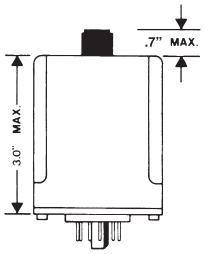
E55826

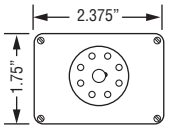
True OFF-Delay Relay Output

SPECIFICATIONS

OUTPUT RATING	DPDT, 10 A @ 250 VAC or 24 VDC, resistive; 211 VA @ 120 VAC, inductive	
TIME TOLERANCES	Minimum Setting	+0 – 20%
	Maximum Setting	±10%
REPEATABILITY	1%	
RESET TIMES	0.5 seconds	
SUPPLY VOLTAGE	24 or 110/120 or 208/240 VAC, 50/60 Hz, or VDC; and 48 VDC; ±10%	
FALSE TRANSFER	No	
REVERSE POLARITY PROTECTED	Yes	
POWER CONSUMPTION	3 watts (approximately)	
TEMPERATURE RATING	Operate	32° to 131°F (0° to +55°C)
	Storage	-49° to 185°F (-45° to +85°C)
LIFE EXPECTANCY	Mechanical	10 million operations (minimum)
	Electrical	100,000 operations @ rated load
WEIGHT	4.5 oz.	

DIMENSIONS (INCHES)

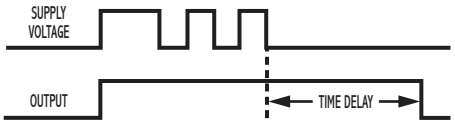




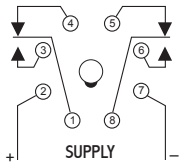
Octal Pin Plug-in

OPERATION

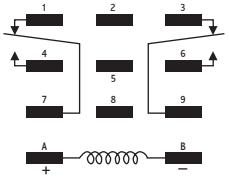
When voltage is applied to the input, the relay energizes. When voltage is removed, the OFF delay begins. Upon completion of the delay period, the relay de-energizes. Reset is accomplished by reapplying voltage to the input terminals. NOTE: If voltage is reapplied during the delay period, the relay remains picked up and the timer resets to zero. VOLTAGE MUST BE APPLIED FOR A MINIMUM OF 0.5 SECONDS TO ASSURE PROPER OPERATION.



WIRING



DPDT Octal Plug-in
RB-08/PF083A



DPDT Blade Plug-in
70-463-1

MODEL NUMBER

MODEL NUMBER	TDT					
SUPPLY VOLTAGE						
24 VAC or DC		24				
48 Volts DC		48				
110/120 VAC or DC		120				
208/240 VAC or DC		240				
TYPE OF VOLTAGE						
AC and DC operation			A			
DC operation only (D Designation used for 48V model only)			D			
TYPE OF OPERATION						
Knob Adjustable				K		
Lock Nut Adjustable				L		
Fixed				F		
ENCLOSURE STYLE						
8-pin octal plug-in					A	
Blade plug-in					B	
DELAY PERIOD						
010 = .1 to 10 SEC						010
030 = .3 to 30 SEC						030
060 = .6 to 60 SEC						060
100 = 1 to 100 SEC						100
200 = 2 to 200 SEC						200
300 = 3 to 300 SEC						300

Example: TDT-120-ALA-300—True off delay, 120 Volts AC or DC, Lock-nut adjustable, time range from 3 to 300 seconds, 8-pin octal plug-in.

STANDARD DELAY RANGES AVAILABLE

The chart below shows the standard adjustable time delay ranges available. The part number suffix equals the maximum adjustable delay period of the timer. No letters following the suffix number indicates the delay period in seconds; an M indicates minutes; and an H indicates hours.

STANDARD DELAY RANGE CHART

PART NUMBER SUFFIX	MINIMUM SETTING	MAXIMUM SETTING
010	0.1 seconds	10 seconds
030	0.3 seconds	30 seconds
060	0.6 seconds	60 seconds
100	1 second	100 seconds
200	2 seconds	200 seconds
300	3 seconds	300 seconds
600	6 seconds	600 seconds
900	9 seconds	900 seconds
30M	18 seconds	30 minutes
60M	36 seconds	60 minutes
90M	54 seconds	90 minutes
2H	1.2 Minutes	2 hours
4H	2.4 Minutes	4 hours
8H	4.8 Minutes	8 hours
12H	7.2 Minutes	12 hours
16H	9.6 Minutes	16 hours
20H	12 Minutes	20 hours
24H	14.4 Minutes	24 hours

Longer delays available upon request. Consult Factory

EXTERNAL RESISTANCE SELECTION

On models specified as having the external resistor adjustability feature, the delay period is set by placing resistance across designated pins or terminals. One meg ohm resistance provides the maximum delay on all models. The minimum delay is obtained by jumping the terminals together.

The resistor or potentiometer chosen should be a 1/4 watt or larger.

To determine the resistor value required for a specific time delay, use the following formula:

$R_{ext} = (T_{des}/T_{max}) \times 1000$

R_{ext} = Resistance value required to obtain T_{des} (in K ohms)

T_{des} = Desired time delay

T_{max} = Maximum delay period of the timer

Example: Model TDC-120-ARC-300; find the external resistance value required for a 240 second delay:

$$R_{ext} = \frac{240}{300} \times 1000 = 800 \text{ K ohms}$$

"FIXED" DELAY OPTION

Most ATC Diversified timers are available with the delay period factory preset ("fixed") for some specified duration. When this option is ordered, the part number should have an "F" in the Type of Operation designation: and the last digits should specify the desired time delay in seconds (S), minutes (M), or hours (H).

Example: TDC 120-AFA-30M—delay-on-operate,120 Volts AC or DC, 8-pin octal plug-in package with a 30 minute fixed delay.

OFF/ON DELAY TIMERS

Included in ATC Diversified's broad line of timers are six (6) models that feature independent OFF/ON delay adjustments. They are TDF, TDH, TDI, TSF, and TSH. Notice in the ordering information section on each of their respective pages the timing range is specified by a three (3) digit suffix. This indicates that both the OFF and ON delay periods have the same timing ranges. Example: TDF-120-ALA-300: Both OFF and ON delay periods are independently adjustable from 3 to 300 seconds.

In the event that two (2) separate delay ranges would be required, the part number is modified to add a slash (/) followed by three (3) more digits. Since the OFF delay (TI) is first in all models, it is specified first in the part number. Example: TDF-120-ALA-12H/30M: the OFF delay is adjustable from 7.2 minutes to 12 hours and the ON delay is adjustable from 18 seconds to 30 minutes.

NOTE: Combinations of various "types of operation" are available: fixed/adjustable, knob/lock nut, etc. Consult factory.

MODEL NUMBER

MODEL NUMBER	T							
TIME DELAY								
SERIES								
Relay Output	D,U							
Solid State Output	S							
MODE OF OPERATION								
SUPPLY VOLTAGE								
24 Volts			24					
120 Volts			120					
240 Volts			240					
TYPE OF VOLTAGE								
AC				A				
DC				D				
TYPE OF OPERATION								
Knob Adjustment					K			
Lock Nut Adjustment					L			
Fixed (Factory Preset)					F			
External Resistor Adjustable					R			
ENCLOSURE STYLE								
8 or 11-pin Round Plug-in								A
Blade Plug-in						B		
Potted Cube						C		
DELAY PERIOD								
See Standard Delay Range Chart								

NOTE: Not all time delays are available with each option shown above. The specific options for each timer type are described on their respective pages.