Magnecraft Time Delay and Sensor Relays

TDR88867 Series SPDT, DPDT, 8 A











Description

The TDR88867 socket-compatible time delay relays offer the following features:

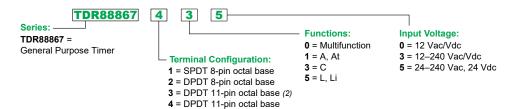
- 35 mm width
- single, dual, or multifunction capability
- easy installation by plugging into standard 8- or 11-pin octal sockets
- 1 or 2 relay outputs capable of switching up to 8 A, for ultimate flexibility
- a single LED with multiple states to clearly indicate the time state at a glance

This excellent feature set makes the TDR88867 an ideal choice in a variety of industrial control applications.

| Feature | Benefit |
|--------------------------|--|
| Integrated rotary switch | Simplifies the programming of the functions and timing |
| LED indication | Displays the state of the timer |
| Removable knob | Resists tampering |
| Socket compatible | Allows for easy installation and replacement |

| Input Voltage | Functions Available (1) | Timing Range | Contact Configuration | Rated Current | Standard Part Number | | |
|----------------------|-----------------------------------|-----------------|-----------------------|---------------|----------------------|--|--|
| 11-pin Octal Base | | | | | | | |
| 24–240 Vac 24 Vdc | С | 0.1 s to 100 hr | DPDT | 8 A | TDR88867435 | | |
| | A, At | 0.1 s to 100 hr | DPDT | 8 A | TDR88867415 | | |
| | L, Li | 0.1 s to 100 hr | DPDT | 8 A | TDR88867455 | | |
| | A, At, B, C, H, Ht, Di, D, Ac, Bw | 0.1 s to 100 hr | DPDT (2) | 8 A | TDR88867305 | | |
| 12 Vac/Vdc | A, At, B, C, H, Ht, Di, D, Ac, Bw | 0.1 s to 100 hr | DPDT (2) | 8 A | TDR88867300 | | |
| 12-240 Vac/Vdc | A, At, B, C, H, Ht, Di, D, Ac, Bw | 0.1 s to 100 hr | DPDT (2) | 8 A | TDR88867303 | | |
| 8-pin Octal Base | | | | | | | |
| 24–240 Vac 24 Vdc | Α | 0.1 s to 100 hr | DPDT | 8 A | TDR88867215 | | |
| | С | 0.1 s to 100 hr | SPDT | 8 A | TDR88867135 | | |
| | L, Li | 0.1 s to 100 hr | SPDT | 8 A | TDR88867155 | | |
| | A, At, B, C, H, Ht, Di, D, Ac, Bw | 0.1 s to 100 hr | SPDT | 8 A | TDR88867105 | | |
| 12 Vac/Vdc | A, At, B, C, H, Ht, Di, D, Ac, Bw | 0.1 s to 100 hr | SPDT | 8 A | TDR88867100 | | |
| 12-240 Vac/Vdc | A, At, B, C, H, Ht, Di, D, Ac, Bw | 0.1 s to 100 hr | SPDT | 8 A | TDR88867103 | | |

Part Number Explanation



- (1) For function descriptions, see pages 34-35.
- (2) One of the outputs can be configured to be either timed or instantaneous.

Magnecraft Time Delay and Sensor Relays TDR88867 Series

SPDT, DPDT, 8 A

Specifications

| Part Number | | TDR88867••0 | TDR88867••3 | TDR88867••5 | | | | |
|--|---|---|---|------------------------|--|--|--|--|
| Input Characteristics | | | | <u> </u> | | | | |
| Input Voltage Range | | 12 Vac/Vdc | 12-240 Vac/Vdc | 24–240 Vac 24 Vdc | | | | |
| Operating Voltage | Operating Voltage | | 85–110% of nominal (85–120% of nominal for 12 Vac/Vdc) | | | | | |
| Maximum Power | AC | 4.2 VA @ 240 Vac | | | | | | |
| Consumption | DC | 1.5 W @ 240 Vdc | | | | | | |
| Output Characteristics | | | | | | | | |
| Contact Configuration | | SPDT, DPDT | | | | | | |
| Output Current Rating | | 8 A | | | | | | |
| Contact Material | | Silver alloy | | | | | | |
| Maximum Switching Voltage | | 250 Vac/Vdc | | | | | | |
| Switching Capabilities | | 8 A, 250 Vac 1/3 hp @ 240 Vac | | | | | | |
| Minimum Switching Requirement | | 10 mA at 5 Vdc | 10 mA at 5 Vdc | | | | | |
| Timing Characteristics | | | | | | | | |
| Functions Available (1) | | Multifunction | Multifunction | | | | | |
| Time Scales | | 7 | | | | | | |
| Time Ranges | | 0.1–1 s 1–10 s 0.1–1 min 1–10 min 0.1–1 hr 1–10 hr 10–100 hr | | | | | | |
| Minimum Duration of the Control Impulse under Load | | 100 ms | | | | | | |
| Maximum Reset Time by De- | -energization | 100 ms | | | | | | |
| Repeatability at Constant Vo | Itage and Temperature | ± 0.5% | | | | | | |
| Temperature Drift | | ±0.05% / °C | | | | | | |
| Voltage Drift | Voltage Drift | | ±0.2% / V | | | | | |
| General Characteristics | General Characteristics | | | | | | | |
| Electrical Life (Operations at | Electrical Life (Operations at Rated Current) (2) | | 100,000 operations | | | | | |
| Mechanical Life (Unpowered | Mechanical Life (Unpowered) (2) | | 5,000,000 operations | | | | | |
| Dielectric Strength | Input to Contacts | 2.5 kV (1 mA / 1 minute) |) at 50 Hz | | | | | |
| | Between Open Contacts | 2.5 kV (1 mA / 1 minute) at 50 Hz | | | | | | |
| Tomporaturo Pango | Storage | -22 to 140 °F (-30 to 60 °C) | | | | | | |
| Temperature Range | Operation | -4 to 140 °F (-20 to 60 °C) | | | | | | |
| Weight | | 2.8 oz. (0.08 kg) | | | | | | |
| Green LED Indication | | Operating status indication Pulsing: relay de-energized, no timing in progress (except Di-D and Li-L) Flashing: timing in progress Steady On: relay energized, no timing in progress | | | | | | |
| Degree of Protection (Enclosure) | | IP40 | | | | | | |
| | | cURus (File: E191122 CNN: NRNT2, NRNT8), CSA (File: 254373 Class: 3211 07) | | | | | | |
| Approvals | | CORUS (FIIE. E 191122 C | ININ. INCINIZ, INCINIO), COA (FIIE: | 204010 Class. 3211 U/) | | | | |

⁽¹⁾ For function descriptions, see pages 34–35.



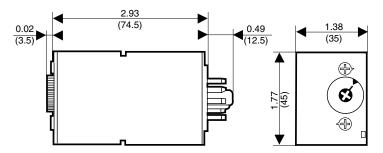
⁽²⁾ Actual product life varies based on electrical load, duty cycle, application, and environmental conditions.

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Dimensions—in. (mm)

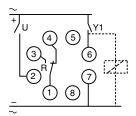
TDR88867 plug-in timers (relay output)



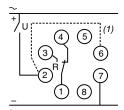
Wiring Diagrams

Wiring connection diagrams for TDR88867 plug-in timers (8-pin, relay output)

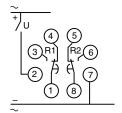
Timing relays with 1 relay output All functions except L and Li



Functions L and Li



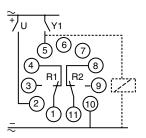
Timing relays with 2 relay outputs Function A



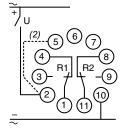
(1) Jumper between pins 2 and 6 for function **L** only

Wiring connection diagrams for TDR88867 plug-in timers (11-pin, relay output)

All functions except L and Li



Functions L and Li



(2) Jumper between pins 2 and 5 for function **L** only