Wireless actuator
Staircase off-delay timer
FTN61NP-230V

$C\epsilon$

valid for devices from production week 25/11
(see bottom side of housing)

1 NO contact not potential free 10A/250V AC, incandescent lamps up to 2000 watts, switch-off early warning and switchable pushbutton permanent light. Bidirectional wireless and with repeater function. Only 0.7 watt standby loss.

For installation.
45mm long, 55mm wide, 33mm deep.

Switching voltage 230V.

Zero passage switching to protect contacts and consumers.

This wireless actuator is a staircase off-delay timer and features state-of-the-art hybrid technology that we developed: we combined the wear-free receiver and evaluation electronics and a bistable relay with zero passage switching.

By using a bistable relay coil power loss and heating is avoided even in the on mode. After installation, wait for short automatic synchronisation before the switched consumer is connected to the mains.

In addition to the wireless control input via an internal antenna, this staircase off-delay timer can also be controlled locally by a conventional 230V control switch previously mounted. Glow lamp current up to 5mA, dependent on the ignition voltage of the glow lamps.

The lighting is switched on again after a power failure provided the set time has not yet elapsed.

Starting in production week 25/2011 with **bidirectional wireless;** in addition, a **repeater** function can be switched in. Every change in state and incoming central command telegrams are confirmed by a wireless telegram. This wireless telegram can be taught-in in other actuators, in the FVS software and in FUA55 universal displays.

Function rotary switches
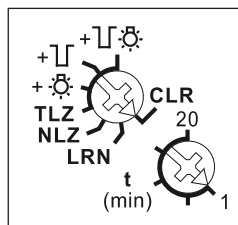
With the top rotary switch in the setting LRN up to 35 wireless pushbuttons and/or wireless motion/brightness sensors FBH can be assigned of which one ore more central pushbuttons. The required function of this staircase off-delay timer can then be selected.

NLZ = off-delay timer
TLZ = staircase time switch
+ ☼ = TLZ with pushbutton permanent light
+ ⊓ = TLZ with switch-off early warning
+ ⊓ ☼ = TLZ with pushbutton-permanent light and switch-off early warning

If the permanent light function ☼ is switched on, the function can be activated by pressing the pushbutton for longer than 1 second. This function switches off automatically after 60 minutes or by pressing the pushbutton for longer than 2 seconds.

If the switch-off early warning ⊓ is switched on, the light starts to flicker approx. 30 seconds before time-out. This is repeated three times at decreasing time intervals.

If both switch-off early warning and pushbutton permanent light ⊓ ☼ are switched on, switch-off early warning is activated before automatic switch-off of the permanent light.

With the bottom rotary switch, the off delay is adjusted from 1 to 20 minutes.

When teaching-in **motion and brightness sensors FBH,** the switching threshold is defined on the last FBH taught-in to switch the light on/off depending on the brightness. The off delay set on the FTN61NP is prolonged by a setting of 1 minute fixed in the FBH.

The LED performs during the teach-in process as mentioned in this instruction manual below. It shows wireless control commands by short flickering during operation.

Typical connection
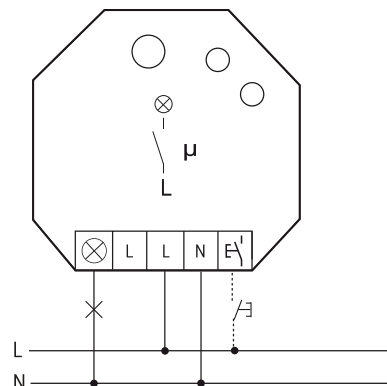
Technical data

Rated switching capacity	10A/250V AC
Incandescent lamp and halogen lamp load [1] 230V	2000W
Fluorescent lamp load with KVG* in lead-lag circuit or non compensated	1000VA
Fluorescent lamp load with KVG* shunt-compensated or with EVG*	500VA
Compact fluorescent lamps with EVG* and energy saving lamps	15x7W 10x20W
Local control current at 230V control input	3.5mA
Max. parallel capacitance (approx. length) of local control lead at 230V AC	0.01µF (30m)
Standby loss (active power)	0.7W

[1] Applies to lamps of max. 150W.

* EVG = electronic ballast units;
  KVG = conventional ballast units

Teaching-in wireless sensors in wireless actuators

All sensors must be taught-in in the actuators so that they can detect and execute commands.

Teaching-in actuator FTN61NP-230V

The teach-in memory is empty on delivery from the factory. If you are unsure whether the teach-in memory contains something or not, **you must first clear the memory contents completely:**
Set the upper rotary switch to CLR.
The LED flashes at a high rate. Within the next 10 seconds, turn the lower rotary switch three times to the right stop (turn clockwise) and then turn back away from the stop.

The LED stops flashing and goes out after 2 seconds. All taught-in sensors are cleared.

Clear individual taught-in sensors in the same way as in the teach-in procedure, except that you set the upper rotary switch to CLR instead of LRN, and operate the sensor. The LED previously flashing at a high rate goes out.

Teaching-in sensors

1. Setting of the lower rotary switch to the desired teaching-in function.
   The flashing of the LED as soon as a new setting range has been reached when turning the rotary switch helps to find the desired position reliably.
   Left stop 1 = teach-in 'central OFF' and FTK as NO contact;
   Approx. middle = teach-in 'switch ON or press again';
   Right stop 20 = teach-in 'central ON' or FTK as NC contact.
   When an **FBH is taught-in as motion/brightness sensor**, the position of the bottom rotary switch during teach-in defines the threshold between 1 = movement detection at darkness and 20 = movement detection at brightness.

2. Set the upper rotary switch to LRN. The LED flashes at a low rate.

3. Operate the sensor which should be taught-in. The LED goes out.

To teach-in further sensors, turn the upper rotary switch briefly away from position LRN. Continue the procedure from pos 1.

After teach-in, set the rotary switches of the actuators to the required function.

Switching on/off repeater:
If control voltage is applied to the local control input when the power supply is switched on, the repeater is switched on/off. When the power supply is switched on, the LED lights up for 2 seconds = repeater off (as-delivered state) or 5 seconds = repeater on to indicate the state.

Teaching-in feedback of this actuator in other actuators : Set the upper rotary switch to NLZ. For switching ON and simultaneously transmitting of feedback the local control input has to be used. For switching OFF and simultaneously transmitting of feedback set the upper rotary switch from NLZ to TLZ.

Teaching-in feedback of other actuators in this actuator: 'Switch on' will be taught-in in

position 'central ON'. 'Switch off' will be taught-in in position 'central OFF'. After teach-in the function and desired off-delay will be set. If the switch-off warning is activated it will still be run after 'central off'.

⚠ When an actuator is ready for teach-in (the LED flashes at a low rate), the very next incoming signal is taught-in. Therefore, make absolutely sure that you do not activate any other sensors during the teach-in phase.

Important Note!

Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock.