### 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; and M indicates minutes; and an H indicates hours.

#### STANDARD DELAY RANGE CHART

| PART NUMBER SUFFIX | MINIMUM SETTING | MAXIMUM SETTING |
|---|---|---|
| 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:

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

$R_{ext}$ = 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.

#### GENERAL ORDER INFORMATION

| MODEL NUMBER >>>>>> | T | | | X | X | | | |
|---|---|---|---|---|---|---|---|---|
| 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 octal 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.**