



# Self-learning mains disconnection relay FR61-230 V

CE

1 NO contact not potential free 10A/250V AC. Standby loss 0.8 watt only.

Built-in device for installation and surface mounting 45 mm long, 55 mm wide, **26 mm deep.** 

230 V supply voltage and switching voltage.

State-of-the-art hybrid technology combines advantages of nonwearing electronic control with high switching capacity of special relays.

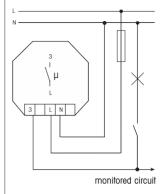
The FR61-230 V mains disconnection relay disconnects the power supply once all series connected loads are turned off, thus preventing any electromagnetic interference fields from occurring.

Small loads up to 200 mA are acceptable and, once major loads are disconnected, they do not prevent field disconnection. There is no need to manually set the limit; it is learned by the FR61. Loads drawing more than 200 mA are consistently defined as loads which should cause the line power to be connected.

As long as no major load is turned on, one pole of the monitored circuit remains isolated from the mains. Neutral and earth are connected continuously to avoid acting as an aerial. A DC voltage of 230 V DC with an extremely low residual ripple is applied for monitoring. Therefore, it is **prohibited to bridge the relay contact**, which would ultimately cause device failure. When a load is turned on, the mains disconnection relay connects the phase.

If the phase is switched on for the first time and after a power failure the FR61 automatically learns in again: At first an inrush current of 30 mA is specified. If a new small load is switched on for more than 24 hours, the total current drawn by the monitored circuit is less than 200 mA, and in the meantime the light has been switched on and off, the new load is learned in and the conductor is switched off. This learn-in mode can be realised immediately after connection of the new load by briefly switching off the MCB.

## **Typical connection**



#### Side view



## For typical connections and further information regarding:

- Switching power supply units in entertainment electronics and plug-in power supply units
- Switching power supply units in distribution boxes
- Roller shutter control
- Plug-in consumers with power control
- and Frequently Asked Questions
  please refer to the internet:

### www.eltako.com

PDF Catalogue. Product group G.

## Important reminder!

Only a trained electrician may install this equipment, otherwise there is a risk of fire or electric shock.