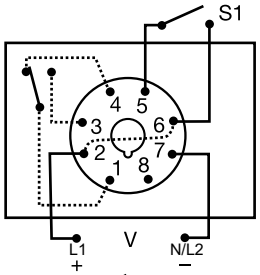
TDMB SERIES

Delay-on-Make/Delay-on-Break

8-PIN

11-PIN

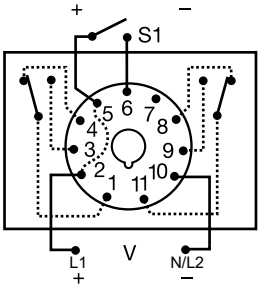
Wiring Diagram



8-PIN OCTAL SPDT

V = Voltage
S1 = Initiate Switch or Thermostat

Relay contacts are isolated.



11-PIN DPDT
(P/N ends with D)

Description

The TDMB combines both delay-on-make and delay-on-break functions into one plug-in package. Selection of the time period is accomplished with dual switches, one for the on delay and the other for the off delay. SPDT or DPDT output options provide isolated, 10A switching capability.

Operation (Delay-on-Make/Delay-on-Break)

Input voltage must be applied at all times. The output relay is de-energized. Upon closure of the initiate switch, the green LED glows and the delay-on-make time delay (T1) begins. At the end of T1, the output relay energizes and the red LED glows. When the initiate switch opens, the green LED turns OFF and the delay-on-break time delay (T2) begins. At the end of T2, the output relay de-energizes and the red LED turns OFF.

Reset: Removing input voltage resets time delay and output. Opening the initiate switch during the delay-on-make delay, resets T1. Closing the initiate switch during the delay-on-break delay, resets T2.

Features & Benefits

FEATURES	BENEFITS
Digital circuitry	Repeat Accuracy + / - 0.1%, Setting accuracy + / - 2%
Isolated, 10A, SPDT or DPDT output contacts	Allows control of loads for AC or DC voltages
User selectable Delay-on-Make and Delay-on-Break time delay	Timing settings are independently adjustable for added flexibility
Industry standard octal plug connection	Eliminates need for special connectors
LED Indication	Provides visual indication of initiate, timing, and relay output status
DIP Switch Adjustment	Provides first time setting accuracy

Ordering Information

MODEL	INPUT VOLTAGE	DELAY-ON-MAKE	DELAY-ON-BREAK	PLUG TYPE
TDMB411	120VAC	0.1 - 102.3s in 0.1s increments	0.1 - 102.3s in 0.1s increments	Octal (8-pin) SPDT
TDMB413D	120VAC	0.1 - 102.3s in 0.1s increments	10 - 10230s in 10s increments	11-pin DPDT
TDMB422	120VAC	1 - 1023s in 1s increments	1 - 1023s in 1s increments	Octal (8-pin) SPDT
TDMB422D	120VAC	1 - 1023s in 1s increments	1 - 1023s in 1s increments	11-pin DPDT
TDMB622	230VAC	1 - 1023s in 1s increments	1 - 1023s in 1s increments	Octal (8-pin) SPDT

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.

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.

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.

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Specifications

Time Delay

Type	Microcontroller 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	≤ 150ms
Time Delay vs Temp. & Voltage	≤ ±2%
Control LED Indicator	Green; on when the initiate switch is closed

Input

Voltage	12 or 24VDC; 24, 120, or 230VAC; 24 to 240VAC/DC; 12 to 48VDC
Tolerance	
12VDC & 24VDC/AC	-15% - 20%
110 to 230VAC/DC	-20% - 10%
AC Line Frequency/DC Ripple	50/60 Hz / ≤ 10%
Power Consumption	AC ≤ 2VA; DC ≤ 2W

Output

Type	Electromechanical relay
Form	SPDT or DPDT
Rating	10A resistive @ 120/240VAC & 28VDC; 1/3 hp @ 230VAC
Life	Mechanical - 1 x10^7; Electrical - 1 x 10^5
Max. Switching Voltage	250VAC
Relay LED Indicator	Red; on when output relay energizes (not included on 12VDC units)

Protection

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

Mechanical

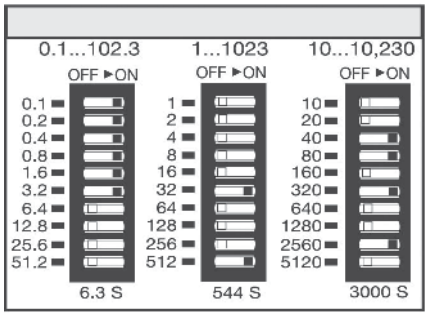
Mounting	Plug-in socket
Dimensions	**H** 81.3 mm (3.2"); **W** 60.7 mm (2.4"); **D** 45.2 mm (1.8")
Termination	Octal 8-pin plug-in, magnal 11-pin plug-in

Environmental

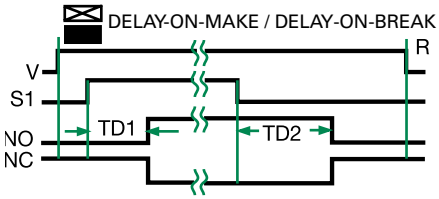
Operating/Storage Temperature	-20° to 60°C / -30° to 85°C
Weight	≅ 6 oz (170 g)

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

Digi-Set Binary Switch Operation



Function Diagram



V = Voltage
S1 = Initiate Switch
NO = Normally Open Contact
NC = Normally Closed Contact
TD1,TD2 = Time Delay
R = Reset
—⌇— = Undefined Time