TDM / TDMH / TDML SERIES

Delay-on-Make Timer

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


8-PIN

Description

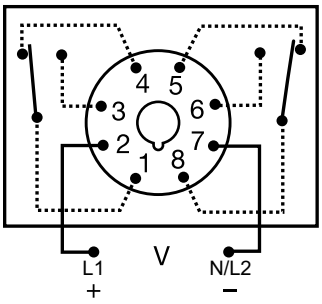
The TDM/TDMH/TDML Series is a delay-on-make timer that combines accurate digital circuitry with isolated, DPDT relay contacts in an industry standard 8-pin plug-in package. DIP switch adjustment allows precise selection of the time delay over the full time delay range. The TDM/TDMH/TDML Series is the 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.

Wiring Diagram



Relay contacts are isolated.

Features & Benefits

FEATURES	BENEFITS
Wide delay range (0.1s to 2.8h)	User selectable via DIP switches for fine tuning to individual applications.
Microcontroller based	Repeat Accuracy + / - 0.1%
Dip switch adjustment	Provides first time setting accuracy of +/-2%
Setting accuracy +/-2%	Provides flexibility for use in most applications
LED indication	Provides visual indication of time delay status
Isolated 10A, DPDT output contacts	Allows control of loads for AC or DC voltages

Ordering Information

MODEL	INPUT VOLTAGE	DELAY RANGE
TDM120AL	120VAC	1 - 1023s in 1s increments
TDM12DL	12VDC	1 - 1023s in 1s increments
TDM230AL	230VAC	1 - 1023s in 1s increments
TDM24AL	24VAC	1 - 1023s in 1s increments
TDM24DL	24VDC/28VDC	1 - 1023s in 1s increments
TDMH120AL	120VAC	10 - 10230s in 10s increments
TDMH24AL	24VAC	10 - 10230s in 10s increments
TDML110DL	110VDC	0.1 - 102.3s in 0.1s increments
TDML120AL	120VAC	0.1 - 102.3s in 0.1s increments
TDML12DL	12VDC	0.1 - 102.3s in 0.1s increments
TDML24DL	24VDC/28VDC	0.1 - 102.3s in 0.1s increments

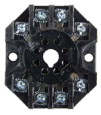
If you don't find the part you need, call us for a custom product 800-843-8848

Accessories

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.

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.

PSC8 or PSC11 Hold-down Clips
Securely mounts plug-in controls in any position. Provides protection against vibration. Use PSC8 with NDS-8 Octal Socket or PSC11 with NDS-11 Socket. Sold in sets of two.



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

C103PM (AL) DIN Rail
35 mm aluminum DIN rail available in a 36 in. (91.4 cm) length.

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Specifications

Time Delay

Type	Digital integrated circuitry
Range*	0.1 - 102.3s in 0.1s increments 1 - 1023s in 1s increments 10 - 10,230s in 10s increments
Repeat Accuracy	±0.1% or 20ms, whichever is greater
Setting Accuracy	±2% or 50ms, whichever is greater
Reset Time	≤ 50ms
Recycle Time	During Timing - TDMH: ≤ 500ms TDM, TDML: ≤ 300ms
Time Delay vs. Temperature & Voltage	±2%
Indicator	LED glows during timing; relay is de-energized

Input

Voltage	12, 24, or 110 VDC; 24, 120, or 230VAC
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
Rating	10A resistive @ 120/240VAC & 28VDC; 1/3 hp @ 120/240VAC
Life	Mechanical - 1 x10^7; Electrical - 1 x 10^6

Protection

Polarity	DC units are reverse polarity protected
Isolation Voltage	≥ 1500V RMS input to output

Mechanical

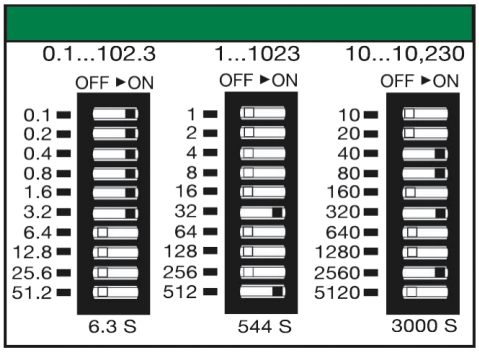
Mounting	Plug-in socket
Dimensions	**H** 81.3 mm (3.2"); **W** 60.7 mm (2.39"); **D** 45.2 mm (1.78")
Termination	Octal 8-pin plug-in

Environmental

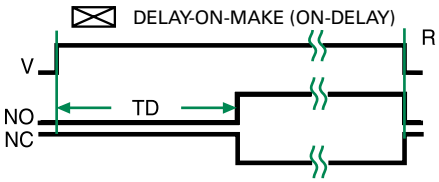
Operating/Storage Temperature	-20° to 65°C / -30° to 85°C
Weight	≅ 6 oz (170 g)

*For CE approved applications, power must be removed from the unit when a switch position is changed.

Binary Switch Operation



Function Diagram



V = Voltage
NO = Normally Open Contact
NC = Normally Closed Contact
TD = Time Delay
R = Reset
= Undefined Time