

# ON DELAY, INTERVAL, FLASHER, CYCLE & DELAYED INTERVAL

## SOLID STATE OUTPUT | THS-1 SERIES

TIME DELAY RELAYS | ENCAPSULATED



- ◆ Cost effective design & compact 2" x 2" enclosure are ideal for volume OEM applications
- ◆ Microprocessor-based design for greater performance & maximum flexibility
- ◆ Encapsulated for protection against harsh environments
- ◆ Output rated 1A continuous/10A inrush is perfect for high duty cycle/long life applications
- ◆ Onboard & remote adjustable or fixed time delays from 0.01 seconds to 100 hours
- ◆ Built-in load suppression eliminates need for separate protection
- ◆ Pilot duty rating



FUNCTION	VOL	INPUT TAGE	CATALOG NUMBER **	WIRING ❖
<b>ON DELAY</b> □ <b>A</b>		24-240V AC 12-125V DC	THS-1024A-** THS-1024D-**	<b>Onboard Adjustable or Fixed Time Delay</b>  <b>DIAGRAM 317</b>
<b>INTER VAL ON</b> <b>B</b>		24-240V AC 12-125V DC	THS-1054A-** THS-1054D-**	
<b>FLASHER</b> (ON Time 1st) <b>E</b>	24-240V	AC 12-125V DC	THS-1094A-** THS-1094D-**	<b>Remote Time Delay</b>  <b>DIAGRAM 320</b>
<b>REPEAT CYCLE</b> * (OFF Time 1st) <b>L</b>	24-240V	AC 12-125V DC	THS-1314A-** THS-1314D-**	
<b>REPEAT CYCLE</b> * (ON Time 1st) <b>M</b>	24-240V	AC 12-125V DC	THS-1514A-** THS-1514D-**	
<b>DELA YED</b> <b>INTERVAL</b> * <b>N</b>	24-240V 12-125V	AC DC	THS-1614A-** THS-1614D-**	

■ See "Definitions of Timing Functions".

□ See Inline (Series-Connection) On Delay.

❖ Diagrams shown are for products with AC input voltage. For products with DC input voltage, the "+" terminal is 2 & the "-" terminal is 3.

\*

\*\* Complete Product Number using two-digit Code from Table below.

### TIME DELAYS

THS-1 Series Products have three time delay options:

- **Onboard Adjustable Time Delay**--complete Product Number by adding two-digit Code from Table at right, i.e., THS-1054A-30 is an Interval On with a time delay range of 0.1-10 seconds.
- **Onboard Fixed Time Delay**--replace two-digit Code with suff x "F" followed by delay [0.1 ... 100] followed by (S) seconds, (M) minutes or (H) hours, i.e., THS-1054A-F5S is an Interval On with a time delay fixed at 5 seconds.
- **Remote Time Delay**--THS-1 Series products can be built with two terminals for remote adjustable or fixed time delays.

** TIMING RANGE TABLE	
Time Delay Range	Code
0.01 - 1 Sec.	02
0.05 - 5 Sec.	04
0.1 - 10 Sec.	30
1 - 100 Sec.	31
10 - 1,000 Sec.	36
0.1 - 10 Min.	32
1 - 100 Min.	33
10 - 1,000 Min.	37
1 - 100 Hr.	35

# OFF DELAY, SINGLE SHOT, WATCHDOG, SINGLE SHOT FALLING EDGE, ON DELAY/OFF DELAY & DELAYED INTERVAL

## SOLID STATE OUTPUT | THS-1 SERIES

### Isolated Control Switch

FUNCTION ■ VOL	INPUT TAGE	CATALOG NUMBER **	WIRING ❖
<b>OFF DELAY</b> <b>C</b>	24-240V AC 12-125V DC	THS-1164A-** THS-1164D-**	<b>Onboard Adjustable or Fixed Time Delay</b> 
<b>SINGLE SHOT</b> <b>D</b>	24-240V AC 12-125V DC	THS-1154A-** THS-1154D-**	
<b>WATCHDOG</b> (Retriggerable Single Shot) <b>J</b>	24-240V AC 12-125V DC	THS-1134A-** THS-1134D-**	
<b>SINGLE SHOT FALLING EDGE</b> (Retriggerable) <b>H</b>	24-240V AC 12-125V DC	THS-1224A-** THS-1224D-**	<b>Remote Time Delay</b> 
<b>ON/OFF DELAY</b> * <b>G</b>	24-240V AC 12-125V DC	THS-1414A-** THS-1414D-**	
<b>DELAYED INTERVAL</b> * (Retriggerable) <b>P</b>	24-240V AC 12-125V DC	THS-1654A-** THS-1654D-**	



- ◆ Cost effective design & compact 2" x 2" enclosure are ideal for volume OEM applications
- ◆ Microprocessor-based design for greater performance & maximum flexibility
- ◆ Encapsulated for protection against harsh environments
- ◆ Output rated 1A continuous/10A inrush is perfect for high duty cycle/long life applications
- ◆ Onboard & remote adjustable or fixed time delays from 0.01 seconds to 100 hours
- ◆ Built-in load suppression eliminates need for separate protection
- ◆ Pilot duty rating



■ See "Definitions of Timing Functions".

❖ Diagrams shown are for products with AC input voltage. For products with DC input voltage, the "+" terminal is 2 & the "-" terminal is 3.

\*

\*\* Complete Product Number using two-digit Code from Table below.

## TIME DELAYS

THS-1 Series Products have three time delay options:

- **Onboard Adjustable Time Delay**--complete Product Number by adding two-digit Code from Table at right, i.e., THS-1164A-30 is an Off Delay with a time delay range of 0.1-10 seconds.
- **Onboard Fixed Time Delay**--replace two-digit Code with suff x "F" followed by delay [0.1 ... 100] followed by (S) seconds, (M) minutes or (H) hours, i.e., THS-1164A-F5S is an Off Delay with a time delay fixed at 5 seconds.
- **Remote Time Delay**--THS-1 Series products can be built with two terminals for remote adjustable or fixed time delays.

\*\* TIMING RANGE TABLE

Time Delay Range	Code
0.01 - 1 Sec.	02
0.05 - 5 Sec.	04
0.1 - 10 Sec.	30
1 - 100 Sec.	31
10 - 1,000 Sec.	36
0.1 - 10 Min.	32
1 - 100 Min.	33
10 - 1,000 Min.	37
1 - 100 Hr.	35



Better. By Design.

# OFF DELAY, SINGLE SHOT, WATCHDOG, SINGLE SHOT FALLING EDGE, ON DELAY/OFF DELAY & DELAYED INTERVAL

## SOLID STATE OUTPUT | THS-1 SERIES

Control Switch Common to Pin 2



- ◆ Cost effective design & compact 2" x 2" enclosure are ideal for volume OEM applications
- ◆ Microprocessor-based design for greater performance & maximum flexibility
- ◆ Encapsulated for protection against harsh environments
- ◆ Output rated 1A continuous/10A inrush is perfect for high duty cycle/long life applications
- ◆ Onboard & remote adjustable or fixed time delays from 0.01 seconds to 100 hours
- ◆ Built-in load suppression eliminates need for separate protection
- ◆ Pilot duty rating



FUNCTION ■ VOL	INPUT TAGE	CATALOG NUMBER **	WIRING ❖
<b>OFF DELAY</b> C	24-240V AC 12-125V DC	THS-1164A-**T THS-1164D-**T	<b>Onboard Adjustable or Fixed Time Delay</b>  DIAGRAM 319
<b>SINGLE SHOT</b> D	24-240V AC 12-125V DC	THS-1154A-**T THS-1154D-**T	
<b>WATCHDOG</b> (Retriggerable Single Shot) J	24-240V AC 12-125V DC	THS-1134A-**T THS-1134D-**T	
<b>SINGLE SHOT FALLING EDGE</b> (Retriggerable) H	24-240V AC 12-125V DC	THS-1224A-**T THS-1224D-**T	<b>Remote Time Delay</b>  DIAGRAM 322
<b>ON/OFF DELAY</b> * G	24-240V AC 12-125V DC	THS-1414A-**T THS-1414D-**T	
<b>DELAYED INTERVAL</b> * (Retriggerable) P	24-240V AC 12-125V DC	THS-1654A-**T THS-1654D-**T	

■ See "Definitions of Timing Functions".

❖ Diagrams shown are for products with AC input voltage. For products with DC input voltage, the "+" terminal is 2 & the "-" terminal is 3.

\*

\*\* Complete Product Number using two-digit Code from Table below.

### TIME DELAYS

THS-1 Series Products have three time delay options:

- **Onboard Adjustable Time Delay**--complete Product Number by adding two-digit Code from Table at right, i.e., THS-1164A-30T is an Off Delay with a time delay range of 0.1-10 seconds.

#### \*\* TIMING RANGE TABLE

Time Delay Range	Code
0.01 - 1 Sec.	02
0.05 - 5 Sec.	04
0.1 - 10 Sec.	30
1 - 100 Sec.	31
10 - 1,000 Sec.	36
0.1 - 10 Min.	32
1 - 100 Min.	33
10 - 1,000 Min.	37
1 - 100 Hr.	35

- **Onboard Fixed Time Delay**--replace two-digit Code with suff x "F" followed by delay [0.1 ... 100] followed by (S) seconds, (M) minutes or (H) hours, i.e., THS-1164A-F5ST is an Off Delay with a time delay fixed at 5 seconds.

- **Remote Time Delay**--THS-1 Series products can be built with two terminals for remote adjustable or fixed time delays.