## Digital Weekly Programmable Timer

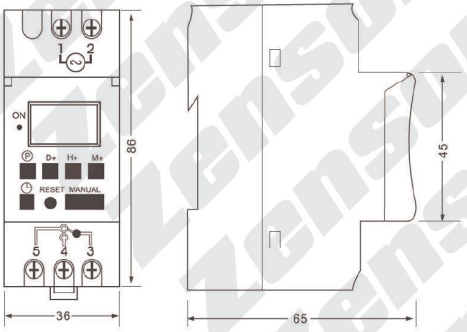



Zensor ZHC15A is a weekly/7 day programmable time switch. It comes in DIN rail mounting housing for ease of installation. The timer has multiple output configurations that will suit most control applications. It allows up to 16 configurable on/ off settings (18 for pulse output). Relay can be configured to output pulse or for a specific time duration. It can also be used as a countdown timer should one needs it occasionally.

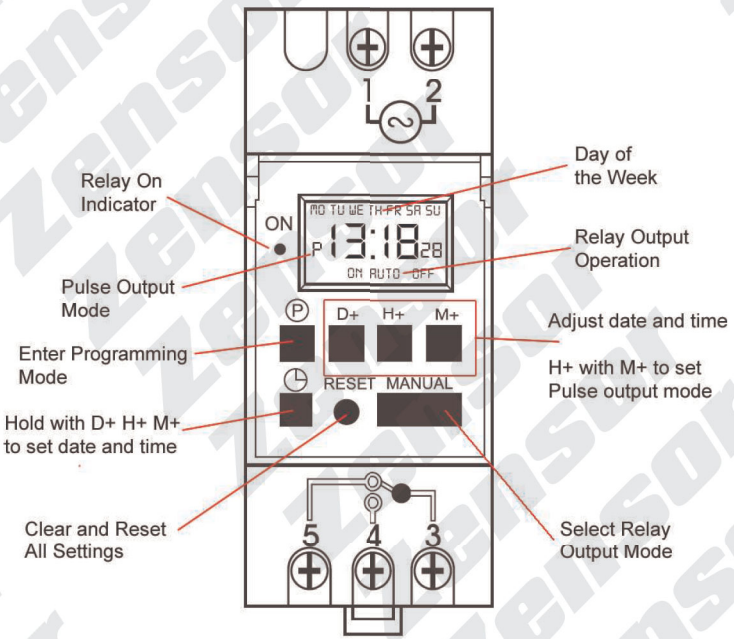
## Specifications

| | |
|---|---|
| **Power Supply** | 12V, 24V, 110VAC, 230VAC. (+/- 10%) |
| **Operating Conditions** | -10 ... 40 °C, 5-85% RH (non-condensing) |
| **Relay Output** | SPDT: 30A 230VAC (resistive load) |
| **Mechanical Life** | $10^7$ cycles |
| **Cyclic Error** | +/- 20 sec per month |
| **Number of Programs** | 16, 18 (pulse output) |
| **Minimum time interval** | 1 minute |
| **Pulse width** | 1 sec to 59 min 59 sec |
| **Count Down time range** | 1 sec to 99 min 59 sec |
| **Memory backup** | 3 years (replaceable battery) |
| **Power Consumption** | 8VA |

## Dimensions




## Nomenclature



## ■ Operation

***Important: Press the RESET button to initialize a new controller before making any configurations.***

***Setting Date and Time***

1. Ensure the controller is in normal Run Mode.
2. While holding the ◷ button, press:
   - **D+** to adjust day
   - **H+** to adjust the hour
   - **M+** to adjust the minute

***Programming***

1. From Run Mode, press the **P** button to enter Programming Mode.
   - The display will show 1 in the bottom left, with **ON** indicated
   - This means you are setting Program 1 ON time.
2. Use **D+**, **H+** and **M+** to set the day and time for the relay to turn ON
3. Press **P** again to set the Program 1 OFF time
4 Press **P** repeatedly to program the next ON/OFF schedules.
   - The Program number will increase each time.
   - A maximum of 16 programs can be stored.

***Pulse Mode Output***

1. From Run Mode, press **H+** and **M+** together to enter Pulse Mode.
2. While holding the ◷ button, press:
   - **H+** to set the pulse width in minutes
   - **M+** to set the pulse width in seconds
3. Press ◷ and MANUAL together to confirm and return to Run mode.
   - A blinking **P** indicateds that **Pulse Control Mode** is active.
4. Up to 18 programs can be stored in Pulse Mode.

***Note: Switching between time range mode and pulse mode will erase all stored programs.***

***Countdown Operation***

1. Press and hold **P** and ◷ keys together to enter **Countdown mode**.
   - The display will show **d** and **ON** in the bottom left
2. Press ◷ with **H+** or **M+** to set the ON duration (hours and minutes)
3. Press **P** to set the **OFF** duration (enter 00:00 if no repeat cycle is required)
4. Press **P** again; the display will show **ON** with the programmed duration.
5. Press **MANUAL** to start countdown.
   - Relay will turn ON immediately and switches OFF after the set time.
6. Press **MANUAL** again to stop countdown early.
7. Hold **P** and ◷ together to exit **Countdown mode**.

***Manual Triggering***

In Run Mode, press the **MANUAL** button to cycle through the following states:
**AUTO** - normal automatic operation
**ON** - relay is forced ON
**OFF** - relay is forced OFF