



## DATA SHEET

### stairwell lighting time switches

#### RTZ F

#### electronic stairwell lighting time switches with switch-off pre-warning

Article number 09980720



[Internetlink](#)



#### Function

Stairwell light time switches or automatic switches are time relays that are electromagnetically or electronically operated for controlling stairwell or corridor lighting. They are usually activated by switches operated in parallel, where the switch-on time can generally be adjusted. In contrast to standard time relays, they usually have special functions, such as a switch-off pre-warning or run-on time. Stairwell light time switches from series RTZ have a wide range of functions and control inputs that can be used flexibly. The control input allows the connection of switches with a total of up to 100 mA glow lamp current and the use of three or four-wire circuits. The device can be switched downstream via the connected switches and switched off by holding down the key (energy saving function). "Pumping" increases the run-on time to a multiple of the freely adjustable time. Depending on the design variant, a number of operating modes can be selected, such as automatic timer with switch-off pre-warning, automatic timer without switch-off pre-warning (RTZ F only), continuous light, switched off, impulse relay without time function (RTZ F only) and impulse relay zero-voltage-proof (RTZ F only).

#### Features

delay adjustable in wide range of 0.5 min to 12 min, LEDs for indicating the supply voltage and output relay position, quiet NO contact for 250 V AC and continuous currents of 10 A (devices connected in series) or 16 A (device not connected in series), control input with overload protection and a max. glow lamp load of 100 mA, operating voltage 230 V AC, automatic 3/4-wire detection, screw terminals even for large cross-sections, compact design

#### Mounting

quick fastening to mounting rail, any installation position

#### Applications

Use for all rooms where energy should be saved by automatically switching off the lighting, e.g. stairwells, corridors or storage rooms in private or commercially used buildings.

#### Notes

A distance of at least 5 mm between the devices must be ensured in the case of continuous currents above 10 A.

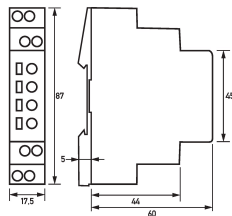
#### Technical Data

Technical Data	RTZ F
Series	RTZ F
Functions time-switch	automatic timer with switch-off warning (TW), automatic timer without switch-off warning (T), pulse relay without time function (P), pulse relay retentively (PN)
Adjustment accuracy	< 15% from scale end value
Repeatability accuracy	2 %
Time delay	0.5 min ... 12 min (adjustable in functions T, TW)
Number of (n.o, n.c., change-over)	1 0 0
Operating voltage (AC)	230 V (196 V ... 253 V)
Operating frequency	48 Hz ... 63 Hz
Internal consumption	max. 2 W
Rated impulse withstand voltage	4 kV
Type	Display supply voltage LED (green)

Technical Data	RTZ F
	Display switch position
Type	LED (yellow)
	control input
Galvanically separated	false
Rated voltage (AC)	230 V (196 V ... 253 V)
Tolerance of rated voltage	-15 % ... 10 %
Rated frequency	50 Hz (48 Hz ... 53 Hz)
	additional control input
Galvanically separated	true
Rated voltage (AC)	8 V ... 230 V
Rated voltage (DC)	8 V ... 230 V
Tolerance of rated voltage	-15 % ... 10 %
Rated frequency	0 Hz ... 50 Hz
	load circuit
Specification	relays
max. Rated current added	10 A
max. Rated current not added	16 A
Overvoltage class	III
max. rated power glow lamps	2000 VA
max. Rated power fluorescent lamp compensated	750 VA
max. Rated power fluorescent lamp not compensated	1000 VA
max. rated power fluorescent lamps duo-switching	1000 VA
	screw-type terminal top and bottom (load circuit)
Connection C1 Maximum number of conductors per terminal	2
Cross section solid	1-wire: 0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Connecting capacity flexible	1-wire: 0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Cross section flexible with ferrule	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Tightening torque	max. 1 Nm
	General data
Duty cycle	continuous operation (Duty cycle ≤ 100 %)
Recovery time	500 ms
Operating position	optional
Mechanical endurance	min. 300 · 10 <sup>6</sup> switching cycles
Electrical endurance	min. 80000 switching cycles (250 V, incandescent lamp load, 1000 VA)
Storage temperature	-25 °C ... 70 °C
Ambient temperature	-25 °C ... 55 °C
Permissible humidity	15 % ... 85 %
Shock resistance	15 g / 11 ms Duration
Housing type	distribution board housing
Mounting type	Mounting rail (35 mm)
Housing material	thermoplastic
Protection class	IP40
sealable	false
Width	17.5 mm
Height	87 mm
Depth	65 mm

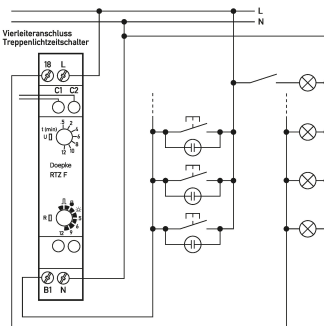
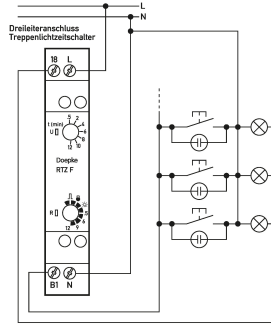
Technical Data	RTZ F
Installation depth	60 mm
Width (modules)	1
Design requirements/Standards	EN 60715, BGV A3, EN 60664-1, EN 60721-3-3, EN 60068-2-6, EN 60068-2-27
Degree of pollution according to EN 60664	2

**Dimensions**



Dimensional drawing Group view

**Wiring example**



Wiring diagram

Wiring diagram 4-wire connection