



Staircase time switch TLZ12D-230V+UC

! Note: Select English language !*
1 NO contact not potential free 16A/250V AC. Incandescent lamps up to 2300W, energy saving lamps ESL up to 200W. Switch-off early warning and push-button permanent light switchable. Standby loss 0.5 watt only. With ESL optimisation and multifunction.
Modular device for DIN EN 60715 TH35 rail mounting.
1 module = 18 mm wide, 58 mm deep.

The functions and times are entered using the MODE and SET keys and indicated on the LC display. A keylock function is provided. **Zero passage switching** to protect contacts and lamps.

230V control input that allows a **glow lamp current up to 50 mA**, dependent on the ignition voltage of the glow lamps. 230V supply voltage and switching voltage. In addition electrically isolated universal voltage from 8 to 230V UC.

Precise variable time range from 1 to 99 minutes.
Separate permanent light switch with the projecting key SET if the functions STS, ISO, IS or R are set.

With motion detector control input BM, which converts the input signal into a control impulse if the function STS is set. In this case the permanent light by push-button function is not active.

3-wire and 4-wire circuits, resettable, with attic lighting if 4-wire circuit. Automatic detection of the method of connection.

If the function STS is set, the lighting is switched on again after a power failure provided the set time has not yet elapsed.

The elapsed period is shown in the middle of the display. The set time flashes at the bottom edge of the display until the set period elapses.

The accrued switch-on time is displayed there outside the elapsed time, first in hours (h), then in months (m) with 1 digit after the decimal point.

When the set time flashes but the elapsed time does not change, a control push-button is inhibited.

If switch-off early warning function is switched on, the light starts flickering in time variable

from 10 to 50 seconds before time-out and is repeated three times at decreasing time intervals.

If permanent light push-button is switched on, permanent light can be switched on by pressing the push-button longer than 1 second. This is switched off automatically after time variable from 0.5 to 10 hours or by pressing the push-button longer than 2 seconds. This function is not available at the BM input.

If both switch-off early warning function and permanent light push-button are switched on, the switch-off early warning function is activated before the permanent light switches off.

If energy saving lamps are switched completely or partially, activate position 'ESL' in the menu guidance. This is indicated by a + sign next to the abbreviation for the function at the top of the display.

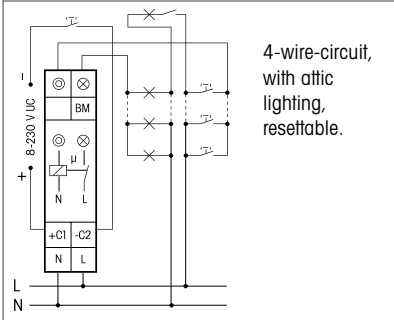
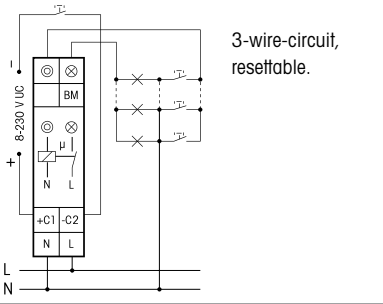
If the function STS is selected **the time can be extended** within the first second after switching on or resetting **by pressing the push-button repeatedly up to three times** (incrementing). Each momentary-contact control increments the set time once. This function is not active at the BM input.

With multifunction: Switchable to the functions **IS** (impulse switch), **R** (relay), **ISO** (impulse switch with off-delay) and **HC** (hour counter). After setting the required function, the function can be blocked. An arrow on the right of the abbreviation indicates the blocking status.

ISO: The impulse switch automatically disconnects after the set delay from 0.1 to 9.9 hours is timed out, provided there is no manual OFF command. Switch-off early warning, permanent light by push-button and ESL are also switchable if the function ISO is set.

HC: As long as the push-button input is excited, the + sign is indicated next to the abbreviation for the function HC at the top of the display. The time is added and indicated at the bottom of the display. Initially up to 9999 hours (h), then automatic change-over to months (m) each with 730 hours and display with 1 digit after the decimal point. The relay is not switched on if the function HC is set.

Typical connections



Technical Data	
Control voltage	230V+8...230V UC
Rated switching capacity	16A/250V AC
Incandescent lamp load and halogen lamp load ¹⁾ 230V	2300W
Fluorescent lamp load with KVG in lead-lag circuit or non compensated	1000 VA
Fluorescent lamps with KVG shunt-compensated or with EVG	500 VA
Compact fluorescent lamp with EVG and energy saving lamps	15x7 W 10x20 W
Standby loss (activ power)	0.5 W
⊙	Control push-button 230V
⊕	Permanent light
BM	Motion detector control input
⊗	Lamp connection

¹⁾ For lamps with 150 W max

How to operate the TLZ12D-230V+UC with display

The left countersunk button is named MODE. The right button is named SET. It projects by 2 mm and its functions is permanent light ON/OFF in automatic mode.

Permanent light corresponds to positions ON or ⊕ of the devices with rotary switches and is indicated in the display by PL flashing.

* After you switch on the power supply (or the power supply is switched on after a power failure), the display indicates the **language setting** flashing for 10 seconds: D = german, GB = English and F = French. During this time, press SET to make changes, press MODE to save and then switch over to normal display. This is the staircase time switch function set at the factory, otherwise the function last selected remains.

Press MODE to display the area at the top of the display. Then select the area by pressing SET before you make a change: **functions STS, ISO, IS, R and HC.** Each time you press SET, you move to the next flashing function. Press MODE on the requested function to end the flashing function. Then set by pressing MODE+SET.

Retain and only change a function: Press MODE twice.

If + appears behind STS or ISO, **the optimisation function for energy saving lamps ESL** is switched on.

Action press MODE	Change press SET
STS = staircase time switch and ISO = impulse switch with time delay.	
TIM flashes	STS: The time delay is incremented in steps of 0.5 min from 1 to 10 minutes and in steps of 1 min from 10 to 99 minutes. ISO: The time is incremented in steps of 0.1 hr from 0.1 to 9.9 hours. Press and hold down to increment the time slowly followed by rapid increase.
SEW flashes	The length of the switch-off early warning is incremented in steps of 5s from 0 to 50s. After 50 the display returns to 0 (then without switch-off early warning).
PLB flashes	The time for the permanent light by pushbutton function is incremented in steps of 0.5 hr from 0 to 10 hours. After 10 the display returns to 0 (then without permanent light by pushbutton).
ESL flashes	ESL+ switches on ESL optimisation, without + it is off.
STS or ISO	no longer flashing: the automatic function is active.

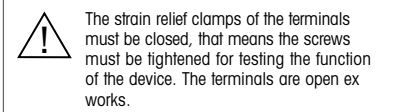
IS = impulse switch, R = switching relay and HC = operating hour counter have no adjustable subfunctions.

If your input ends with a non flashing display, this is the selected function. With time periods, the reference and the residual times are shown at the bottom of the display.

Reset operating hour counter to 0
Press MODE and SET simultaneously for 2 seconds. The bottom line in the display flashes. Press SET to reset to 0.

Lock and unlock
If the automatic function is active (no element is flashing), the setting can be locked against unintentional adjustment and then unlocked. As long as it is locked, an arrow at the top right of the display points to a lock icon on the front panel.

Lock: Press MODE and SET simultaneously and briefly. **LCK** flashes. Lock by pressing SET.
Unlock: Press MODE and SET simultaneously for 2 seconds. **UNL** flashes. Unlock by pressing SET.



Important reminder!
This electrical equipment may only be installed by skilled electricians otherwise fire hazard or danger of electric shock exists!