PrSense Relay Timers

Off-Delay Relay Timers T2R-FD Series

Overview

The T2R-FD series offers a single off-delay timing function in a cost-effective design and compact size. The T2R-FD series is an ideal choice for many industrial applications. They utilize a microprocessor- based design for reliable performance and maximum flexibility. A 10A SPDT relay output can handle most pilot duty and fractional horsepower loads. All products are encapsulated for robust protection of internal components. This series is offered in a wide range of adjustable timing ranges.

Features

- Cost effective design and compact 2 x 2in enclosure
- Encapsulated for protection
- 10A SPDT relay output contacts
- 24VAC/VDC and 120VAC/VDC models available



T2R-FD-30-24AD

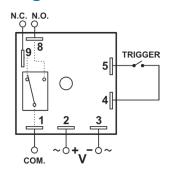
Off-Delay Relay Timers T2R-FD Series						
Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Link
T2R-FD-30-24AD	\$43.50	Off-delay	0.1 to 10 seconds	24 VAC/VDC	(1) SPDT timed relay	PDF
T2R-FD-30J-120A	\$43.50	Off-delay	0.1 to 10 seconds	120 VAC/VDC	(1) SPDT timed relay	PDF
T2R-FD-31-24AD	\$43.50	Off-delay	1 to 100 seconds	24 VAC/VDC	(1) SPDT timed relay	PDF
T2R-FD-31J-120A	\$43.50	Off-delay	1 to 100 seconds	120 VAC/VDC	(1) SPDT timed relay	PDF
T2R-FD-32-24AD	\$43.50	Off-delay	0.1 to 10 minutes	24 VAC/VDC	(1) SPDT timed relay	PDF
T2R-FD-32J-120A	\$43.50	Off-delay	0.1 to 10 minutes	120 VAC/VDC	(1) SPDT timed relay	PDF
T2R-FD-33-24AD	\$43.50	Off-delay	1 to 100 minutes	24 VAC/VDC	(1) SPDT timed relay	<u>PDF</u>
T2R-FD-33J-120A	\$43.50	Off-delay	1 to 100 minutes	120 VAC/VDC	(1) SPDT timed relay	PDF

Off-Delay Relay Timers Specifications			
Models	T2R-FD-3x-24AD	T2R-FD-3xJ-120A	
Input Specifications			
Nominal Voltage	24VAC/VDC	120VAC/VDC	
Nominal Consumption	Maximum 2VA		
Nominal Frequency	50/60 Hz		
Voltage Tolerance	AC operation: +10/-15% of nominal at 50/60 Hz DC operation: +10/-15% of nominal		
Contact Specifications			
Туре	(1) SPDT		
Switching Capacity	10A @ 240VAC, 30VDC 7A @ 28VDC SPDT 1/4 HP @ 120VAC (N.O.)		
Electrical Lifetime	Full load: 100,000 operations		
Mechanical Lifetime	10,000,000 operations		
Reset Time			
Triggered with Input Voltage	0.1 se	econds	
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		rate after power is removed: econds	
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		

*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



PrSense 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	INPUT VOLTAGE	
		energized. Input voltage must be removed to reset the time delay relay & de-energize the output.	OUTPUT	t

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.	OUTPUT t t
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.	OUTPUT t t
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.	INPUT VOLTAGE TRIGGER OUTPUT t t
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.	INPUT VOLTAGE TRIGGER OUTPUT t <t t<="" td=""></t>

Note: Please see inserts for more information