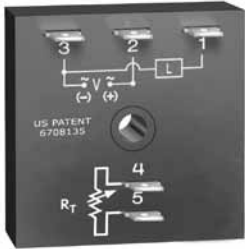


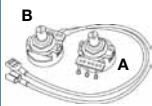
Interval TSD6 Digi-Timer Timing Module



- Fixed or Adjustable Delays From 0.1 s... 100 h
- +/-0.1% Repeat Accuracy
- +/-1% Factory Calibration
- 12 or 24 V DC Interval Timing
- 1 A Solid State Output
- Encapsulated

Approvals:

Accessories



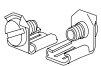
External adjust potentiometer
P/Ns:
P1004-95 (fig A)
P1004-95-X (fig B)



Mounting bracket
P/N: P1023-6



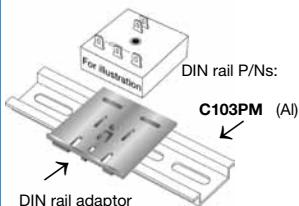
Female quick connect
P/N:
P1015-64 (AWG 14/16)



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



Versa-knob
P/N: P0700-7



DIN rail adaptor
P/N: P1023-20

See accessory pages for specifications.

Description

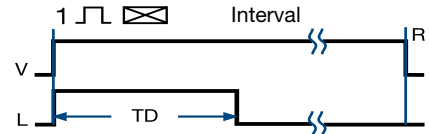
The TSD6 offers total solid state interval timing for 12 or 24 V DC applications. This series provides either negative or positive switching. The TSD Series is designed for more demanding commercial and industrial applications where small size, and accurate performance is required. The factory calibration for fixed time delays is within 1% of the target time delay. The repeat accuracy, under stable conditions, is 0.1% of the time delay. The TSD Series is rated to operate over an extended temperature range. Time delays of 0.1 seconds to 100 hours are available. The output is rated 1 A steady and 10 A inrush. The modules are totally solid state and encapsulated to protect the electronic circuitry.

Operation

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

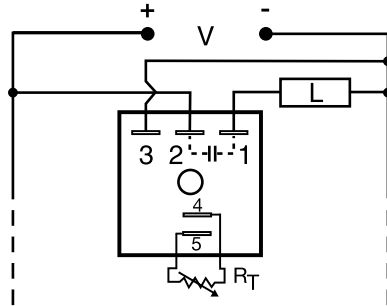
Reset: Removing input voltage resets the time delay and the output.

Function

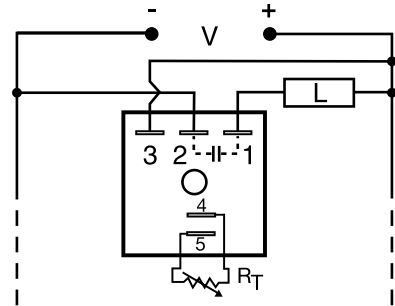


V = Voltage L = Load R = Reset
TD = Time Delay = Undefined time

Connection



Positive Switching



Negative Switching

R_T is used when external adjustment is ordered.
Dashed lines are internal connections.

Available Models-

TSD61130MP
TSD61145MP
TSD6121P
TSD631180SP
TSD6321P
TSD6334P

TSD6113SN
TSD6115SN
TSD6123N
TSD631380SP
TSD6325P

TSD6113SP
TSD61160MP
TSD6310.8SN
TSD6320P
TSD6330P

Don't see what you need? Call us for a minimum quantity and price quote!

Ordering Table

TSD6 Series	X Input	X Adjustment	X Time Delay *	X Switching Mode
	-1 - 12 V DC	-1 - Fixed	-0 - 0.1 ... 10 s	-P - Positive
	-3 - 24 V DC	-2 - External Adjust	-1 - 1 ... 100 s	-N - Negative
		-3 - Onboard Adjust	-2 - 10 ... 1000 s	
			-3 - 0.1 ... 10 m	
			-4 - 1 ... 100 m	
			-5 - 10 ... 1000 m	
			-6 - 1 ... 100 h	

Example P/N: TSD6320P Fixed -TSD6110.1SN

*If Fixed Delay is selected, insert delay [0.1...1000] followed by (S) sec. or (M) min., or [1 ... 100] (H) hours.

Interval TSD6 Digi-Timer Timing Module

Dedicated
timers

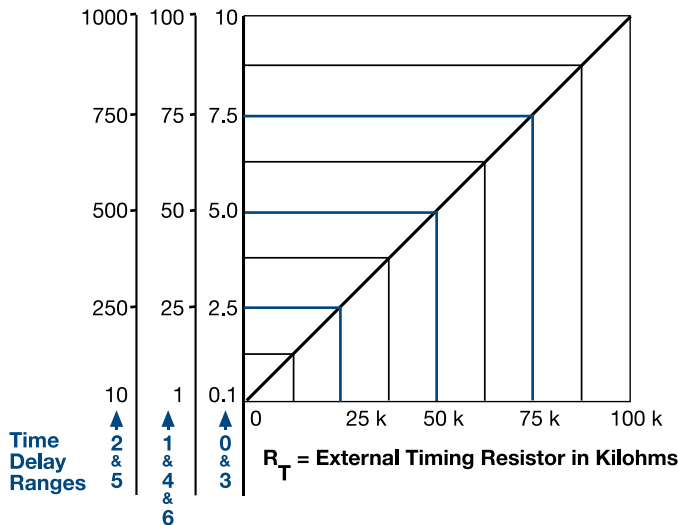
Technical Data

Time Delay	
Range	0.1 s ... 100 h 7 adjustable ranges or fixed
Repeat Accuracy	+/-0.1% or 20 ms, whichever is greater
Tolerance (Factory Calibration)	≤ +/-1%
Reset Time	≤ 150 ms
Time Delay vs. Temperature & Voltage	≤ +/-1%
Input	
Voltage	12 or 24 V DC
Tolerance	+/-15%
Ripple	+/-10%
Power Consumption	≤ 1 W
Output	
Type	Solid state, positive or negative switching
Form	Normally Open, closed during timing
Maximum Load Current	1 A steady state, 10 A inrush at 60°C
Off State Leakage Current	≅ 1 mA
Voltage Drop	≅ 1.0 V at 1 A
Protection	
Circuitry	Encapsulated
Dielectric Breakdown	≥ 2000 V RMS terminals to mounting surface
Insulation Resistance	≥ 100 MΩ
Polarity	Units are reverse polarity protected
Mechanical	
Mounting	Surface mount with one #10 (M5 x 0.8) screw
Package	2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm)
Termination	0.25 in. (6.35 mm) male quick connect terminals
Environmental	
Operating Temperature	-40°C ... +75°C
Storage Temperature	-40°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≅ 2.4 oz (68 g)

5

External Resistance vs Time Delay

In Secs., Mins., or Hours



This chart applies to externally adjustable part numbers.

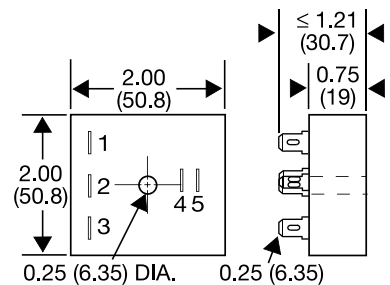
The time delay is adjustable over the time delay range selected by varying the resistance across the R_T terminals; as the resistance increases the time delay increases.

When selecting an external R_T , add the tolerances of the timer and the R_T for the full time range adjustment.

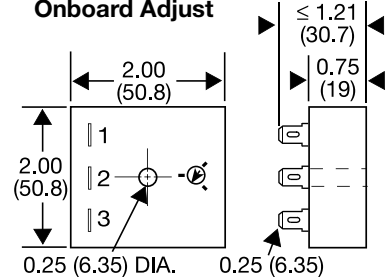
Examples: 1 to 50 S adjustable time delay, select time delay range 1 and a 50 K ohm R_T . For 1 to 100 S use a 100 K ohm R_T .

Mechanical View

Fixed & External Adjust



Onboard Adjust



Inches (Millimeters)

TSD6Cen 09:10