

Time Delay Relays – Repeat Cycle

R27 Series



Programmable, DPDT, 10 Amp, AC or DC, Repeat Cycle Time Delay Relays (ON Time followed by OFF Time).

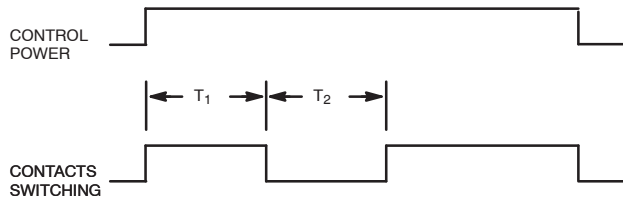
Features

- Universal Input Voltage (U-suffix)
- 16 Time Ranges in Single Timer (0.05 sec. to 100 hrs.)
- User Sets Time Ranges
No Math – Just Flip Switches
- Instructions Right on Unit
- Fine Tuning Knob for Precision Timing
- Pin for Pin Interchangeable with Timers in the Field – No Rewiring
- AC or DC Operation
- CMOS Digital Circuitry – 0.5% Repeatable Accuracy

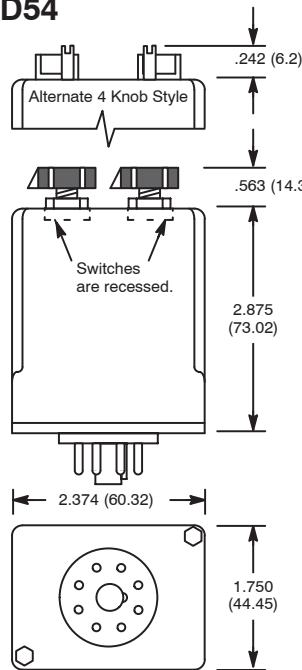


OPERATIONS

RECYCLE TIMING – The first delay period begins when input voltage is applied. At the end of the first delay, or “ON” period, the internal relay pulls in, and the second delay, or “OFF” period begins. When the second delay period ends, the relay drops out. This recycling sequence will continue until the removal of input voltage. When input voltage is removed, the relay drops out.



D54

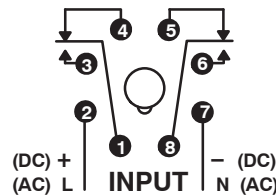


| 1 2 3 4 Four Knob Style | TIME RANGE | | |
|----------------------------|------------|------|---------|
| | Min | Max | |
| A | 0.6 | 2.5 | Seconds |
| B | 1.5 | 5.0 | |
| C | 2.5 | 10.5 | |
| D | 5 | 21 | |
| E | 10 | 42 | |
| F | 0.4 | 1.4 | Minutes |
| G | 0.7 | 2.8 | |
| H | 1.5 | 5.5 | |
| I | 3 | 11 | |
| J | 5.5 | 22.5 | |
| K | 11 | 45 | Hours |
| L | 0.4 | 1.5 | |
| M | 0.8 | 3.0 | |
| N | 1.5 | 6.0 | |
| O | 3 | 12 | |
| P | 6 | 24 | |

Universal Type

| Dial Setting | TIME RANGE | | |
|--------------|------------|-----|---------|
| | Min | Max | |
| A | 0.05 | 0.5 | Seconds |
| B | 0.1 | 1 | |
| C | 0.5 | 5 | |
| D | 1 | 10 | |
| E | 3 | 30 | |
| F | 6 | 60 | |
| G | 0.2 | 2 | Minutes |
| H | 0.5 | 5 | |
| I | 1 | 10 | |
| J | 3 | 30 | |
| K | 6 | 60 | |
| L | 0.2 | 2 | Hours |
| M | 0.5 | 5 | |
| N | 1 | 10 | |
| O | 2.4 | 24 | |
| P | 10 | 100 | |

DPDT, 2 Form “C”



Electrical Specifications

Contact

Rating: 10 Amps 240VAC or 30VDC, 1/3 HP, 240VAC or 120VAC

Pilot Duty: 345VA, 120VAC or 240VAC, 50/60Hz

Life: 500,000 (100,000 U-type) operations at full load

Mechanical Life: 7,000,000 (10,000,000 U-type) operations at no load

Input

Nominal input voltage: See Chart

Steady state input current: See Chart

Timing

Timing adjustment modes available: See Timing Range Chart

Repeat Accuracy

± 0.5% – after established at steady temperature (4 hours)

Timing tolerance at high end of range: –0, +10%

Timing tolerance at low end of range: +0, –50%

Reset Time: 60 mS typ

Environmental Characteristics

Operating: –20°C to +55°C

| AC or DC OPERATED | | | | | |
|-------------------|----------------------------|--------------|-----------------|-------------------------------------|----------|
| NTE Type No. | Nom. Voltage | Contact Arr. | Input Cur. Nom. | Max. Contact Cur. @ 28VDC or 120VAC | Diag No. |
| R27-11AD10-12 | 12VAC/DC | DPDT | 167mA | 10A | D54 |
| * R27-11AD10-24 | 24VAC/DC | DPDT | 83mA | 10A | D54 |
| * R27-11AD10-120 | 120VAC/DC | DPDT | 17mA | 10A | D54 |
| NEW R27-11AD10-U | 24 – 240VAC 12 – 125VDC | DPDT | – | 10A | D54 |

* These devices are being phased out and replaced by the R27-11AD10-U.

| ACCESSORIES | | |
|-----------------|-------------|--------------|
| MOUNTING STYLES | DESCRIPTION | NTE TYPE NO. |
| SURFACE MOUNT | 8-PIN OCTAL | R95-101 |
| PANEL MOUNT | 8-PIN OCTAL | R95-118 |
| DIN RAIL MOUNT | 8-PIN OCTAL | R95-113 |
| DIN RAIL MOUNT | 8-PIN OCTAL | R95-181 |