EKTS-316-230 Time Switch

1.Scope Of Application

Suitable for AC 50Hz, rated control power supply voltage AC 230V and below the control circuit, as a delay timing element.
The power supply of various control circuits can be switched on or off at a predetermined time, which is suitable for lamps, neon lights, advertising signs, radio and television equipment and various household appliances.

2.Operational Condition

3.1 Use environment: the altitude does not exceed 2000 meters;
3.2 The ambient temperature is not higher than +40℃ and not lower than -5℃;
3.3 The rated control power supply voltage changes to 85%-110% of the rated voltage;
3.4 In a medium without serious vibration and explosion risk, and there is no gas and dust in the medium sufficient to corrode metal and destroy insulation;
3.5 Where rain and snow can't erode.

3.Structure Characteristics

This series of time-control switch adopts eight-bit microprocessor chip, can be directly packaged on PCB board, peripheral use patch components, surface mounting, LCD LCD display, high-power relay output; Compact structure can be mounted on guide rails.

4. Technical Characteristics

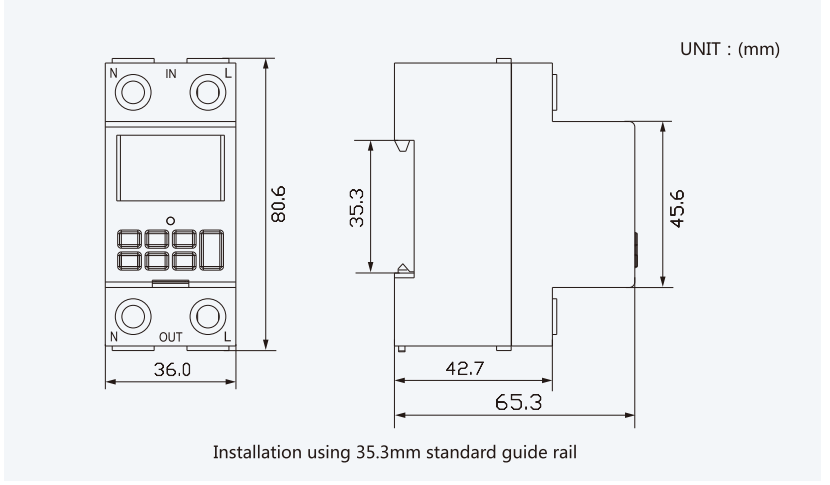
5.1 Rated insulation voltage Ui: AC 230V
5.2 Rated impulse withstand voltage Uimp: AC 1.5kV
5.3 Rated control power supply voltage Us: AC 230V
5.4 Pollution Level: 3
5.5 Enclosure Protection class: IP20
5.6 Load power: (resistive load: 6KW; Inductive load: 1.8KW; Motor load: 1.2KW; Lamp load: 0.9KW)
5.7 Daily travel time error: less than or equal to ±2 seconds;
5.8 You can set 16 on and 16 off actions per day;
5.9 The switching time can be cycled daily or weekly;
5.10 The maximum time control is 168 hours, the minimum time control is 1 minute;
5.11 Mechanical life: greater than or equal to 1 million times;
5.12 Electrical life: more than or equal to 100,000 times;
5.13 Coordination with the short circuit protector (SCPD) is enough. The relay should not cause harm to people and equipment under short circuit conditions, and should not be allowed to continue to use before repair or replacement of parts.

5.Installation Use Operation

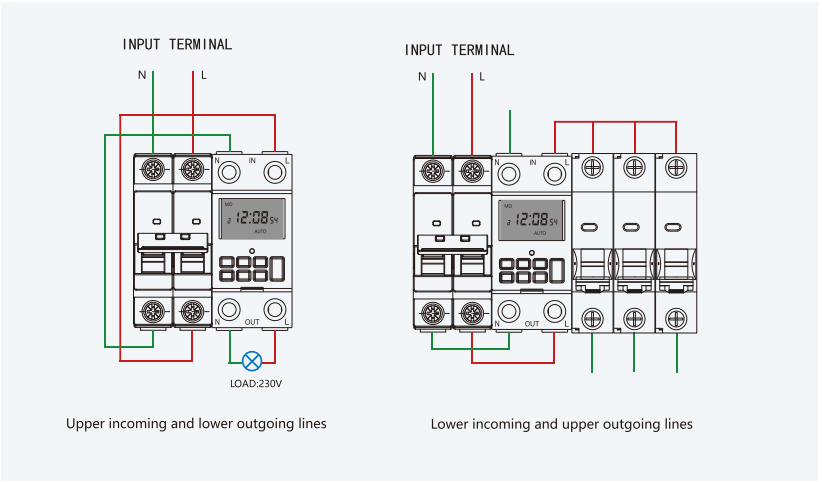
6.1 Press and hold the “Cancel/Restore ”key to power on the device
6.2 If you do not operate the keyboard for 30 seconds, it will automatically lock, and the sign “” is displayed in the lower left corner.
6.3 Unlocking: Press the “Cancel/Resume” button 4 times to automatically unlock, and the symbol “” disappears..
6.4 After unlocking, press “Calibration Week”, “Calibration Time”, and “Calibration Score” to calibrate the time.
6.5 Set the switch time according to the steps in the table below.

STEP	KEY	SET CONTENT
1	Press the"TMG"key	Enter the timed start setting display" $_{on}1$"
2	Press the"D+"key	Set the time to open on a certain day or day or every day of the week
3	Press the "H+" and "M+" buttons respectively	Set the time for automatic opening
4	Press the"TMG"key	Entering the timed shutdown setting display"1 $_{off}$"
5	Press the"D+"key	Enter the scheduled start setting and display settings. Set the time for this shutdown to be on a certain day or day of the week
6	Press the "H+" and "M+" buttons respectively	Set an automatic shutdown time
7	Repeat the process from 1 to 6	Set the switch time for the remaining 2-16 times. If timing is not required, make it display: "--: --"
8	Press the"CLK"key	End timing setting and return to clock running state
9	Press the"A/M"key	End the timing setting, return to the clock running state, point the switch flag to the "off" position, and then adjust to the "automatic" position

6.Product outline and installation dimensions



Installation using 35.3mm standard guide rail



Upper incoming and lower outgoing lines

Lower incoming and upper outgoing lines

7.Precautions For Operation

8.1 To prevent contact heating under strong current, it is necessary to tighten the screws on the wire post during wiring.
8.2 It is strictly prohibited to install or disassemble products with electricity.
8.3 If you do not use it for a long time and press the “time calibration” and “minute calibration” buttons for 3 seconds, you will enter a sleep state; Release the sleep state, press and hold the “Cancel/Resume” button for 5 seconds, and re-enter use (note: In the sleep state, all the original set data is cleared, and after restarting, it enters the factory state).
8.4 For equipment that may cause significant economic losses or personal safety, it is important to design with sufficient margin for technical characteristics and performance values, and safety facilities such as double circuit protection should be used.

8.Common fault

9.1 The time control switch after power on operation is not working properly. Check whether the time control switch period setting meets the required requirements, and whether the week setting is set in the "automatic" position.

9.2 When the time control switch reaches the set time, the output indicator light is on, but the relay does not switch. Check if the power supply voltage is too low.

9.3 Burnt products

Check if the power supply exceeds the rated power supply voltage of the product and if the power cord is connected incorrectly.

9.4 Troubleshooting

When a product malfunctions, the first step is to quickly disconnect the power supply, connect the wires correctly according to the wiring diagram, check the wiring is correct, and then follow the operating precautions. If the product itself has quality issues, please contact your local distribution company or our company.