



Motor-Driven Cycle Progress Timer

A Dial-Adjustable TDR with cycle progress indication, the ATC 322B can also be used as a low-cost automatic reset timer for a wide range of interval, delay and pulse timing functions, in either ON-delay or OFF-delay operation.

PRICE/PERFORMANCE VALUE: Although it is priced like a TDR, the 322B provides the versatile timing functions and features of much more expensive automatic reset timers.

INSTANTANEOUS AND DELAYED LOAD SWITCHES: Because the standard 322B includes an instantaneous switch as well as two delayed switches, it can be used in the On-Delay mode for interval and/or delayed control, with either a momentary or sustained start signal. All three switches are mounted on a sliding deck which facilitates replacement and maintenance.

SURFACE OR FLUSH MOUNT: The 322B is provided with hardware for surface mounting or, if desired, flush mounting through a single 15/16" OD cutout in a 1/8" panel.

CYCLE PROGRESS INDICATION: A pointer in the dial knob rotates during the cycle, continuously showing the time remaining until time-out.

SPECIFICATIONS

MODEL	Choice of ON-Delay or OFF-Delay operation (not field-convertible)	
RANGES	12 standard ranges, from 5 SEC to 5 HRS at 60Hz (6 SEC to 6 HRS at 50 Hz)	
REPEAT ACCURACY	± 2% of dial range.	
RESET TIME	150 ms.	
MIN. SETTING	5% of dial range.	
LIFE EXPECTANCY	MECHANICAL: 2,500,000 cycles (average) CONTACTS: 2,500,000 operations under resistive or inductive load of 1A	
TIMING MODES	SINGLE CYCLE: interval, delay or pulse.	
LOAD SWITCHES	INSTANTANEOUS: one, SPDT, precision type.	
	DELAYED: two, SPDT, precision type.	
TERMINALS	CONTACT RATINGS (non-inductive): 10 A at 120 VAC 5 A at 240V AC	
	11-point terminal block on side of housing; all terminals accept .250" push-on connectors. Terminals 1, 2, 4, 9 and 11 are split connectors for use with either one .250" or two .110" push-on connectors.	
POWER REQUIREMENTS	120 or 240V, 50 or 60 Hz. (±10%, - 15%)	
	Running Current	121 mA (14.5 VA) at 120V
	Inrush Current	157 mA (18.9 VA) at 120V
TEMPERATURE RATING	32° to 120°F (0 to 50°C)	
WEIGHT	NET: 1 lb. 8 oz.	SHIPPING: 2 lbs.

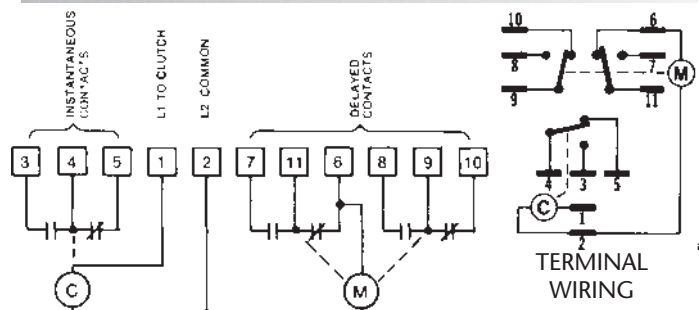
OPERATION

The 322B is a synchronous motor-driven timer with an electrically-operated clutch equipped either for On-Delay or Off-Delay operation.

ON-DELAY: When power is applied (start signal sustained on), the clutch engages, the motor begins to drive a cam toward its zero position, and the instantaneous switch transfers from one set of contacts to the other. At the end of the timed period, the cam trips one of the delayed switches, but the motor continues to run. A brief time later (about 2-1/2% to 5% of full scale), the cam trips the second delayed switch, stopping the motor but leaving the clutch engaged. The 322B resets when power is removed from the clutch.

OFF-DELAY: Timing begins when power is removed (start signal off) from the spring-loaded, normally-engaged clutch. The timer resets when power is restored to the clutch, thus disengaging it and transferring the instantaneous switch from one set of contacts to the other. Action of the delayed contacts is the same as with the On-Delay timer. A power outage stops the motor but does not reset the Off-Delay 322B; the timer completes the interrupted cycle when power is restored.

WIRING



RANGE - 60Hz- 120 V		Voltage Frequency		MODEL NUMBER >>>>	Basic Type	Range	Voltage Frequency	Arrangement	Switch Diff.	Features
5 SEC	114	120/60	A	322B				On-delay (reset on power interruption)	1	
10 SEC	003	240/60	B					Off-delay (non-reset on power interruption)	2	
20 SEC	005							Switch Differential		
40 SEC	115							2-1/2%-5% of dial range		2
60 SEC	007							Special	0	
150 SEC	009							Features		
5 MIN	012							Standard surface mounting unit, clutch contact		CS
10 MIN	014							Special		CK
20 MIN	050									
40 MIN	056									
60 MIN	017									
5 HR	113									
RANGE - 50Hz - 120 V										
6 SEC	101	120/50	C							
12 SEC	116	240/50	D							
24 SEC	117	Special	K							
48 SEC	118									
72 SEC	073									
180 SEC	119									
6 MIN	029									
12 MIN	047									
24 MIN	052									
48 MIN	058									
72 MIN	061									
6 HR	030									
Special	000									

BLACK—Circuit Closed GRAY—Circuit Open

SWITCH	CONTACTS	ON DELAY			
		Timing Sequence**			
		Before Start	During Cycle	*	End of Cycle
Instantaneous	4-3	Black	Black	Black	Black
	4-5	Black	Black	Black	Black
Delayed (D ₂)	11-6	Black	Black	Black	Black
	11-7	Black	Black	Black	Black
Delayed (D ₁)	9-10	Black	Black	Black	Black
	9-8	Black	Black	Black	Black

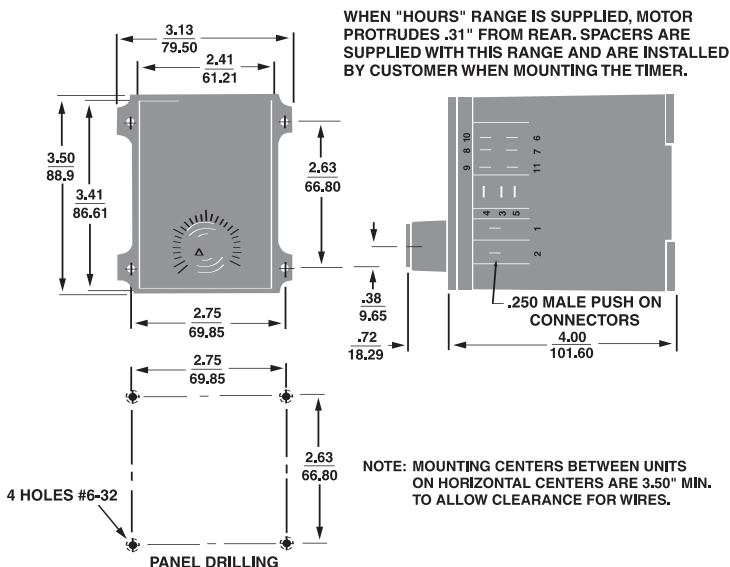
*D₂ trips approximately 2-1/2% of range after end of cycle.
** Assumes a sustained closed start signal (i.e. longer than the dial set time).

SWITCH	CONTACTS	OFF DELAY			
		Timing Sequence**			
		Before Start	During Cycle	*	End of Cycle
Instantaneous	4-3	Black	Black	Black	Black
	4-5	Black	Black	Black	Black
Delayed (D ₂)	11-6	Black	Black	Black	Black
	11-7	Black	Black	Black	Black
Delayed (D ₁)	9-10	Black	Black	Black	Black
	9-8	Black	Black	Black	Black

*D₂ trips approximately 2-1/2% to 5% of range after end of cycle.
** Assumes a sustained open start signal (i.e. longer than the dial set time).

/// DIMENSIONS (INCHES/MILLIMETERS)

SURFACE MOUNTING OF TIMER



FLUSH MOUNTING OF TIMER

