

ERDI SERIES



Wiring Diagram



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

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

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.

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.



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Specifications

Time Delay Type Range

Adjustment Repeat Accuracy Tolerance (Factory Calibration) Reset Time Time Delay vs Temp. & Voltage Input Voltage Tolerance 12VDC & 24VDC/AC 120VDC/AC & 230VAC AC Line Frequency

Output

Type Form Rating

Life

Protection Isolation Voltage Insulation Resistance Polarity Mechanical Mounting Dimensions

Termination

Environmental Operating/Storage Temperature Weight Digital integrated circuitry 0.1s - 500m in 11 adjustable ranges, 0.1s - 1000m fixed External adjust or onboard ±0.5%

≤ ±10% ≤ 150ms

≤±2%

120VAC or 230VAC

-15% - 20% -20% - 10% 50/60 Hz

Isolated relay contacts DPDT 10A resistive @ 120/240VAC & 28VDC; 1/3 hp @ 120/240VAC Mechanical - 1 x 10⁷; Electrical - 1 x 10⁶

 \geq 1500V RMS input to output \geq 100 $M\Omega$ DC units are reverse polarity protected

Surface mount with two #6 (M3.5 x 0.6) screws H 88.9 mm (3.5"); W 63.5 mm (2.5"); D 43.2 mm (1.7") 0.25 in. (6.35 mm) male quick connect terminals

-40° to 65°C / -40° to 85°C ≅ 5.7 oz (162 g)

Selection Guides

	R _T Selection Chart						
	Desired Time Delay*						
	Seconds						
1	2	3	4	5	6	Megohm	
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					
	B-					
	Minutes					
7	8	9	10	11	Megohm	
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 RT add at least 20% for tolerance of unit and the RT.

Function Diagrams

V

S1

NO

NC

ΤD



TD

S1 = Initiate Switch NO = Normally Open Contact NC = Normally Closed Contact TD = Time Delay R = Reset

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