

TMR5 series non-programmable plug-in time delay relays

Wiring

Wire the socket per the wiring diagram on the side of the time delay relay. **Note:** For products that use a control switch to initiate the unit, this control switch is a dry-type contact (applying voltage to the pins could damage the unit). For products using a power trigger to initiate the unit, the power trigger is the application of voltage with a value equal to the input voltage with the same polarity. For DC input voltages, make sure the polarity matches the wiring diagram. If using solid-state input devices with any product, problems with leakage current may occur.

Setting the time delay

All TMR5 Series non-programmable products, except those with fixed time delays come with a specific single time delay range as indicated on the nameplate and by the catalog number. Adjust the time delay within the specific time range by rotating the knob located on the top of the unit. **Note:** The tick marks are for reference only.

Troubleshooting

If the unit fails to operate properly, check that all connections are correct per the wiring diagram on the product. For DC input voltages, make sure the polarity matches the wiring diagram. Use the descriptions of how each function operates below and on back of this sheet as a guide to determine if the unit is operating properly. If problems continue, contact EATON TRC 1-800-809-2772 for assistance.



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| Function | Wiring | Product | Operation | Timing Chart |
|--------------------------|---------------|---------|---|--------------|
| ON delay | Standard | TMR5N | Upon application of input voltage, the time delay (t) begins. At the end of the time delay (t), the output is energized. Input voltage must be removed to reset the time delay relay and de-energize the output. | |
| Interval ON | Standard | TMR5T | Upon application of input voltage, the output is energized and the time delay (t) begins. At the end of the time delay (t), the output is de-energized. Input voltage must be removed to reset the time delay relay. | |
| Single shot | 5-6 trigger | TMR5C | Upon application of input voltage, the time delay relay is ready to accept a trigger. When the trigger is applied, the output is energized and the time delay (t) begins. During the time delay (t), the trigger is ignored. At the end of the time delay (t), the output is de-energized and the time delay relay is ready to accept another trigger. | |
| | Power trigger | TMR5G | | |
| OFF delay | 5-6 trigger | TMR5F | Upon application of input voltage, the time delay relay is ready to accept a trigger. When the trigger is applied, the output is energized. Upon removal of the trigger, the time delay (t) begins. At the end of the time delay (t), the output is de-energized. Any application of the trigger during the time delay will reset the time delay (t) and the output remains energized. | |
| | Power trigger | TMR5P | | |
| Watchdog | 5-6 trigger | TMR5W | Upon application of input voltage, the time delay relay is ready to accept a trigger. When the trigger is applied, the output is energized and the time delay (t) begins. At the end of the time delay (t), the output is de-energized unless the trigger is removed and re-applied prior to time out (before time delay [t] elapses). Continuous cycling of the trigger at a rate faster than the time delay (t) will cause the output to remain energized indefinitely. | |
| | Power trigger | TMR5D | | |
| Repeat cycle (off first) | Standard | TMR5R | Upon application of input voltage, the time delay (t1) begins. At the end of the time delay (t1), the output is energized and remains in that condition for the time delay (t2). At the end of this time delay, the output is de-energized and the sequence repeats until input voltage is removed. | |
| Repeat cycle (on first) | Standard | TMR5Y | Upon application of input voltage, the output is energized and the time delay (t1) begins. At the end of the time delay (t1), the output is de-energized and remains in that condition for the time delay (t2). At the end of this time delay, the output is energized and the sequence repeats until input voltage is removed. | |
| Flasher (off first) | Standard | TMR5L | Upon application of input voltage, the time delay (t) begins. At the end of the time delay (t), the output is energized and remains in that condition for the time delay (t). At the end of the time delay (t), the output is de-energized and the sequence repeats until input voltage is removed. | |

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