.4 (sec per day)	Degree of protection	IP 41 (EN 60529)
Shortest switching interval	1 min	Protection class	II (IEC 60730)
Pulse duration	2 s	Wiring diagram	ZDR 101 <a href="#">A01090</a> ZDR 102 <a href="#">A03089</a>
		Dimension drawing	<a href="#">M275250</a>
		Operating instructions <sup>2)</sup>	505105 . . .

### Accessories

- [0226187 001\\*](#) External memory
- [0226187 002\\*](#) Plug-in dummy for memory slot (empty, as a cover)
- [0275490 000](#) Frame for panel mounting
- [0226327 001](#) Sealable transparent cover

\*) Dimension drawing or wiring diagram are available under the same number

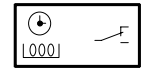
- 1) If blocks with validity for Mo-Su are formed, there are 399 memory addresses (single-channel) or 406 memory addresses (dual-channel).
- 2) In 6 languages, delivered with each unit. Language code: German = 001; French = 002; English = 003; Italian = 004; Spanish = 005; Swedish = 008.

### Operation

The *memotime* is a microprocessor-controlled, fully-electronic time-switch with programmable hour, day and week settings; with LCD display. Applying power across terminals 1 and 2 renders the clock operable.

The bi-stable output relay retains its status even after a power failure, though no switching operations are carried out in such cases. When power is restored, the appropriate switching status is re-instated in accordance with the program.

The switching status can also be set by hand using the ON/OFF buttons. By switching over to TIME, the switching program in the memory is overridden (holiday function) without loss of data.



Y03175



Y03090

**Functions**

IMPULS	Pulsing instead of relay-contact change-over
1 x	Special-day timer program with automatic reset to AUTO
CODE	Programming block via freely-selectable 4-digit code
DAILY	Daily switching program for seven days
M	Read-in or -out function for the memory
RESET	All individual data are erased
Display	Menu-led LCD function display with time

**Operating modes**

TIME	Inputs: time, date, summertime/wintertime change-over, absence
AUTO	Automatic operation as per program
PROG	Programming the memory (single-circuit model)
PROG A	Programming the memory for channel A (dual-circuit model)
PROG B	Programming the memory for channel B (dual-circuit model)
TEST	Checking the program in chronological order

**Programming**

Entries are made on a ten-figure key pad which can be blocked with an entry code. Number of switching commands per week (either as change-over or as pulse):-

- 57 memory addresses on the single-circuit model; 399 switching commands with DAILY
- 58 memory addresses on the dual-circuit model; 406 switching commands with DAILY.

Additional priority programs or single switching times can be programmed up to 6 days in advance (e.g. holidays, periods of absence or party times).

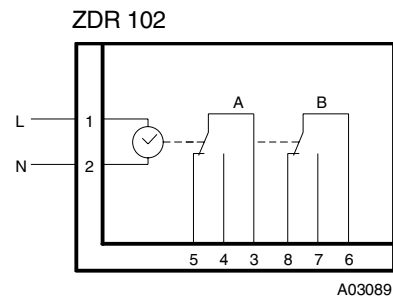
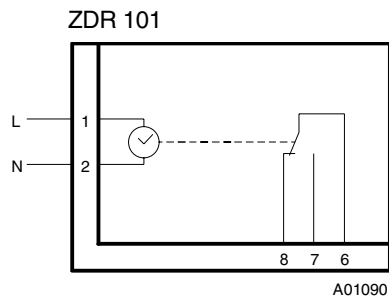
**Additional technical data**

Complies with:-	
Directive 2006/95/EC	EN 60730-1/ EN 60730-2-7
EMC directive 2004/108/EC	EN 61000-6-1/ EN 61000-6-2 EN 61000-6-3/ EN 61000-6-4

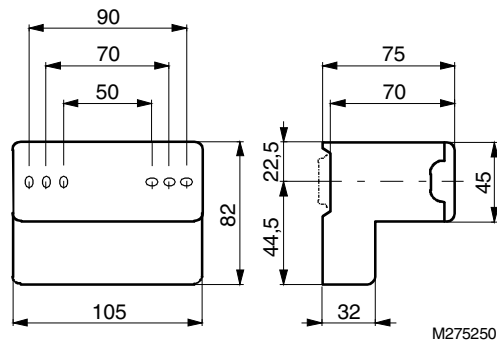
**Fitting instructions**

After electrical connection has been made via the terminal socket, the device can be inserted and secured with a sealable screw.

**Wiring diagrams**



**Dimension drawing**



**Accessories**

