Chipsmall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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TRB SERIES

CE UL CSA UL *

*8-pin models UL listed when used in combination with P1011-6 socket only.
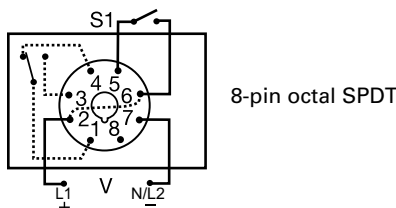
8-PIN

11-PIN

Description

The TRB Series combines an isolated, 10A electromechanical relay output with analog timing circuitry. False trigger of the TRB by a transient is unlikely because of the complete isolation of the circuit from the line prior to initiation. The initiate contact is common to one side of the line and may be utilized to operate other loads. Installation is easy due to the TRB's industry standard 8- or 11-pin plug-in base wiring.

Operation (Delay-on-Break)

Input voltage must be applied before and during timing. Upon closure of the initiate switch, the output relay energizes. The time delay begins when the initiate switch is opened (trailing edge triggered). The output remains energized during timing. At the end of the time delay, the output de-energizes. The output will energize if the initiate switch is closed when input voltage is applied.

Reset: Reclosing the initiate switch during timing resets the time delay. Loss of input voltage resets the time delay and output.
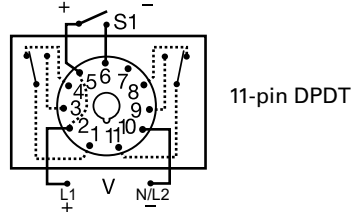
Wiring Diagram

8-pin octal SPDT
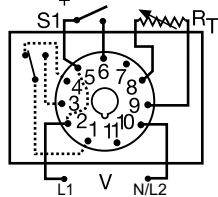
11-pin SPDT

11-pin DPDT

V = Voltage
S1 = Initiate Switch

Relay contacts are isolated. R_T is used when external adjustment is ordered.

Features & Benefits

FEATURES	BENEFITS
Complete isolation of circuit from line	No false trip due to transients
Industry standard 8 or 11-pin connection	Provides easy installation and field replacement
Isolated, 10A, SPDT or DPDT output contacts	Allows control of loads for AC or DC voltages
Analog circuitry	Repeat accuracy + /- 2%

Accessories

P1004-XX, P1004-XX-X Versa-Pot
Panel mountable, industrial potentiometer recommended for remote time delay adjustment.

P0700-7 Versa-Knob
Designed for 0.25 in (6.35 mm) shaft of Versa-Pot. Semi-gloss industrial black finish.

BZ1 Front Panel Mount Kit
Provides an easy method of through-the-panel mounting of 8- or 11-pin plug-in timers, flashers, and other controls.

Ordering Information

MODEL	INPUT VOLTAGE	ADJUSTMENT	OUTPUT FORM	TIME TOLERANCE	TIME DELAY
TRB120A2Y30	120VAC	Onboard	Octal, SPDT (AC only)	+ /- 10%	1 - 30s
TRB120A3X600	120VAC	Lock shaft	Octal, SPDT (AC only)	+ /- 20%	7 - 600s
TRB120A4Y120	120VAC	Onboard	11-pin, DPDT	+ /- 10%	2 - 120s
TRB24D10Y10	24VDC/28VDC	Fixed	11-pin, DPDT	+ /- 10%	10s

If you don't find the part you need, call us for a custom product 800-843-8848
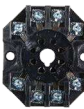
TRB SERIES

Accessories

NDS-8 Octal 8-pin Socket
8-pin 35mm DIN rail or surface mount. Surface mounted with two #6 screws or snaps onto a 35 mm DIN rail. Uses PSC8 hold-down clips.

NDS-11 11-pin Socket
11-pin 35mm DIN rail or surface mount. Surface mounted with two #6 screws or snaps onto a 35 mm DIN rail. Uses PSC11 hold-down clips.

P1011-6 Octal Socket for UL listing*
8-pin surface mount socket with binder head screw terminals. Rated 10A @ 600VAC.

Selection Guides

External R_T P/N Selection Table	
Value	Part Number
1M ohm	P1004-16
1.5M ohm	P1004-15
2M ohm	P1004-14
3M ohm	P1004-12
5M ohm	P1004-13
1M ohm	P1004-16-X
1.5M ohm	P1004-15-X
2M ohm	P1004-14-X
3M ohm	P1004-12-X
5M ohm	P1004-13-X

R_T Selection Chart	
Time Delay*	
Range	R_T
Seconds	Megohm
0.05...1	1.0
0.05...2	2.0
0.05...3	3.0
0.1...5	5.0
0.1...10	3.0
1...30	1.5
1...60	3.0
2...120	2.0
2...180	3.0
7...240	1.5
7...300	2.0
7...360	2.0
7...420	3.0
7...480	3.0
7...600	5.0

* When selecting an external R_T add at least 15...30% for tolerance of unit and the R_T.
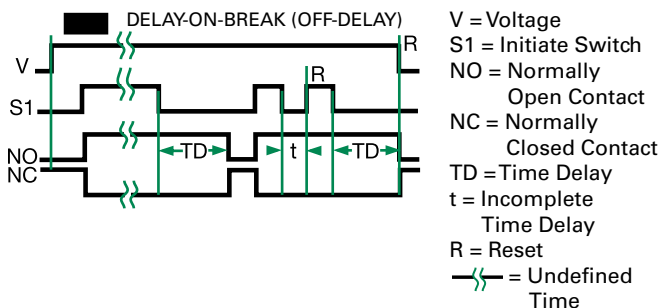
Specifications

Time Delay

Type	Analog circuitry
Range	50ms - 10m in 15 adjustable ranges or fixed
Repeat Accuracy	±2% or 20ms, whichever is greater
Fixed Time Tolerance & Setting Accuracy	±5, 10, or 20%
Initiate Time	≤ 70ms
Reset Time	≤ 75ms
Recycle Time	≤ 250ms
Time Delay vs Temp. & Voltage	≤±10%

Input

Voltage	24/28 or 110VDC; 24, 120, or 230VAC (DC voltages on DPDT output models only)
Tolerance	
24VDC/AC	-15% - 20%
10 to 230VAC/DC	-20% - 10%
AC Line Frequency	50/60 Hz
Power Consumption	≤ 3.25W

Output

Type	Electromechanical relay
Form	Isolated SPDT or DPDT
Rating	10A resistive @ 120/240VAC & 28VDC; 1/3 hp @ 120/240VAC
Life	Mechanical - 1 x 10^7; Electrical - 1 x 10^6

Protection

Insulation Resistance	≥ 100 MΩ
Isolation Voltage	≥ 1500V RMS between input to output
Polarity	DC units are reverse polarity protected

Mechanical

Mounting	Plug-in socket
Dimensions	**H** 91.6 mm (3.62"); **W** 60.7 mm (2.39"); **D** 45.2 mm (1.78")
Termination	Octal 8-pin plug-in or 11-pin plug-in

Environmental

Operating/Storage Temperature	-20° to 65°C / -30° to 85°C
Weight	≅ 6 oz (170 g)

Function Diagram

DELAY-ON-BREAK (OFF-DELAY)

V = Voltage
S1 = Initiate Switch
NO = Normally Open Contact
NC = Normally Closed Contact
TD = Time Delay
t = Incomplete Time Delay
R = Reset
= Undefined Time