

**General**

The ERV-09D flasher relay is designed to be used in places (industry, residence, factory, etc.) where two-time (on-off) control is required.

**Usage and Working Principle of the Device**

**Display:** It is shown here when setting the time and counting down the set time. If the operating time is set in minutes, the rightmost dot on the displays will flash while the device is counting the time. The ON display is reserved for operating time and the OFF display is reserved for waiting time.

**“ON” Knobe:** It is used for the Working Time interval. Interval 9.9 sec., 99 sec., 9.9 min. and can be set to 99 minutes.

**OFF Knobe:** It is used for the Waiting Time interval. Interval 9.9 sec., 99 sec., 9.9 min. and can be set to 99 minutes.

**“t on” Knobe:** It is used to set the Working Time. The working time can be set in seconds or minutes according to the selected time interval. While setting the “t on” time, the adjusted value is shown on the “ON” display (on the upper screen).

**“t off” Knobe:** It is used to set the Waiting Time. The waiting time can be set in seconds or minutes according to the selected time interval. While setting the “t off” time, the adjusted value is shown on the “OFF” display (on the lower screen).

**OUT Led:** This led lights up when the device energized the relay. (When counting the working time)

**Example Operation Scenario**

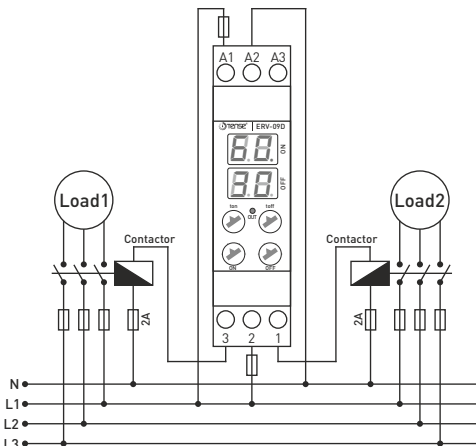
Let’s set it to be working (on) time: 60 minutes, Waiting (off) time: 30 seconds.

To set the working time as 60 minutes, let’s turn the “ON” knobe to the part that writes “D” (It will appear as “99.” on the upper display.) and the “t on” knobe until see the value 60 on the screen (upper display).

To set the waiting time as 30 seconds, turn the “OFF” knobe to the part that writes “B” (It will appear as “99” on the lower display.) and the “t off” button until see the value 30 on the screen (lower display).

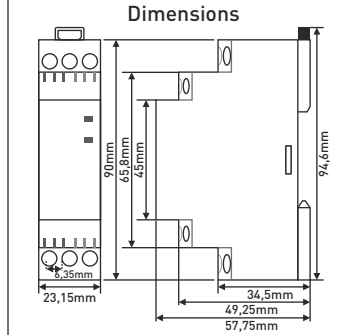
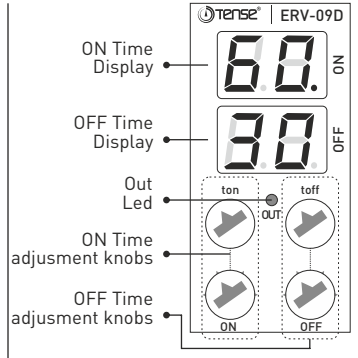
After this setting is made, the device first starts counting the “ON” time, the remaining value for the on time is displayed on the “ON” display and the “OUT” led lights up, the relay output is at the 3 (NO) contact. When the “ON” time expires, the device starts counting the “OFF” time, the remaining value for the off time is displayed on the “OFF” display and the “OUT” led turns off, the relay output is in contact number 1 (NC). The device continues to operate as described above until its power is cut off.

**Connection Diagram**



**Technical Specifications**

Operating Voltage (A1-A2) : 100-240V AC 50/60Hz.	Display : 2x2 LED Display, 1x LED.
Operating Voltage (A2-A3) : 12V DC (A2(-), A3(+))	Connection Type : Mounting on the din rail.
Operating Frequency : 50/60 Hz.	Weight : <80gr.
Operating Power : <6VA	Contact : 5A 250V AC Resistive Load
Operating Temperature : -20°C.....+55°C	Operating Altitude : <2000m
Operating Time Interval : 0,1 sec. - 99 min.	Cable Diameter : 2,5mm <sup>2</sup>



**Note**

- 1- If the time interval is changed with the “ON” and/or “OFF” knobs while the device is energized, the device must be de-energized and re-energized in order for the changed time interval to be valid.
- 2- If the time is changed with the “t on” and/or “t off” knobs while the device is counting time, the device continues to count the new set time.

**Stage Values**

- A : 9.9 seconds **99**
- B : 99 seconds **99**
- C : 9.9 minutes **99**
- D : 99 minutes **99**

**Operation Characteristic**



**Warnings**

- Please use the device according to the manual.
- Don't use the device in wet.
- Include a switch and circuit breaker in the assembly.
- Put the switch and circuit breaker nearby the device, operator can reach easily.
- Mark the switch and circuit breaker as releasing connection for device.

**Maintenance**

Switch off the device and release from connections. Clean the trunk of device with a swab. Don't use any conductor or chemical might damage the device. Make sure device works after cleaning.