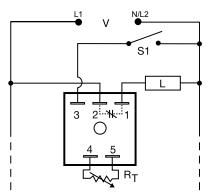


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# Wiring Diagram

TS441165



V = Voltage S1 = Initiate Switch L = Load

 $R_{T}\xspace$  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<br>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<br>and during time delay | Faster operation   |  |  |
| Totally solid state and encapsulated             | No moving parts to arc and wear out over time and<br>encapsulated to protect against shock, vibration,<br>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 quick connect terminals.

### Time Delay Relays Dedicated - Delay-on-Make, Normally Closed



### Accessories

TS441165



#### 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

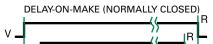
### **Selection Guide**

| R <sub>T</sub> Selection Chart |     |     |     |        |  |
|--------------------------------|-----|-----|-----|--------|--|
| Desired Time Delay*            |     |     |     | Вт     |  |
| 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**

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# **Specifications**

#### Time Delay Type Range Adjustment Repeat Accuracy Tolerance (Factory Calibration) Time Delay vs Temp. & Voltage Recycle Time Input Voltage

Voltage Tolerance AC Line Frequency Output Type Form Maximum Load Current Voltage Drop Protection Circuitry Dielectric Breakdown Insulation Resistance Mechanical

Mounting Dimensions

#### Termination Environmental

Operating/Storage Temperature Humidity Weight Analog circuitry 165s Fixed ±2% or 20ms, whichever is greater; under fixed conditions

 $\leq \pm 10\%$ 

≤ ±10% ≤ 150ms

120VAC

±20%

50/60 Hz Solid state NC, closed during timing 1A steady state, 10A inrush at 60°C

≅ 2.5V @ 1A Encapsulated

 $\geq$  2000V RMS terminals to mounting surface  $\geq$  100 MΩ

Surface mount with one #10 (M5 x 0.8) screw H 50.8 mm (2.0"); W 50.8 mm (2.0"); D 30.7 mm (1.21") 0.25 in. (6.35 mm) male quick connect terminals

 $-40^{\circ}$  to 75°C /  $-40^{\circ}$  to 85°C 95% relative, non-condensing  $\approx 2.4$  oz (68 g) 单击下面可查看定价,库存,交付和生命周期等信息

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