ABB TDMB1A01 02.17.03

Delay On Make/Delay On Break **TDMB Digi-Set Time Delay Relay**





- Switch Setable Time Delays From 0.1 s ... 10,230 s
- +/-2% Setting Accuracy
- +/-0.1% Repeat Accuracy
- SPDT or DPDT
- 10 A Output Contacts

Description

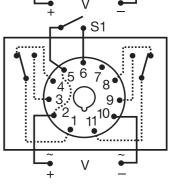
The TDMB combines both delay on make and delay on break functions into one plug-in package. Selection of the time period is accomplished with dual switches, one for the ON delay and the other for the OFF delay. SPDT or DPDT output options provide isolated, 10 A switching capability.

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

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.

Approvals:





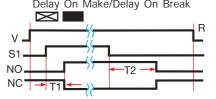
8 Pin Octal

SPDT

11 Pin

DPDT

Relay contacts are isolated. Dashed lines are internal connections

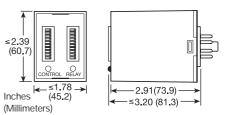


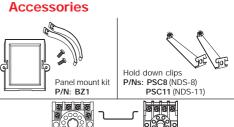
V = Voltage S1 = Switch Initiate R = Reset NO = Normally Open NC = Normally Closed T1 = Delay On Make Time T2 = Delay On

Type Plug/ **Output Form** -D - 11 Pin Plug Delay On Make/Delay On Break DPDT Blank - Octal Plug (8 Pin) SPDT

Break Time ——— = Undefined time

Digi-Set Binary Switch Operation 0.1...102.3 1...1023 10...10,230 OFF ►ON OFF ►ON OFF ►ON 0.1 = 0.2 = 0.4 = 0.8 = 1.6 = 3.2 = 6.4 = 6.4 40= 80= 160= 320= 640= 8 = 16 = 32 = 64 = 128 = 1280**=** 2560**=**





See accessory pages at the end of this section

P/N: NDS-11

Ordering Table

TDMB **Series**

Input -1 - 12 V DC

- -2 24 V AC 24 V DC
- -4 120 V AC -5 - 110 V DC -6 - 230 V AC

Delay On Make 1 - 0.1...102.3 s in

- 0.1 s increments -2 - 1...1023 s in 1 s increments
 - 10...10230 s in 10 s increments

0.1 s increments - 1...1023 s in 1 s increments -3 - 10...10230 s in

Delay On Break

-1 - 0.1...102.3 s in

10 s increments

* No control status LED for 12 V DC Example P/N: TDMB423

Technical Data

Time Delay		1
Type	Digital integrated circuitry	⊣ ։
Range**	0.1 102.3 s in 0.1 s increments	E
<u> </u>	1 1023 s in 1 s increments	
	10 10,230 s in 10 s increments	
Repeat Accuracy	+/-0.1%	
Setting Accuracy	+/-2%	
Reset Time	150 ms	
Recycle Time	≤500 ms	
Time Delay vs. Temperature & Voltage	+/-5%	
Input		
Voltage	12, 24, 120, or 230 V	
Tolerance 12 V DC & 24 V DC/AC	-15% +20%	
110 230 V AC/DC	-20% +10%	
Line Frequency	50 60 Hz	
Output		
Type	Electromechanical relay	
Form	SPDT or DPDT	
Rating	10 A resistive at 120 V AC	
Life	Mechanical 1 x10 ⁷	
	Full Load 1 x 10 ⁶	
Protection		
Isolation Voltage	≥ 1500 V RMS input to output	
Mechanical		
Mounting	Plug-in socket	
Package	3.2 x 2.4 x 1.8 in. (81.3 x 60.7 x 45.2 mm)	
Termination	Octal plug (8 Pin), magnal plug (11 Pin)	
Environmental		
Operating Temperature	-20°C +60°C	
Storage Temperature	-30°C +85°C	
Weight	≅ 6 oz (170 g)	
		(
		`
		_

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

8-pin socket

P/N: NDS-8