

The TDM Series is a delay-on-make timer that combines accurate digital circuitry with isolated, DPDT relay contacts in an industry standard 8-pin plug-in package. DIP switch adjustment allows precise selection of the time delay over the full time delay range. The TDM Series is the product of choice for custom control panel and OEM designers.

Operation (Delay-on-Make):

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.

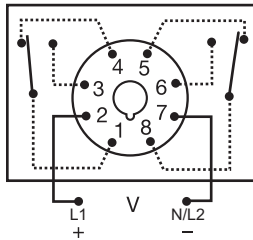
Reset: Removing input voltage resets the time delay and output.

For more information see: Appendix A, pages 156-164 for function descriptions and diagrams. Appendix B, page 165, Figure 8 for dimensional drawing.

Digi-Set Binary Switch Operation:

0.1...102.3		1...1023		10...10,230	
OFF ▶ ON		OFF ▶ ON		OFF ▶ ON	
0.1	<input type="checkbox"/>	1	<input type="checkbox"/>	10	<input type="checkbox"/>
0.2	<input type="checkbox"/>	2	<input type="checkbox"/>	20	<input type="checkbox"/>
0.4	<input type="checkbox"/>	4	<input type="checkbox"/>	40	<input type="checkbox"/>
0.8	<input type="checkbox"/>	8	<input type="checkbox"/>	80	<input type="checkbox"/>
1.6	<input type="checkbox"/>	16	<input type="checkbox"/>	160	<input type="checkbox"/>
3.2	<input type="checkbox"/>	32	<input type="checkbox"/>	320	<input type="checkbox"/>
6.4	<input type="checkbox"/>	64	<input type="checkbox"/>	640	<input type="checkbox"/>
12.8	<input type="checkbox"/>	128	<input type="checkbox"/>	1280	<input type="checkbox"/>
25.6	<input type="checkbox"/>	256	<input type="checkbox"/>	2560	<input type="checkbox"/>
51.2	<input type="checkbox"/>	512	<input type="checkbox"/>	5120	<input type="checkbox"/>
6.3 S		544 S		3000 S	

Connection:



Relay contacts are isolated.

Features:

- Switch settable time delay
- Three time ranges from 0.1s - 10,230s
- ±0.1% repeat accuracy
- ±2% setting accuracy
- 10A, DPDT output contacts
- LED indication

Approvals:

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

Auxiliary Products:

- **Panel mount kit:** P/N: BZ1
- **8-pin socket:** P/N: NDS-8
- **Hold-down clips (sold in pairs):** P/N: PSC8 (NDS-8)
- **Octal socket for UL listing:** P/N: P1011-6
- **DIN rail:** P/N: C103PM (AI)

Available Models:

TDM120AL	TDMH24DL
TDM12DL	TDML110DL
TDM230AL	TDML120AL
TDM24AL	TDML12DL
TDM24DL	TDML230AL
TDMH120AL	TDML24DL
TDMH24AL	

If desired part number is not listed, please call us to see if it is technically possible to build.

Order Table:

- TDM - 1 - 1023s in 1s increments
- TDMH - 10 - 10,230s in 10s increments
- TDML - 0.1 - 102.3s in 0.1s increments

X	Input Voltage	X	LED Indication
—	12D - 12VDC	—	L
—	24A - 24VAC		
—	24D - 24VDC/28VDC		
—	110D - 110VDC		
—	120A - 120VAC		
—	230A - 230VAC		

Specifications

Time Delay		Rating	10A resistive @ 120/240VAC & 28VDC;
Type	Digital integrated circuitry		1/3 hp @ 120/240VAC
Range*	0.1 - 102.3s in 0.1s increments	Life	Mechanical - 1 x 10 ⁷ ; Electrical - 1 x 10 ⁶
	1 - 1023s in 1s increments	Protection	
	10 - 10,230s in 10s increments	Polarity	DC units are reverse polarity protected
Repeat Accuracy	±0.1% or 20ms, whichever is greater	Isolation Voltage	≥ 1500V RMS input to output
Setting Accuracy	±2% or 50ms, whichever is greater	Mechanical	
Reset Time	≤ 50ms	Mounting	Plug-in socket
Recycle Time	During Timing - TDMH: ≤ 500ms	Dimensions	3.2 x 2.39 x 1.78 in. (81.3 x 60.7 x 45.2 mm)
	TDM, TDML: ≤ 300ms	Termination	Octal 8-pin plug-in
Time Delay vs Temp. & Voltage	±2%	Environmental	
Indicator	LED glows during timing; relay is de-energized	Operating / Storage Temperature	-20° to 65°C / -30° to 85°C
Input		Weight	≈ 6 oz (170 g)
Voltage	12, 24, or 110 VDC; 24, 120, or 230VAC	*For CE approved applications, power must be removed from the unit when a switch position is changed.	
Tolerance	12VDC & 24VDC/AC -15% - 20%		
	110VAC/DC to 230VAC. -20% - 10%		
AC Line Frequency	50/60 Hz		
Power Consumption	≤ 2.25W		
Output			
Type	Electromechanical relay		
Form	DPDT		