

Interval (Single Pulse On Operate) TS2, TS6 Versa-Timer Timing Module

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10 YEAR WARRANTY

- 12 or 24 V DC; 24, 120, or 230 V AC Input Voltages
- Fixed or Adjustable Delays From 0.05 s ... 10 m in 8 Ranges
- Repeat Accuracy +/-2%
- Load Currents to 1 A, 10 A Inrush
- Totally Solid State and Encapsulated

Approvals: (TS2 only)

Accessories



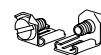
External adjust potentiometer
P/Ns:
P1004-XX (fig A)
P1004-XX-X (fig B)



Mounting bracket
P/N: P1023-6



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



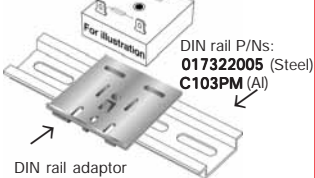
Quick connect to screw adaptor
P/N: P1015-18



Versa-knob
P/N: P0700-7



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



DIN rail P/Ns:
017322005 (Steel)
C103PM (Al)

See accessory pages for specifications.

Description

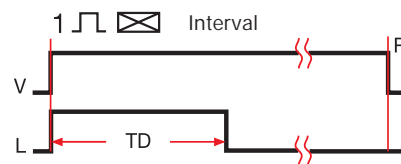
The TS2 is designed for AC voltages. The TS6 Series is designed for DC voltages at 12 or 24 V DC. These series are capable of controlling load currents of up to 1 A steady state, 10 A inrush. Encapsulated circuitry and the reliability of a +/-2% repeat accuracy make the TS2 and TS6 ideal for cost sensitive applications.

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.

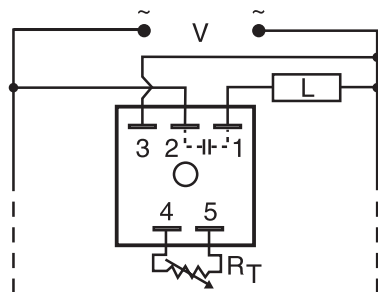
Reset: Removing input voltage resets the time delay and the output.

Function

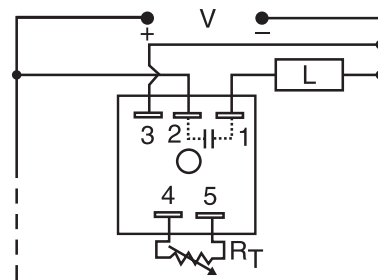


V = Voltage L = Load R = Reset
TD = Time Delay —||— = Undefined time

Connection



R_T is used when external adjustment is ordered.



R_T is used when external adjustment is ordered.

Note: TS6 is not reverse polarity protected.

Ordering Table

TS2 Series	Input	Adjustment	Time Delay*
-2	24 V AC	-1 - Fixed	-1 - 0.05 ... 3 s
-4	120 V AC	-2 - External Adjust	-2 - 0.5 ... 60 s
-6	230 V AC		-3 - 2 ... 180 s
			-4 - 5 ... 600 s

* If Fixed Delay is selected, insert delay [0.05 ... 600] in seconds.

Example P/N: TS2421 Fixed - TS24130

TS6 Series	Input	Adjustment	Time Delay*	Switching Mode
-1	12 V DC	-1 - Fixed	-1 - 0.05 ... 1 s	-P - Positive
-2	12 V DC	-2 - External Adjust	-2 - 0.5 ... 20 s	
-3	24 V DC		-3 - 2 ... 60 s	
-4	24 V DC		-4 - 5 ... 120 s	

*If Fixed Delay is selected, insert delay [0.05 ... 120] or [0.05 ... 600] in secs.

Example P/N: TS6123P Fixed - TS6110.5P

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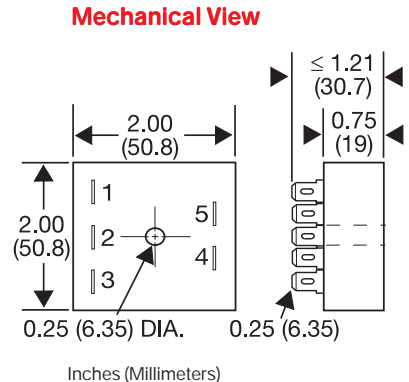
Technical Data

Time Delay		
Type		Analog circuitry
Range	12 V DC	0.05 ... 120 s in 4 adjustable ranges or fixed (1 MΩ max. R _T)
	Other Voltages	0.05 ... 600 s in 4 adjustable ranges or fixed
Repeat Accuracy		+/-2% or 20 ms, whichever is greater
Tolerance (Factory Calibration)		≤ +/-10%
Time Delay vs. Temperature & Voltage		≤ +/-10%
Reset Time		≤ 150 ms
Input		
Voltage		12 or 24 V DC; 24, 120, or 230 V AC
Tolerance		+/-15%
DC Ripple		10%
Power Consumption		DC ≤ 1 W; AC ≤ 2 VA
Output		
Type		Solid state
Form		Normally Open, closed during timing
Maximum Load Current		1 A steady state, 10 A inrush at 60°C
Voltage Drop		DC ≅ 1.0 V at 1 A; AC ≅ 2.5 V at 1 A
Protection		
Circuitry		Encapsulated
Polarity		TS6 is not reverse polarity protected
Dielectric Breakdown		≥ 2000 V RMS terminals to mounting surface
Insulation Resistance		≥ 100 MΩ
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/Storage Temperature		-40°C ... +75°C / -40°C ... +85°C
Humidity		95% relative, non-condensing
Weight		≅ 2.4 oz (68 g)

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R _T Selection Chart				
Desired Time Delay*				R _T
Seconds				
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



TS6 12 VDC				
Time Delay	VTP P/N	Fig. A P/N	Fig. B P/N	
1 - 0.05 ... 1 s	VTP2A	P1004-16	P1004-16-X	
2 - 0.5 ... 20 s	VTP2E	P1004-16	P1004-16-X	
3 - 2 ... 60 s	VTP2F	P1004-16	P1004-16-X	
4 - 5 ... 120 s	VTP2H	P1004-16	P1004-16-X	

TS2 & TS6 All Other Voltages				
Time Delay	VTP P/N	Fig. A P/N	Fig. B P/N	
1 - 0.05 ... 3 s	VTP4B	P1004-12	P1004-12-X	
2 - 0.5 ... 60 s	VTP4F	P1004-12	P1004-12-X	
3 - 2 ... 180 s	VTP4J	P1004-12	P1004-12-X	
4 - 5 ... 600 s	VTP5N	P1004-13	P1004-13-X	

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