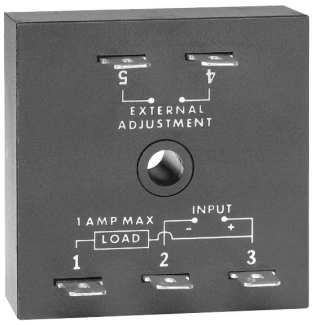


The TS2 Series is designed for 24, 120 or 230VAC and the TS6 Series is designed for 12 or 24VDC. These series are capable of controlling load currents of up to 1A steady state, 10A inrush. Encapsulated circuitry and the reliability of a ±2% repeat accuracy make the TS2 and TS6 ideal for cost sensitive applications.

Operation (Interval):
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.

For more information see:
Appendix A, pages 156-164 for function descriptions and diagrams.
Appendix B, page 165, Figure 1 for dimensional drawing.

Features:

- 12 or 24VDC; 24,120, or 230VAC input voltages
- Fixed or adjustable delays from 0.05s - 10m in 8 ranges
- Repeat accuracy ±2%
- Load currents to 1A, 10A inrush
- Totally solid state & encapsulated

Approvals:

Auxiliary Products:

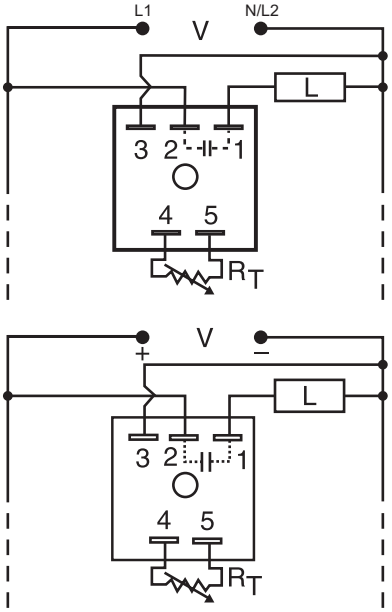
- **External adjust potentiometer:**
  P/N: P1004-XX
  P/N: P1004-XX-X
- **Female quick connect:**
  P/N: P1015-64 (AWG 14/16)
- **Quick connect to screw adaptor:**
  P/N: P1015-18
- **Mounting bracket:** P/N: P1023-6
- **DIN rail:** P/N: C103PM (Al)
- **DIN rail adaptor:** P/N: P1023-20
- **Versa-knob:** P/N: P0700-7
- **Plug-on adjustment module:**
  P/N: VTP(X)(X)

TS6 12VDC	
Time Delay	VTP P/N
1 - 0.05-1s	VTP2A
2 - 0.5-20s	VTP2E
3 - 2-60s	VTP2F
4 - 5-120s	VTP2H

TS2 & TS6 All Other Voltages	
Time Delay	VTP P/N
1 - 0.05-3s	VTP4B
2 - 0.5-60s	VTP4F
3 - 2-180s	VTP4J
4 - 5-600s	VTP5N

Selection Table for VTP Plug-on Adjustment Accessory.

Connection:



R_T is used when external adjustment is ordered.
Note: TS6 is not reverse polarity protected.

R_T Selection Chart				
Desired Time Delay* Seconds				R_T
1	2	3	4	Megohm
0.05	0.5	2	5	0.0
0.5	10	30	60	0.5
1.0	20	60	120	1.0
▼	24VDC or AC ONLY†		▼	
1.5	30	90	180	1.5
2.0	40	120	240	2.0
2.5	50	150	300	2.5
3.0	60	180	360	3.0
			420	3.5
			480	4.0
			540	4.5
			600	5.0

* When selecting an external R_T add at least 20% for tolerance of unit and the R_T.
† 1 Megohm max for 12 VDC Units

Order Tables:

TS2

X Input Voltage	X Adjustment	X Time Delay*
2 - 24VAC	1 - Fixed	1 - 0.05 - 3s
4 - 120VAC	2 - External adjust	2 - 0.5 - 60s
6 - 230VAC		3 - 2 - 180s
		4 - 5 - 600s

*If fixed delay is selected, insert delay (**0.05 - 600**) in seconds.

TS6

X Input Voltage	X Adjustment	X Time Delay*		X Switching Mode
		12VDC	24VDC	
1 - 12VDC	1 - Fixed	1 - 0.05 - 1s	0.05 - 3s	P - Positive
3 - 24VDC	2 - External adjust	2 - 0.5 - 20s	0.5 - 60s	
		3 - 2 - 60s	2 - 180s	
		4 - 5 - 120s	5 - 600s	

*If fixed delay is selected, insert delay (**0.05 - 120** 12VDC) or (**0.05 - 600** 24VDC) in secs.

Available Models:

TS22120	TS2421	TS6116P
TS2213	TS2422	TS6122P
TS2223	TS2423	TS6123P
TS2411.5	TS2424	TS6311P
TS24110	TS2611.5	TS63110P
TS2412	TS26130	TS6321P
TS2413	TS26190	
TS24130	TS2621	

If desired part number is not listed, please call us to see if it is technically possible to build.

Specifications

Time Delay
Type . . . . . Analog circuitry
Range
12VDC . . . . . 0.05 - 120s in 4 adjustable ranges or fixed (1 MΩ max. R_T)
Other Voltages . . . . . 0.05 - 600s in 4 adjustable ranges or fixed
Repeat Accuracy . . . . . ±2% or 20ms, whichever is greater
Tolerance (Factory Calibration) . . . . . ≤ ±10%
Time Delay vs Temp. & Voltage . . . . . ≤ ±10%
Reset Time . . . . . ≤ 150ms
Input
Voltage . . . . . 12 or 24VDC; 24, 120, or 230VAC
Tolerance . . . . . ±15%
DC Ripple 10%
Power Consumption . . . . . DC ≤ 1W; AC ≤ 2VA
Output
Type . . . . . Solid state
Form . . . . . NO, closed during timing
Maximum Load Current . . . . . 1A steady state, 10A inrush at 60°C
Voltage Drop . . . . . DC ≅ 1.0V @ 1A; AC ≅ 2.5V @ 1A
Protection
Circuitry . . . . . Encapsulated
Polarity . . . . . TS6 is not reverse polarity protected
Dielectric Breakdown . . . . . ≥ 2000V RMS terminals to mounting surface
Insulation Resistance . . . . . ≥ 100 MΩ
Mechanical
Mounting . . . . . Surface mount with one #10 (M5 x 0.8) screw
Dimensions . . . . . 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 / Storage Temperature . . . . . -40° to 75°C / -40° to 85°C
Humidity . . . . . 95% relative, non-condensing
Weight . . . . . ≅ 2.4 oz (68 g)