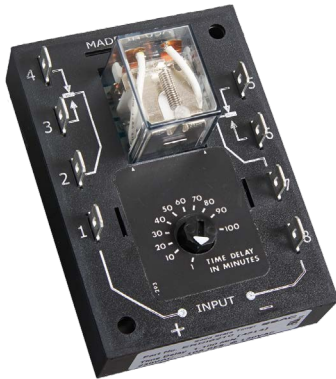


ERDI SERIES



Description

Econo-Timers are a combination of digital electronics and an electromechanical relay. DPDT relay output for relay logic circuits, and isolation of input to output voltages. For applications, such as interval on, pulse shaping, minimum run time, etc. The ERD Series is encapsulated to protect the circuitry from shock, vibration and humidity.

Operation (Interval)

Upon application of input voltage, time delay begins, and output relay energizes. At the end of time delay, output de-energizes until input voltage is removed.

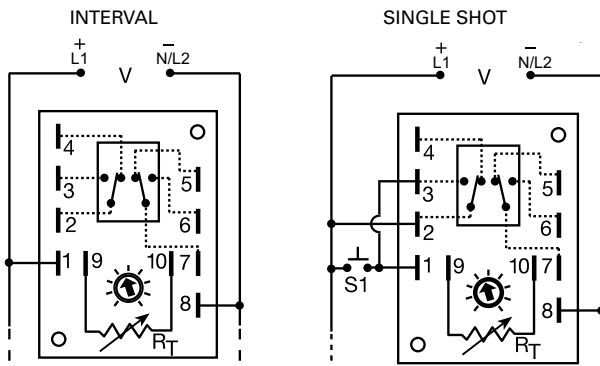
Reset: Removing input voltage resets the time delay and the output.

Operation (Single Shot)

Input voltage must be applied before and during timing. Upon momentary or maintained closure of initiate switch, output relay energizes for time delay. At the end of the delay, output de-energizes. Opening or reclosing initiate switch during timing has no affect on time delay. Output will energize if initiate switch is closed when input voltage is applied.

Reset: Reset occurs when time delay is complete & initiate switch is opened. Loss of input voltage resets time delay and output.

Wiring Diagram



2-3 & 7-6 are Normally Open Contacts (NO)
2-4 & 7-5 are Normally Closed Contacts (NC)

Features & Benefits

| FEATURES | BENEFITS |
|--|--|
| Digital integrated circuitry | Repeat Accuracy +/- 0.5%, Factory calibration +/- 10% |
| Isolated, 10A, DPDT output contacts | Allows control of loads for AC or DC voltages |
| Encapsulated | Protects against shock, vibration, and humidity |

Accessories



P1004-16, P1004-16-X Versa-Pot
Panel mountable, industrial potentiometer recommended for remote time delay adjustment.



P0700-7 Versa-Knob
Designed for 0.25 in. (6.35 mm) shaft of Versa-Pot. Semi-gloss industrial black finish.



P1015-64 (AWG 14/16) Female Quick Connect
These 0.25 in. (6.35 mm) female terminals are constructed with an insulator barrel to provide strain relief.



P1015-18 Quick Connect to Screw Adapter
Screw adapter terminal designed for use with all modules with 0.25 in. (6.35 mm) male quick connect terminals.

Ordering Information

| MODEL | INPUT VOLTAGE | ADJUSTMENT | TIME DELAY |
|----------|---------------|------------|------------|
| ERDI436 | 120VAC | External | 0.6 - 60s |
| ERDI6210 | 230VAC | Onboard | 1 - 100m |

If you don't find the part you need, call us for a custom product 800-843-8848

ERDI SERIES

Specifications

Time Delay

Type Digital integrated circuitry
Range 0.1s - 500m in 11 adjustable ranges,
 0.1s - 1000m fixed

Adjustment External adjust or onboard
Repeat Accuracy ±0.5%

Tolerance (Factory Calibration) ≤ ±10%

Reset Time ≤ 150ms

Time Delay vs Temp. & Voltage ≤ ±2%

Input

Voltage 120VAC or 230VAC

Tolerance

12VDC & 24VDC/AC -15% - 20%

120VDC/AC & 230VAC -20% - 10%

AC Line Frequency 50/60 Hz

Output

Type Isolated relay contacts

Form DPDT

Rating 10A resistive @ 120/240VAC & 28VDC;
 1/3 hp @ 120/240VAC

Life Mechanical - 1 x 10⁷; Electrical - 1 x 10⁶

Protection

Isolation Voltage ≥ 1500V RMS input to output

Insulation Resistance ≥ 100 MΩ

Polarity DC units are reverse polarity protected

Mechanical

Mounting

Surface mount with two #6 (M3.5 x 0.6) screws

Dimensions **H** 88.9 mm (3.5"); **W** 63.5 mm (2.5");

D 43.2 mm (1.7")

Termination

0.25 in. (6.35 mm) male quick connect terminals

Environmental

Operating/Storage

-40° to 65°C / -40° to 85°C

Temperature

≅ 5.7 oz (162 g)

Weight

Selection Guides

| R _T Selection Chart | | | | | | | R _T Megohm |
|--------------------------------|-----|-----|------|-----|-----|-----|--------------------------|
| Desired Time Delay* | | | | | | 1 | |
| Seconds | | | | | | | |
| 1 | 2 | 3 | 4 | 5 | 6 | | |
| 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.6 | 0.0 | |
| 0.19 | 0.6 | 1 | 1.7 | 3 | 6 | 0.1 | |
| 0.28 | 1.1 | 2 | 3.2 | 6 | 12 | 0.2 | |
| 0.37 | 1.6 | 3 | 4.7 | 9 | 18 | 0.3 | |
| 0.46 | 2.1 | 4 | 6.2 | 12 | 24 | 0.4 | |
| 0.55 | 2.6 | 5 | 7.7 | 15 | 30 | 0.5 | |
| 0.64 | 3.0 | 6 | 9.2 | 18 | 36 | 0.6 | |
| 0.73 | 3.5 | 7 | 10.7 | 21 | 42 | 0.7 | |
| 0.82 | 4.0 | 8 | 12.2 | 24 | 48 | 0.8 | |
| 0.91 | 4.5 | 9 | 13.7 | 27 | 54 | 0.9 | |
| 1.0 | 5.0 | 10 | 15 | 30 | 60 | 1.0 | |

* When selecting an external R_T add at least 20% for tolerance of unit and the R_T.

| R _T Selection Chart | | | | | | R _T Megohm |
|--------------------------------|-----|------|-----|-----|-----|--------------------------|
| Desired Time Delay* | | | | | 7 | |
| Minutes | | | | | | |
| 7 | 8 | 9 | 10 | 11 | | |
| 0.1 | 0.1 | 0.2 | 1 | 10 | 0.0 | |
| 0.6 | 1 | 1.7 | 10 | 50 | 0.1 | |
| 1.1 | 2 | 3.2 | 20 | 100 | 0.2 | |
| 1.6 | 3 | 4.7 | 30 | 150 | 0.3 | |
| 2.1 | 4 | 6.2 | 40 | 200 | 0.4 | |
| 2.6 | 5 | 7.7 | 50 | 250 | 0.5 | |
| 3.0 | 6 | 9.2 | 60 | 300 | 0.6 | |
| 3.5 | 7 | 10.7 | 70 | 350 | 0.7 | |
| 4.0 | 8 | 12.2 | 80 | 400 | 0.8 | |
| 4.5 | 9 | 13.7 | 90 | 450 | 0.9 | |
| 5.0 | 10 | 15 | 100 | 500 | 1.0 | |

* When selecting an external R_T add at least 20% for tolerance of unit and the R_T.

Function Diagrams

