

Delay On Make TRM Series Time Delay Relay



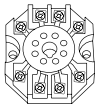
10
YEAR
WARRANTY

- 10 A DPDT or SPDT Output Contacts
- 24 ... 230 V Operation in Ranges
- Octal or 11 Pin Plug-in
- Fixed or Adjustable Delays from 0.05 to 600 s in ranges
- +/-2% Repeat Accuracy
- Hold Down Clamps Available

Approvals:

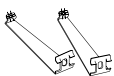
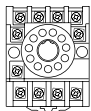
** 8 pin models used in combination with P1011-6 socket only.

Accessories



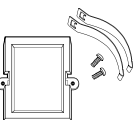
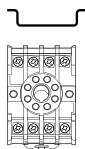
Octal socket for UL Listing
P/N: **P1011-6**

11 pin socket
P/N: **NDS-11**



Hold down clips
P/Ns:
PSC8 (NDS-8)
PSC11 (NDS-11)

Octal
8 pin socket
P/N: **NDS-8**



Panel mount kit
P/N: **BZ1**

Description

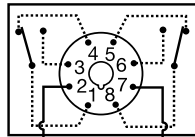
The TRM Series is a combination of analog electronic circuitry and electromechanical relay output. It provides input to output isolation with a wide variety of input voltages and time ranges. Standard plug-in base wiring, fast reset, rugged enclosure, and good repeat accuracy make the TRM a select choice in any OEM application.

Operation

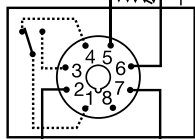
Upon application of input voltage, the time delay begins. The output is de-energized before and during the time delay. At the end of the time delay, the output relay energizes and remains energized until input voltage is removed.

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

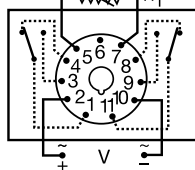
Connection



8 Pin Octal DPDT



8 Pin Octal SPDT



11 Pin DPDT

Available Models-

TRM110D1Z30	TRM120A1Y1	TRM120A2X1
TRM120A2X30	TRM120A2X60	•TRM120A2Y10
•TRM120A2Y180	•TRM120A2Y30	TRM120A2Y60
TRM120A5Y120	TRM230A2X60	TRM230A2Y180
TRM24A2Y120	TRM24A2Y30	TRM24A2Z10
TRM24A8Y5	TRM24D1Y1	TRM24D2X300
TRM24D2Y30	TRM24D5Y10	•TDML12DL
•TDML24DL		

Don't see what you need? Call us for a minimum quantity and price quote!

Ordering Table

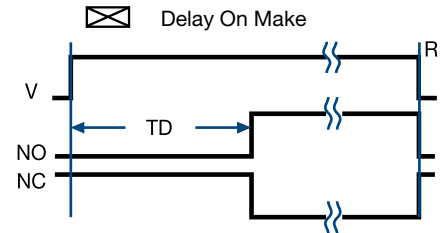
TRM Series	X Input	X Adjustment and Output Form	X Time Tolerance	X Time Delay* (Seconds)
	- 24A - 24 V AC	- 1 - Fixed, Octal, DPDT	- X - +/-20%	0.05 ... 1
	- 24D - 24 V DC/28 V DC	- 2 - Knob Adjust, Octal, DPDT	- Y - +/-10%	0.05 ... 2
	- 110D - 110 V DC	- 3 - Lock Shaft Adjust, Octal, DPDT	- Z - +/- 5%	0.05 ... 3
	- 120A - 120 V AC	- 5 - Ext. Adjust, 11 Pin, DPDT without Potentiometer		0.1 ... 5
	- 230A - 230 V AC	- 6 - Ext. Adjust, 11 Pin, DPDT supplied with Potentiometer		0.1 ... 10
		- 8 - Ext. Adjust, Octal, SPDT, without Potentiometer		1 ... 30
		- 9 - Ext. Adjust, Octal, SPDT, with Potentiometer		1 ... 60
				2 ... 120
				2 ... 180
				7 ... 240
				7 ... 300
				7 ... 360
				7 ... 420
				7 ... 480
				7 ... 600

Example P/N:

TRM120A2Y30 = 120 VAC, knob adjust, Octal, DPDT output, +/-10%, 1 to 30 s
TRM230A1X10 = 230 VAC, fixed at 10 s, +/-20%, Octal base, DPDT output

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

Function



V = Voltage TD = Time Delay R = Reset
 NO = Normally Open NC = Normally Closed
 —||— = Undefined time

S1 = Initiate Switch

Relay contacts are isolated. Dashed lines are internal connections.

R_T is used when external adjustment is ordered.

Delay On Make

TRM Series

Time Delay Relay

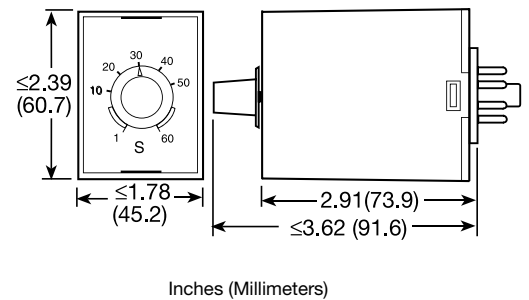
Dedicated
timers

Technical Data

Time Delay		
Type		Analog circuitry
Range		50 ms ... 10 m in 15 adjustable ranges or fixed
Repeat Accuracy		+/-2% or 20 ms, whichever is greater
Fixed Time Tolerance & Setting Accuracy		+/-5, 10, or 20%
Reset Time		≤ 50 ms
Recycle Time		After timing: ≤ 20 ms
		During timing: 0.1% of max. time delay or 75 ms, whichever is greater
Time Delay vs. Temperature & Voltage		≤ +/-10%
Input		
Voltage		24 or 110 V DC; 24, 120, or 230 V AC
Tolerance	24 V DC/AC	-15% ... +20%
	110 ... 230 V AC/DC	-20% ... +10%
Frequency		50 ... 60 Hz
Power Consumption		≤ 2.25 W
Output		
Type		Electromechanical relay
Form		Isolated DPDT or SPDT
Rating		10 A resistive at 120/240 V AC & 28 V DC; 1/3 hp at 120/240 V AC
Life		Mechanical: 1 x 10 ⁷ ; Electrical: 1 x 10 ⁶
Protection		
Isolation Voltage		≥ 1500 V RMS between input & output terminals
Insulation Resistance		≥ 100 MΩ
Polarity		DC units are reverse polarity protected
Mechanical		
Mounting		Plug-in socket
Termination		Octal (8 Pin) or 11 Pin plug-In
Package		3.62 x 2.39 x 1.78 in. (91.6 x 60.7 x 45.2 mm)
Environmental		
Operating Temperature		-20°C ... +65°C
Storage Temperature		-30°C ... +85°C
Weight		≅ 6 oz (170 g)

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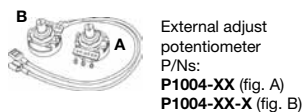
Mechanical View



Time Delay*		R _T
Range		
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.

Accessories



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



Versa-knob
P/N: P0700-7

Figure	Value	Part Number
A	1 M ohm	P1004-16
A	1.5 M ohm	P1004-15
A	2 M ohm	P1004-14
A	3 M ohm	P1004-12
A	5 M ohm	P1004-13
B	1 M ohm	P1004-16-X
B	1.5 M ohm	P1004-15-X
B	2 M ohm	P1004-14-X
B	3 M ohm	P1004-12-X
B	5 M ohm	P1004-13-X

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