

# Time Delay Relays – Delay on Operate

## R60 Series



Programmable, DPDT, 10 Amp, AC or DC, Delay On Operate Time Delay Relays.

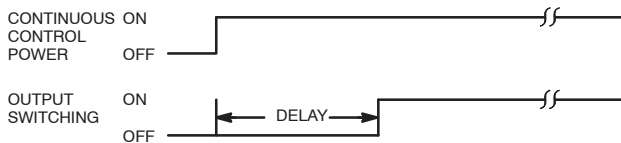
### Features

- Universal Input Voltage (U-suffix)
- 16 Time Ranges in Single Timer (0.05 sec. to 100 hrs.)
- User Sets Time Ranges  
No Math – Just Flip Switches
- Instructions Right on Unit
- Fine Tuning Knob for Precision Timing
- Pin for Pin Interchangeable with Timers in the Field – No Rewiring
- AC or DC Operation
- CMOS Digital Circuitry – 0.5% Repeatable Accuracy

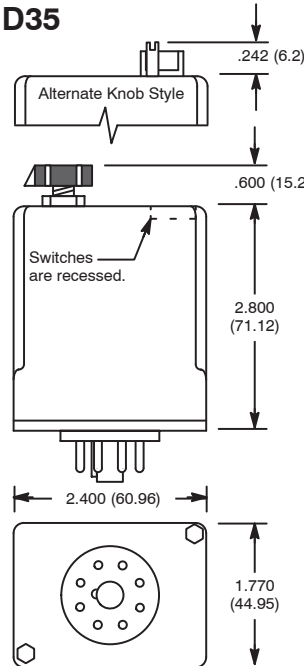


### OPERATION

**DELAY ON OPERATE**– The delay period begins when input voltage is applied. At the end of the delay period, the relay will operate and will not release until input voltage is removed. Reset occurs when input voltage is reapplied.



### D35

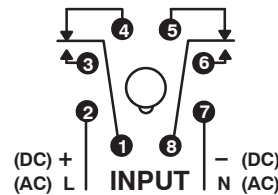


1 2 3 4	Knob Style	TIME RANGE		Seconds
		Min	Max	
↑↑↑↑	A	0.1	0.25	Seconds
↑↑↑↑	B	0.15	0.5	
↑↑↑↑	C	0.3	1.0	
↑↑↑↑	D	0.5	2.0	
↑↑↑↑	E	1.0	4.0	
↑↑↑↑	F	2.0	8.0	
↑↑↑↑	G	4.0	15	
↑↑↑↑	H	8.0	30	
↑↑↑↑	I	15	60	
↑↑↑↑	J	30	120	
↑↑↑↑	K	1.0	4.0	Minutes
↑↑↑↑	L	2.0	8.0	
↑↑↑↑	M	4.0	15	
↑↑↑↑	N	8.0	30	
↑↑↑↑	O	15	60	
↑↑↑↑	P	30	120	

### Universal Type

Dial Setting	TIME RANGE		Seconds
	Min	Max	
A	0.05	0.5	Seconds
B	0.1	1	
C	0.5	5	
D	1	10	
E	3	30	
F	6	60	
G	0.2	2	Minutes
H	0.5	5	
I	1	10	
J	3	30	
K	6	60	
L	0.2	2	Hours
M	0.5	5	
N	1	10	
O	2.4	24	
P	10	100	

### DPDT, 2 Form "C"



### AC or DC OPERATED

NTE Type No.	Nom. Voltage	Contact Arr.	Input Cur. Nom.	Max. Contact Cur. @ 28VDC or 120VAC	Diag No.
R60-11AD10-12	12VAC/DC	DPDT	167mA	10A	D35
R60-11AD10-24	24VAC/DC	DPDT	83mA	10A	D35
R60-11AD10-120	120VAC/DC	DPDT	17mA	10A	D35
R60-11AD10-U	24 – 240VAC 12 – 125VDC	DPDT	–	10A	D35

\* These devices are being phased out and replaced by the R60-11AD10-U.

### ACCESSORIES

MOUNTING STYLES	DESCRIPTION	NTE TYPE NO.
SURFACE MOUNT	8-PIN OCTAL	R95-101
PANEL MOUNT	8-PIN OCTAL	R95-118
DIN RAIL MOUNT	8-PIN OCTAL	R95-113
DIN RAIL MOUNT	8-PIN OCTAL	R95-181

## Electrical Specifications

### Contact

**Rating:** 10 Amps 240VAC or 30VDC, 1/3 HP, 240VAC or 120VAC Pilot Duty 345VA, 120VAC or 240VAC, 50/60Hz

**Life:** 500,000 (100,000 U-type) operations at full load

**Mechanical Life:** 7,000,000 (10,000,000 U-type) operations at no load

### Input

**Nominal Input voltage:** See Chart

**Steady state input current:** See Chart

### Timing

**Timing adjustment modes available:** See Timing Range Chart

### Repeat Accuracy

± 0.5% – after established at steady temperature (4 hours)

**Timing tolerance at high end of range:** –0, +10%

**Timing tolerance at low end of range:** +0, –50%

**Reset Time:** 60 mS typ

### Environmental Characteristics

**Operating:** –20°C to +55°C