proSense® Relay Timers

Off-Delay Relay Timers T2S-FD Series

Overview

The T2S-FD series offers a single off-delay timing function in a cost-effective design and compact size. The T2S-FD series is an ideal choice for many industrial applications. Models in this series utilize a microprocessor-based design for reliable performance and maximum flexibility. Units feature a 1A continuous/10A inrush solid state output that is perfect for high duty cycle/long life applications All products are encapsulated for robust protection of internal components. This series is offered in a wide range of adjustable timing ranges.

Features

- Three time delay options
- Pushbutton thumbwheels for digital set of time delay and function
- Universal 24-240VAC and 12-125VDC
- 1A continuous, 10A inrush SPNO timed solid state relay output output

T2S-FD-30-240A

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Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
T2S-FD-30-125D	$42.50	Off-delay	0.1 to 10 seconds	12-125 VDC	(1) SPNO timed solid state relay	PDF
T2S-FD-30-240A	$39.50	Off-delay	0.1 to 10 seconds	24-240 VAC	(1) SPNO timed solid state relay	PDF
T2S-FD-31-125D	$42.50	Off-delay	1 to 100 seconds	12-125 VDC	(1) SPNO timed solid state relay	PDF
T2S-FD-31-240A	$39.50	Off-delay	1 to 100 seconds	24-240 VAC	(1) SPNO timed solid state relay	PDF
T2S-FD-32-125D	$42.50	Off-delay	0.1 to 10 minutes	12-125 VDC	(1) SPNO timed solid state relay	PDF
T2S-FD-32-240A	$39.50	Off-delay	0.1 to 10 minutes	24-240 VAC	(1) SPNO timed solid state relay	PDF
T2S-FD-33-125D	$42.50	Off-delay	1 to 100 minutes	12-125 VDC	(1) SPNO timed solid state relay	PDF
T2S-FD-33-240A	$39.50	Off-delay	1 to 100 minutes	24-240 VAC	(1) SPNO timed solid state relay	PDF

Off-Delay Relay Timers Specifications

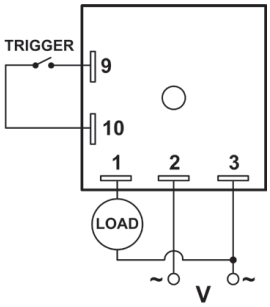
Models	T2S-FD-3x-240A	T2S-FD-3x-125D
Input Specifications		
Nominal Voltage	24-240VAC	12-125VDC
Nominal Consumption	Maximum 1VA	
Nominal Frequency	50/60 Hz	
Voltage Tolerance	AC operation: +10 to -15% of nominal voltage, 50/60 Hz DC operation: +10 to -15% of nominal voltage	
Contact Specifications		
Minimum Load Current	20mA	
Type	(1) SPNO	
Switching Capacity	1A continuous, 10A inrush @ 65ºC, pilot duty	
Electrical Lifetime	No predictable failure if used within operating parameters	
Reset Time		
Triggered with Input Voltage	0.05 seconds	
Functions Triggered with Control Switch	0.04 seconds	
Time Circuit Specifications		
Setting Accuracy	Maximum setting (adjustable): +5%, -0% Minimum setting (adjustable): +0%, -50% Fixed time delay: ± 2% or 50ms, whichever is greater	
Start-up Time	Time from when power is applied until unit is timing: 0.05 seconds	
Maintain Function Time	Time unit continues to operate after power is removed: 0.01 seconds	
Repeat Accuracy	Constant voltage and temperature within specifications: ± 0.1% or ± 0.04 seconds, whichever is greater	

Off-Delay Relay Timers Specifications

General Specifications	
Connection	0.25 inch male quick-connect terminals
Ambient Temperature	-28 to +65°C [-18 to +149°F]
Storage Temperature	-40 to +85°C [-40 to +185°F]
Protection Rating	IP00
Mounting	Surface with one #8 or #10 screw and a maximum tightening torque of 15 in•lb.
Mounting Orientation	Any
Weight	0.15 lb
Agency Approvals and Standards *	cURus File E191059, CE cURus File E222847

***To obtain the most current agency approval information, see the Agency Compliance & Certifications Checklist section on the specific part number's web page..**

Wiring Diagram



ProSense® Relay Timers

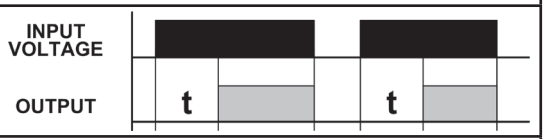
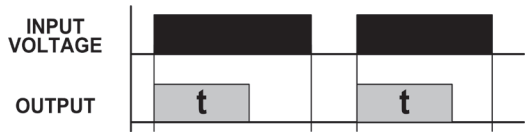
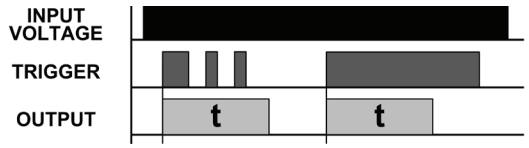
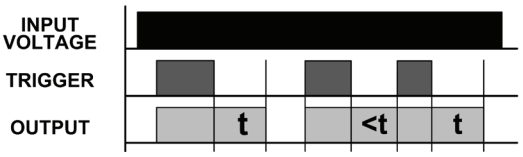
Timing Charts

T2L Series (-4X Suffix)

Function	Series	Operation	Timing Chart
ON DELAY Delay on Operate	T2L (-4x Suffix)	Upon application of input voltage, the time delay (t) begins. At the end of the time delay (t), the output is energized. Input voltage must be removed to reset the time delay relay & de-energize the output.	

Note: Please see inserts for more information

T2L, T2R, & T2S Series

Function	Product Series	Operation	Timing Chart
ON DELAY Delay on Operate	T2L-ND T2R-ND T2S-ND	Upon application of input voltage, the time delay (t) begins. At the end of the time delay (t), the output is energized. Input voltage must be removed to reset the time delay relay & de-energize the output.	
INTERVAL ON Interval	T2S-TT	Upon application of input voltage, the output is energized and the time delay (t) begins. At the end of the time delay (t), the output is de-energized. Input voltage must be removed to reset the time delay relay.	
SINGLE SHOT One Shot Momentary Interval	T2R-SST T2S-SST	Upon application of input voltage, the time delay relay is ready to accept a trigger. When the trigger is applied, the output is energized and the time delay (t) begins. During the time delay (t), the trigger is ignored. At the end of the time delay (t), the output is de-energized and the time delay is ready to accept another trigger.	
OFF DELAY Delay on Release Delay on Break Delay on De-Energization	T2R-FD T2S-FD	Upon application of input voltage, the time delay relay is ready to accept a trigger. When the trigger is applied, the output is energized. Upon removal of the trigger, the time delay (t) begins. At the end of the time delay (t), the output is de-energized. Any application of the trigger during the time delay will reset the time delay (t) and the output remains energized.	

Note: Please see inserts for more information