

prosense® Relay Timers

Multi-Mode Relay Timers TRM-16 Series Overview

The TRM-16 series offers the digital accuracy of DIP-switch setting as well as the flexible programmability of a multi-function and multi-time range relay. These products provide an easy and accurate method to select any of 16 time delay functions and any time delay between 0.05 seconds and 10,230 hours (310 hours maximum for Dual Mode functions). Programming is accomplished through the use of two 10-position DIP-switches.

Features

- Sixteen user-selectable modes in one unit
- DIP-switches for accurate digital set of time delay and selection of function
- 0.05 seconds to 10,230 hours programmable time delay (Single mode functions only)
- 120 VAC/VDC and 24 VAC/VDC models available
- 11-pin octal socket
- 10A DPDT output contact
- LED indicates timing mode and time out conditions



TRM-16-D-120AD

Multi-Mode Relay Timers TRM-16 Series

Part Number	Price	Timer Type	Timing Range	Voltage	Output Type	Drawing Links
TRM-16-D-120AD	\$92.00	Multi-mode 16 mode selectable	0.05 seconds to 10,230 hours selectable	120 VAC/VDC	(1) DPDT timed relay	PDF
TRM-16-D-24AD	\$92.00	Multi-mode 16 mode selectable	0.05 seconds to 10,230 hours selectable	24 VAC/VDC	(1) DPDT timed relay	PDF

Multi-Mode Relay Timer Specifications

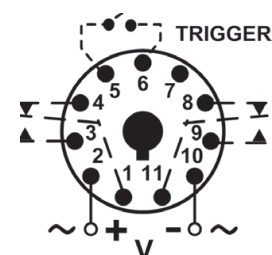
Part Number	TRM-16-D-120AD	TRM-16-D-24AD
Input Specifications		
Nominal Voltage	120 VAC/VDC	24 VAC/VDC
Nominal Consumption	Max 2VA	
Nominal Frequency	50/60 Hz	
Contact Specifications		
Type	(1) DPDT	
Switching Capacity	10A @ 240VAC, 30VDC 1/2 HP @ 120/240 VAC (N.O.) 1/3 HP @ 120/240 VAC (N.C.) B300 & R300 (N.O.) AC15 and DC13	
Electrical Lifetime	Full Load: 100,000 operations	
Mechanical Lifetime	10,000,000 operations	
Reset Time		
Functions Triggered with All Other Functions	0.1 seconds	
Functions Triggered with Control Switch	0.04 seconds	
Time Circuit Specifications		
Setting Accuracy	Constant Voltage & Temperature w/i specifications: +0.1% of set time or +50ms, whichever is greater For Variable Voltage & Temperature w/i specifications: +1% of set time 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 & Temperature w/i specifications: +0.1% of set time or +0.02 seconds, whichever is greater For Variable Voltage & Temperature w/i specifications: +1% of set time or +0.02 seconds, whichever is greater	

Multi-Mode Relay Timer Specifications

General Specifications	
Connection (screw terminal)	Recommend 70170-D socket 1 or 2 #12-20 AWG Wire
Tightening Torque	12 in-lb
Wire/Ferrule Size	1 or 2 #12-20 AWG (Ferrule size: Stud size 6 with max overall width 0.30")
Ambient Temperature	-28 to +65°C [-18 to +150°F]
Storage Temperature	-40 to +85°C [-40 to +185°F]
Protection Rating	IP20
Vibration Resistance	10-55 Hz with 3G maximum and 0.5mm total displacement (+/- 0.25mm).
Mounting	Socket mount (11-pin required)
Mounting Orientation	Any
LED Indicator	Green ON - Power Red ON - Relay Energized
Weight	0.22 lbs
Agency Approvals and Standards *	UR File E191059, CSA File 602618, CE, UL Listed with appropriate socket File E191059

*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

TRM-16 Series Multi-Mode Relay Timers

Function Table

STATUS

GRN-POWER ON

RED-RELAY ON

ON ← OFF → ON

TIME BASE

FUNCTION

A

B

C

D

E

F

G

H

J

K

1

2

4

8

16

32

64

128

256

512

SINGLE MODE (t)

DUAL MODE

1

2

4

8

16

1

2

4

8

16

SEE CHART ON SIDE FOR FUNCTION & TIME BASE SETUP

COMBINE FOR TOTAL TIME

Top

SELECT FUNCTION

FUNCTION

A

B

C

D

ON DELAY

OFF

OFF

OFF

OFF

INTERVAL ON

ON

OFF

OFF

OFF

OFF DELAY

OFF

ON

OFF

OFF

TR. ON DELAY

ON

ON

OFF

OFF

FLASHER (ON)

OFF

OFF

ON

OFF

FLASHER (OFF)

ON

OFF

ON

OFF

WATCHDOG

OFF

ON

ON

OFF

ONE SHOT F. EDGE

ON

ON

ON

OFF

SINGLE SHOT

OFF

OFF

OFF

ON

CYCLE (ON)

ON

OFF

OFF

ON

CYCLE (OFF)

OFF

ON

OFF

ON

DELAYED INTERVAL

ON

ON

OFF

ON

ON/OFF DELAY

OFF

OFF

ON

ON

TR. DELAYED INT.

ON

OFF

ON

ON

ONE SHOT-FLASHER

OFF

ON

ON

ON

ON DELAY/FLASHER

ON

ON

ON

ON

SELECT TIME BASE

BASE

E

F

G

SINGLE MODE (t)

DUAL MODE (t1)

0.01S

OFF

OFF

OFF

0.1 S

ON

OFF

OFF

1S

OFF

ON

OFF

0.1M

OFF

OFF

ON

1M

ON

ON

OFF

0.1H

ON

OFF

ON

1H

OFF

ON

ON

10H

ON

ON

ON

DUAL MODE (t2)

BASE

H

J

K

0.01S

OFF

OFF

OFF

0.1 S

ON

OFF

OFF

1S

OFF

ON

OFF

0.1M

OFF

OFF

ON

1M

ON

ON

OFF

0.1H

ON

OFF

ON

1H

OFF

ON

ON

10H

ON

ON

ON

NOTE: SWITCHES H, J, & K ARE ONLY USED ON DUAL MODE FUNCTIONS

Side

www.automationdirect.com

Relays and Timers

tREL-115

prosense® Octal Sockets

Features

- Mounts on 35mm DIN rail
- Screw clamp wire termination



70169-D



70170-D



750-2C-SKT

Octal Sockets for Relays

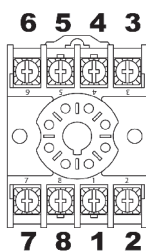
Part Number	Price	Description	Qty	Wt (lb)	Drawing Links
<u>70169-D</u>	\$5.50	Macromatic relay socket, 8-pin, 35mm DIN rail or panel mount. For use with ProSense octal relays.	1	0.1	PDF
<u>70170-D</u>	\$6.50	Macromatic relay socket, 11-pin, 35mm DIN rail or panel mount. For use with ProSense octal relays.	1	0.1	PDF
<u>750-2C-SKT</u>	\$4.75	AutomationDirect relay socket, 8-pin, 35mm DIN rail or panel mount. For use with 750-2C and H750-2C series octal relays.	1	0.1	PDF

Octal Sockets Specifications

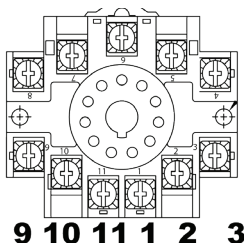
Part Number	Number of Pins	Voltage	Current	Screw Size	Wire Size (capacity)	Screw Torque	Screw Chassis Mounting Torque	Agency Approval *
<u>70169-D</u>	8	600V	10A	6-32	1 or 2, 12-20 AWG	12 in-lb	7 in-lb	UL Recognized E169693, CSA, CE
<u>70170-D</u>	11	300V	10A	6-32	1 or 2, 12-20 AWG	12 in-lb	12 in-lb	
<u>750-2C-SKT</u>	8	600V	5A	M3.5	1-12 AWG / 1-14 AWG	9 in-lb	7 in-lb	UL Recognized E225080, CSA, CE

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

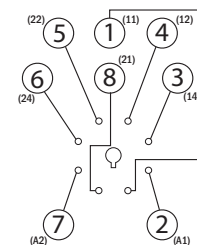
Socket Pinouts



70169-D



70170-D



750-2C-SKT