Motion Detector
EIS9 ISO-Timer
Timing Module

Discontinued Product

- Excellent Pulse Train Monitor
- Fast Reset to Zero During Timing
- Excellent Accuracy and Reliability
- Optical Isolation Between Input and Output

Description

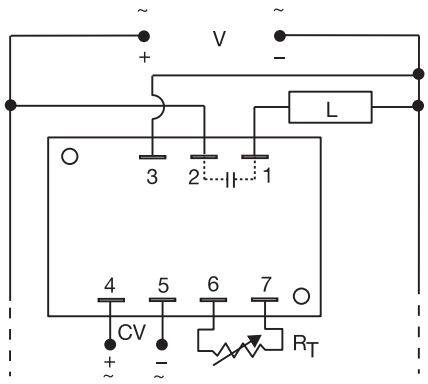
Provides long or short delays with accuracy and stability over a wide voltage and temperature range. Ideal for pulse train monitoring of programmable controllers, or motion detection. Designed for multiple voltage, and low voltage AC & DC control circuits. The control voltage and output voltage are optically isolated.

Operation

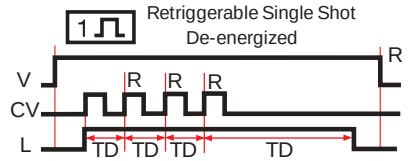
Initial Output Status - De-Energized
Input voltage must be applied prior to and during timing. Upon application of control voltage (momentary or maintained), the output is energized and the time delay is started. On completion of the delay, the output is de-energized.

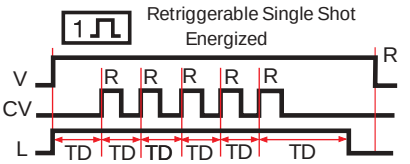
Initial Output Status - Energized
Upon application of input voltage, the output is energized and the time delay is started. At the end of the time delay, the load is de-energized.

Reset: Reapplying control voltage will reset the time delay and restart timing. Reset is also accomplished by removing and reapplying input voltage.



R_T is used when external adjustment is ordered.





V = Voltage L = Load R = Reset
CV = Control Voltage TD = Time Delay

Ordering Table

EIS9 Series	X Input	X Control Voltage	X Adjustment	X Time Delay *	X Initial Output Status
	1 - 12 V DC	D - 19 ... 144 V AC	1 - Fixed	0 - 0.2 ... 10 s	A - De-energized
	2 - 24 V AC	E - 88 ... 288 V AC	2 - External Adjust	1 - 1 ... 100 s	B - Energized
	3 - 24 V DC	F - 6 ... 18 V DC		2 - 10 ... 1000 s	
	4 - 120 V AC			3 - 0.1 ... 10 m	
	6 - 230 V AC			4 - 1 ... 100 m	
				5 - 10 ... 1000 m	

Example P/N: EIS94D21B Fixed: EIS92F175SA

*If Fixed Delay is selected, insert delay [0.2 ... 1000] followed by (S) sec. or [0.1 ... 1000] (M) min.

Technical Data

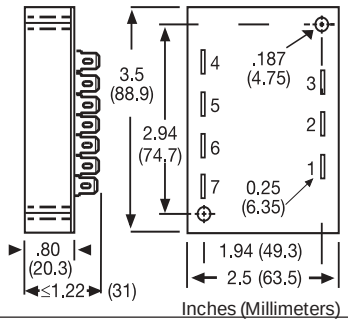
Time Delay	
Type	Digital integrated circuitry
Range	0.2 s ... 1000 m in 6 adjustable ranges or fixed
Repeat Accuracy	+/-0.5%
Time Delay vs. Temperature & Voltage	+/-2%
Tolerance (Factory Calibration)	Range 0: +/-2% or 50 ms, whichever is greater Range 1-5: +/-1% or 50 ms, whichever is greater
Recycle Time	AC control voltages: ≤300 ms DC control voltages: ≤5 ms
Initiate Time	AC control voltages: ≤30 ms DC control voltages: ≤2 ms
Input	
Line Voltage	24, 120, or 230 V AC; 12 or 24 V DC
Tolerance	+/-15%
Line Frequency	50 ... 60 Hz
DC Ripple	10%
Control Voltage	6 ... 288 V in 3 ranges
Output	
Type	Solid state
Form	Normally Open, closed during timing
Rating	1 A steady state, 10 A inrush for ≤16 ms at 60°C
Voltage Drop	DC: ≅ 1 V at 1 A; AC: ≅ 2.5 V at 1 A
DC Operation	Positive switching mode
Protection	
Circuitry	Encapsulated
Isolation Voltage	≥ 2000 V RMS input to output
Insulation Resistance	≥ 100 MΩ
Polarity	DC units are reverse polarity protected
Mechanical	
Mounting	Surface mount with two #6 (M3.5x0.6) screws
Termination	0.25 in. (6.35 mm) male quick connect terminals
Operating / Storage Temperature	-40°C ... +75°C / -40°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≅ 4.8 oz (136 g)

Time Delay	VTP P/N
0 – 0.2 ... 10 s	VTP5C
1 – 1 ... 100 s	VTP5G
2 – 10 ... 1000 s	VTP5K
3 – 0.1 ... 10 m	VTP5N
4 – 1 ... 100 m	VTP5P
5 – 10 ... 1000 m	VTP5R

R_T Selection Chart

Desired Time Delay*						R_T
Seconds			Minutes			
0	1	2	3	4	5	Megohm
0.2	1	10	0.1	1	10	0.0
1	10	100	1	10	100	0.5
2	20	200	2	20	200	1.0
3	30	300	3	30	300	1.5
4	40	400	4	40	400	2.0
5	50	500	5	50	500	2.5
6	60	600	6	60	600	3.0
7	70	700	7	70	700	3.5
8	80	800	8	80	800	4.0
9	90	900	9	90	900	4.5
10	100	1000	10	100	1000	5.0

* When selecting an external R_T add at least 11% for tolerance of unit and the R_T.

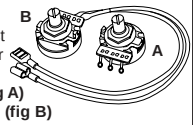


Inches (Millimeters)

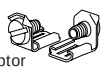
Accessories

Female quick connect
P/N: P1015-64 (AWG 14/16)

External adjust potentiometer
P/Ns:
P1004-13 (fig A)
P1004-13-X (fig B)



Quick connect to screw adaptor
P/N: P1015-18



Versa-knob
P/N: P0700-7

Plug-on adjustment module
P/N: VTP(X)(X)

See accessory pages at the end of this section.