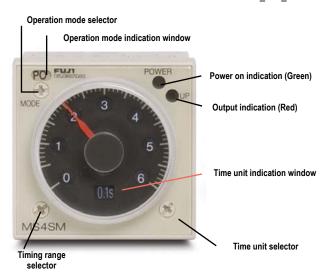
## **Timers for all Applications**



# Koyo digital timers: powerful but easy to use

This full-function timer has all the bells and whistles, including full programmability:

Timing ranges and modes: Seconds to hours time ranges with decimal selection and up and down timing modes accommodate a wide range of applications.

Output modes: Five output modes, from on-delay to one-shot, use a reliable 2A relay to operate the controlled device.

Tamper-proof: Key protection can be set for individual keys to prevent unintentional changes by the operator.

# Fuji multi-mode timers with full features

Ease of use: As the time range is adjusted, the corresponding display changes.

Full functionality: Up to four output modes can be selected simply with the turn of a screw. All outputs contain 5A, DPDT relays.

LED indicators

# Miniature DIN timers are small and accurate

Small size: Under one inch wide.

Easy operation: A simple dial allows easy setup for the operator.

Accuracy: The timer will perform its timing function with repeatable accuracy of  $\pm$ 1% of the setting.



	ST7P Series	MS4S Series	KT-V4S Series		
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Display	Manual dial Time setting Output LED indicator	Manual dial Time setting Power LED indicator Output LED indicator Output mode setting	4-digit green LED display for time setting 4-Digit red LED display for current time Output LED indicator Programming indicators		
Input Power	100-120 VAC or 24 VDC	100-240 VAC or 24 VDC/AC	85-260 VAC or 10-26 VDC		
Inputs	Timed signal	Reset signal Start signal Gate signal Timed signal	Start signal Reset signal Timed signal		
Outputs	Normally-open DPDT Normally-closed DPDT	Normally-open DPDT Normally-closed DPDT	1 SPDT DC NPN transistor		
Contact Rating	3 A @ 240 VAC (resistive load)	5 A @ 250 VAC (resistive load)	Mechanical: 2 A @ 220 VAC Transistor: 100 mA @ 24 VDC		
Output Modes	On-delay	On-delay Flicker One shot Off-delay	On-delay Flicker One shot Off-delay Accumulation		
Time Ranges	0.4 seconds to 60 minutes	0.05 seconds to 60 hours	0.001 seconds to 999.9 hours		
Enclosure Rating	NEMA 1	NEMA 1	IP65 - faceplate		
Agency Approvals	UL/CSA/CE/TUV	UL/CSA/CE/TUV	UL/CSA/CE		

www.automationdirect.com Relays and Timers tREL-96

## Fuji 1/16 DIN Super Timers

### **Overview**

The MS4S series super timers are 1/16 DIN style timing relays designed for process control, machine tool control, safety control and many other types of applications. The timers are plug-in 8-pin or 11-pin surface/DIN-rail mountable with up to four selectable modes of operation and four selectable timing ranges.



#### **MS4SM Series**

- Multi-mode timer with mode indication. Ondelay (PO), flicker (FL), one-shot (OS), or signal off-delay (SF)
- 11-pin plug-in with start, reset and gate (interrupt) input signals and a DPDT contact output
- Timing range from 0.05 seconds to 60 hours
- Timer scale with selectable ranges of 0-6, 0-12, 0-30 and 0-60
- Timing units in selectable ranges of 0.1s, sec, min and hrs
- Power on LED indicator (green) flickers during timing operation, UP (red) LED is on when normally open contact is closed

#### **MS4SA Series**

- · On-delay timer
- 8-pin plug-in with a DPDT contact output
- Timing range from 0.05 seconds to 60 hours
- Timer scale with selectable ranges of 0-6, 0-12, 0-30 and 0-60s

- Timing units in selectable ranges of 0.1s, sec, min and hrs
- Power on LED indicator (green) flickers during timing operation, UP (red) LED is on when normally open contact is closed

#### **MS4SC Series**

- On-delay timer
- 8-pin plug-in with a SPDT timed contact output and a SPDT instantaneous contact output
- Timing range from 0.05 seconds to 60 hours
- Timer scale with selectable ranges of 0-6, 0-12, 0-30 and 0-60
- Timing units in selectable ranges of 0.1s, sec, min and hrs
- Power on LED indicator (green) flickers during timing operation, UP (red) LED is on when normally open contact is closed

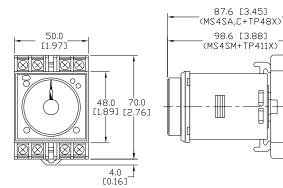
Fuji 1/16 DIN Super Timers Selection Chart						
Part Number	Price	Description				
MS4SM-AP-ADC*	\$70.00	Fuji Electric multi-mode relay timer, 0.05 seconds to 60 hours selectable timing range, 100-240 VAC operating voltage, 5A contact rating, (1) DPDT timed relay output(s), socket mount, 11-pin. Requires Fuji Electric TP411X or TP411SBA timer socket.	0.05 seconds to 60 hours			
MS4SA-AP-ADC	\$70.00	Fuji Electric on-delay relay timer, 0.05 seconds to 60 hours selectable timing range, 100-240 VAC operating voltage, 5A contact rating, (1) DPDT timed relay output(s), socket mount, 8-pin. Requires Fuji Electric TP48X or TP48SB timer socket.	0.05 seconds to 60 hours			
MS4SC-AP-ADC*	\$70.00	Fuji Electric on-delay relay timer, 0.05 seconds to 60 hours selectable timing range, 100-240 VAC operating voltage, 5A contact rating, (1) SPDT timed relay and (1) SPDT instant relay output(s), socket mount, 8-pin. Requires Fuji Electric TP48X or TP48SB timer socket.				
MS4SM-CE-ADC*	\$70.00	Fuji Electric multi-mode relay timer, 0.05 seconds to 60 hours selectable timing range, 24 VAC/VDC operating voltage, 5A contact rating, (1) DPDT timed relay output(s), socket mount, 11-pin. Requires Fuji Electric TP411X or TP411SBA timer socket.	0.05 seconds to 60 hours			
MS4SA-CE-ADC*	\$70.00	Fuji Electric on-delay relay timer, 0.05 seconds to 60 hours selectable timing range, 24 VAC/VDC operating voltage, 5A contact rating, (1) DPDT timed relay output(s), socket mount, 8-pin. Requires Fuji Electric TP48X or TP48SB timer socket.	0.05 seconds to 60 hours			
MS4SC-CE-ADC*	\$65.00	On-delay timer with selectable timing range from 0.05s to 60 hours. Input power is 24 VDC/AC. SPDT timed relay output and SPDT instantaneous relay output. 8-pin connection. UL, CSA, TÜV approved.	0.05 seconds to 60 hours			
TP411X	\$10.00	Fuji Electric timer socket, 35mm DIN rail mount. For use with MS4SM series timers.				
TP411SBA	\$10.00	Fuji Electric timer socket, panel mount. For use with MS4SM series timers.				
TP48X	\$10.00	Fuji Electric timer socket, 35mm DIN rail mount. For use with MS4SA and MS4SC series timers.	N/A			
TP48SB	\$10.00	Fuji Electric timer socket, panel mount. For use with MS4SA and MS4SC series timers.				
PANEL-16	\$17.00	AutomationDirect mounting clips, package of 5. For use with 1/16 DIN timers and counters.				

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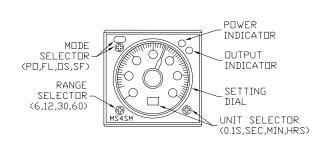
## **Dimensions**

mm [inches]

#### (Timer and Socket Assembly)



#### Control



<sup>\*</sup> Socket mounts must be purchased separately

# **Fuji Miniature DIN Super Timers**



## **Overview**

The ST7P is a compact and highly accurate timer. It is an on-delay operation type with a single timing range. These timers are designed to optimize mounting space in small areas. Mounting is by DIN rail or by securing directly to a panel with a fastener.

## **Features**

- Highly accurate, with a repeat accuracy within ±1% at maximum setting time
- ST7P models offer a number of timing ranges. Please see Selection Guide below
- · Large dial makes time setting easy
- LED indicators make it easy to monitor timer operation
- ST7P series meets UL and CSA standards

Fuji Miniature DIN Super Timers Selection Chart							
Part Number	Price	Description	Voltage	Time Range			
ST7P-2A15S-ADC	\$55.00	Mini-DIN on-delay timer with timing range of 0.4s to 5s. Input power is 100-120 VAC. DPDT relay output. UL, CSA, TÜV approved	100-120VAC	0.4 seconds to 5 seconds			
ST7P-2A13T-ADC	\$55.00	Mini-DIN on-delay timer with timing range of 2s to 30s. Input power is 100-120 VAC. DPDT relay output. UL, CSA, TÜV approved		2 seconds to 30 seconds			
ST7P-2A16T-ADC	\$55.00	Mini-DIN on-delay timer with timing range of 4s to 60s. Input power is 100-120 VAC. DPDT relay output. UL, CSA, TÜV approved		4 seconds to 60 seconds			
ST7P-2A11N-ADC	\$55.00	Mini-DIN on-delay timer with timing range of 1 min. to 10 min. Input power is 100-120 VAC. DPDT relay output. UL, CSA, TÜV approved		1 minute to 10 minutes			
ST7P-2A16N-ADC	\$55.00	Mini-DIN on-delay timer with timing range of 4 min. to 60 min. Input power is 100-120 VAC. DPDT relay output. UL, CSA, TÜV approved		4 minutes to 60 minutes			
ST7P-2DE5S-ADC	\$55.00	Mini-DIN on-delay timer with timing range of 0.4s to 5s. Input power is 24 VDC. DPDT relay output. UL, CSA, TÜV approved	24VDC	0.4 seconds to 5 seconds			
ST7P-2DE3T-ADC	\$55.00	Mini-DIN on-delay timer with timing range of 2s to 30s. Input power is 24 VDC. DPDT relay output. UL, CSA, TÜV approved		2 seconds to 30 seconds			
ST7P-2DE6T-ADC	\$55.00	Mini-DIN on-delay timer with timing range of 4s to 60s. Input power is 24 VDC. DPDT relay output. UL, CSA, TÜV approved		4 seconds to 60 seconds			
ST7P-2DE1N-ADC	\$53.00	Mini-DIN on-delay timer with timing range of 1 min. to 10 min. Input power is 24 VDC. DPDT relay output. UL, CSA, TÜV approved		1 minute to 10 minutes			
ST7P-2DE6N-ADC	\$53.00	Mini-DIN on-delay timer with timing range of 4 min. to 60 min. Input power is 24 VDC. DPDT relay output. UL, CSA, TÜV approved		4 minutes to 60 minutes			
<u>TP88X2</u>	\$10.00	DIN rail/surface mount socket for ST7P series timers. UL, CSA, TÜV approved	N/A	N/A			

## **Dimensions**

mm [inches]

# Timer and Socket Assembly Control Output Indicator Indicator Setting DIAL 4.2 [0.16]