Timers for buildings

Schematics

Switching example: 7LF6 111 timer in 4-wire circuit, L-momentary contact, resettable

Usual circuit for new installation with separate cable routing for pushbuttons and lights. The additional DI switch allows external switching to permanent light. A time switch can also be used. An additional attic circuit is also available, which operates independently of the timer, but on the same electrical circuit. The timer can be restarted before the set time expires.



 $t_{o} = runtime$

Switching example: 7LF6 111 timer in 3-wire circuit, N-momentary contact, resettable

Can only be used with a limited number of wires. The timer can be restarted before the set time expires. While this 3-wire circuit with N-momentary contact is technically possible, it does not comply with DIN VDE 0100-460. However, it is used in old systems for replacement purposes.



 $t_{\rm o} = {\rm runtime}$

Switching example: 7LF6 112 timer for fans up to 200 VA

The switch switches the light on immediately, e.g. in a toilet. After a delay of approx. 1 minute, the fan is switched on. When the light is switched off, the fan continues to run for the time set at the timer.



Switching example: 7LF6 115 energy-saving timer with advance warning

The timer is connected in the same way as the 7LF6 111 timer in a 4-wire or 3-wire circuit. The energy-saving timer switches on if pressed once and switches off when it is pressed again. If it is not switched off manually, it is automatically switched off after the set time, or max. 60 minutes. 20 and 40 seconds before expiry, the light flashes briefly twice (50 ms) to warn of the impending switch-off. This allows time to reset the switch while the light is still on. Prior to the warning time, a push of the button ends the timing interval.





Switching example: 7LF6 110 timer in 3-wire circuit, L-momentary contact, not resettable

Circuit for new installation with shared cable routing for pushbuttons and lights. The timer can only be restarted after the set time expires.



 $t_{\rm P}$ = runtime

Switching example: 7LF6 113 timer with advance warning

The timer is connected in the same way as the 7LF6 111 timer in a 4-wire circuit or 3-wire circuit. 20 and 40 seconds before expiry, the light flashes briefly twice (50 ms) to warn of the impending switch-off. This allows time to reset the switch while the light is still on.



$t_{\rm e}$ = runtime

Switching example: 7LF6 114 lighting timer with advance warning

The timer is connected in the same way as the 7LF6 111 timer in a 4-wire circuit or 3-wire circuit. When pressed, the lighting timer switches on for the set runtime, up to 10 minutes. If the switch is pressed for more than one second, the light is switched on for four times the set time, i.e. up to 40 minutes. The last press of the pushbutton is decisive. 20 and 40 seconds before expiry, the light flashes briefly twice (50 ms) to warn of the impending switch-off. This allows time to reset the switch while the light is still on. The timing interval restarts each time the button is pressed.



 $t_{\rm e}$ = runtime

BETA Switching

Timers

Timers for buildings

Switching example: 5TT1 303 ECG control switch



The device is fitted with a direct voltage input for the control of an 5LZ....-4 ECG Dynamic. When the pushbutton is actuated, the power supply is released and the ECG dynamic is brightened, depending on the setting of the timer, for up to 10 minutes.

On expiry of this time, the ECG dynamic is dimmed according to the set dimmer level, if pressed again it brightens again. If the switch is not pressed for 30 minutes, the lighting switches off completely. In addition to these functions, the dimming time and brightness period can also be controlled using a separate pushbutton or time switch over control inputs B1 and B2.

Switching the ECG dynamic and the fluorescent lamp as little as possible extends the service life.



Corridor lighting in homes for the elderly

At mealtimes, from 5 to 7 p.m., the light in the corridors can be permanently switched on using a time switch (contact B1). Between 7 and 10 p.m., the lighting is dimmed using switch B2. Simply press the corridor pushbutton again to return the lighting to the brighter setting at any time. After 10 p.m., the light is switched off. It can be switched back on at any time by pressing the corridor pushbutton.

Corridor lighting in hospitals

During the day – during peak periods, lunch times, visiting times, shift changes, doctor's rounds – the light is switched on. During quiet periods, i.e. afternoons and nights, the light is switched to a dimmed state. A patient can switch the light back to the bright setting at any time by pressing the corridor pushbutton. In emergencies, the nurse can switch the light to "emergency operation", i.e. permanently bright, using switch B1 (no time limit of brightness period).