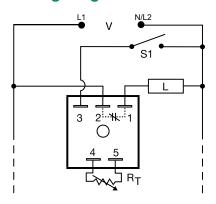
TS441165





Wiring Diagram



V = Voltage S1 = Initiate Switch L = Load

R_T is used when external adjustment is ordered.

Description

The TS441165 is an analog delay-on-make timer with a normally closed solid-state output. Unlike an interval timer, the load is energized prior to and during the time delay period. It can be used as a faster starting interval time delay when S1 is closed upon application of input voltage.

Operation (Delay-on-Make NC)

Upon application of input voltage, the load is energized immediately. When the initiate switch is closed, the time delay begins. At the end of the time delay, the load de-energizes.

Reset: When the initiate switch is reopened, the load again energizes and the time delay is reset. Removing input voltage resets the time delay and output.

Features & Benefits

FEATURES	BENEFITS	
Analog circuitry	Repeat Accuracy + / - 2%	
Compact, low cost design	Allows flexiblility for OEM applications	
1A steady, 10A inrush solid-state output	Provides 100 million operations in typical conditions.	
Load energized prior to and during time delay	Faster operation	
Totally solid state and encapsulated	No moving parts to arc and wear out over time and encapsulated to protect against shock, vibration, and humidity	
Normally closed output	Can be used as a faster starting interval time delay	

Accessories



P1004-XX, P1004-XX-X Versa-Pot

Panel mountable, industrial potentiometer recommended for remote time delay adjustment.



P1023-6 Mounting bracket

The 90° orientation of mounting slots makes installation/removal of modules quick and easy.



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 guick connect terminals.



TS441165

Accessories



C103PM (AL) DIN Rail

35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.



P1023-20 DIN Rail Adapter

Allows module to be mounted on a 35 mm DIN type rail with two #10 screws.



VTP(X)(X) Plug-on Adjustment Module

Mounts on modules with in-line adjustment terminals. Rated at 0.25W at 55°C. Available in resistance values from $5K\Omega$ to $5M\Omega$.

Selection Table for VTP Plug-on Adjustment Accessory

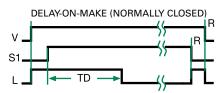
Time Delay	VTP P/N
1 - 0.05-3s	VTP4B
2 - 0.5-60s	VTP4F
3 - 2-180s	VTP4J
4 - 5-600s	VTP5N

Selection Guide

R _T Selection Chart					
Des	R-				
	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	
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.

Function Diagram



V = VoltageS1 =Initiate Switch L = LoadTD =Time Delay R = Reset = Undefined Time

Specifications

Time Delay

Type Analog circuitry Range 165s Adjustment Fixed

Repeat Accuracy ±2% or 20ms, whichever is greater; under

fixed conditions

Tolerance

(Factory Calibration) $\leq \pm 10\%$

Time Delay vs Temp.

& Voltage $\leq \pm 10\%$ **Recycle Time** ≤ 150ms

Input

120VAC Voltage **Tolerance** ±20% **AC Line Frequency** 50/60 Hz

Output

Type Solid state NC, closed during timing **Form**

Maximum Load Current

Voltage Drop Protection

Circuitry

Dielectric Breakdown **Insulation Resistance**

Mechanical

Mounting

Dimensions

Termination Environmental

Operating/Storage

Temperature Humidity Weight

 -40° to 75° C / -40° to 85° C 95% relative, non-condensing

D 30.7 mm (1.21")

1A steady state, 10A inrush at 60°C

≥ 2000V RMS terminals to mounting surface

Surface mount with one #10 (M5 x 0.8) screw

0.25 in. (6.35 mm) male quick connect terminals

H 50.8 mm (2.0"); **W** 50.8 mm (2.0");

 $\approx 2.4 \text{ oz } (68 \text{ g})$

≈ 2.5V @ 1A

Encapsulated

 \geq 100 M Ω

Time Delay	VTP P/N
1 - 0.05-3s	VTP4B
2 - 0.5-60s	VTP4F
3 - 2-180s	VTP4J
4 - 5-600s	VTP5N