



FUJI 1/16 DIN SUPER TIMERS

Overview

The MS4S series super timers are a 1/16 DIN style timing relay 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.

Features

MS4SM

- Multi-mode timer with mode indication. On-delay (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
- LED indicators. Power on (green) flickers during timing operation UP (red) on when N.O. contact is closed

MS4SA

- 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 0-60

- Timing units in selectable ranges of 0.1s, sec, min and hrs
- LED indicators — power on (green) flickers during timing operation. UP (red) on when N.O. contact is closed

MS4SC

- 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
- LED indicators — power on (green) flickers during timing operation. UP (red) on when N.O. contact is closed

Product Selection Guide

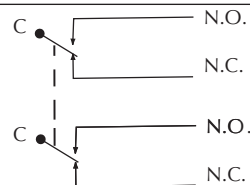
Part Number	Description	Voltage	Time Range	
MS4SM-AP-ADC	Multi-mode timer with selectable timing range from 0.05s to 60 hours. Input power is 100 - 240 VAC. DPDT relay output. 11-pin connection. UL, CSA, TÜV approved	100-240VAC	0.05 seconds to 60 hours	
MS4SA-AP-ADC	On-delay timer with selectable timing range from 0.05s to 60 hours. Input power is 100 - 240 VAC. DPDT relay output. 8-pin connection. UL, CSA, TÜV approved		0.05 seconds to 60 hours	
MS4SC-AP-ADC	On-delay timer with selectable timing range from 0.05s to 60 hours. Input power is 100 - 240 VAC. SPDT timed relay output and SPDT instantaneous relay output. 8-pin connection. UL, CSA, TÜV approved		0.05 seconds to 60 hours	
MS4SM-CE-ADC	Multi-mode timer with selectable timing range from 0.05s to 60 hours. Input power is 24 VDC/ VAC DPDT relay output. 11-pin connection. UL, CSA, TÜV approved	24 VDC/VAC	0.05 seconds to 60 hours	
MS4SA-CE-ADC	On-delay timer with selectable timing range from 0.05s to 60 hours. Input power is 24 VDC/ VAC. DPDT relay output. 8-pin connection. UL, CSA, TÜV approved		0.05 seconds to 60 hours	
MS4SC-CE-ADC	On-delay timer with selectable timing range from 0.05s to 60 hours. Input power is 24 VDC/ VAC. SPDT timed relay output and SPDT instantaneous relay output. 8-pin connection. UL, CSA, TÜV approved		0.05 seconds to 60 hours	
TP411X	Surface mount socket for MS4SM series timers. UL, CSA, TÜV approved	N/A	N/A	
TP411SBA	Flush mount socket for MS4SM series timers. UL, CSA, TÜV approved			
TP48X	Surface mount socket for MS4SA and MS4SC series timers. UL, CSA, TÜV approved			
TP48SBA	Flush mount Socket for MS4SA and MS4SC series timers. UL, CSA, TÜV approved			

SPDT



A single pole, double throw relay switches one common line between two stationary contacts, one normally open and one normally closed.

DPDT



A double pole, double throw relay simultaneously switches two independent commons with two independent normally open/normally closed contacts.

FUJI 1/16 DIN SUPER TIMERS



MS4SM-AP-ADC
MS4SM-CE-ADC



MS4SA-AP-ADC
MS4SA-CE-ADC



MS4SC-AP-ADC
MS4SC-CE-ADC



TP48X



TP48SBA



TP411X



TP411SBA

Specifications

Approvals	UL file no.: E44592, CSA file no.: LR20479, TÜV license no: R9551800	
Repeat Accuracy	±0.3% at maximum setting time	
Reset Time	0.1 second or less	
Operating Voltage Range	85-264VAC MS4SM-AP-ADC MS4SA-AP-ADC MS4SC-AP-ADC	20.4-26.4VDC/VAC MS4SM-CE-ADC MS4SA-CE-ADC MS4SC-CE-ADC
Operating Temperature Range	-10 to +55°C (14 to 131°F) (no icing)	
Humidity	35 to 85% (no condensation)	
Contact Ratings	5A at 30VDC resistive load, 1A @ 30VDC inductive load, 5A @ 250VAC resistive load, 2.5A @ 120VAC inductive load	
Power Consumption	Approx. 10VA at 120/240VAC; 1W at 24VDC	
Insulation Resistance	100MΩ at 500 VDC insulation tested	
Dielectric Strength	2000VAC 1 min. between current carrying part and non-current carrying part 2000VAC 1 min. between output contact and control circuit 1000VAC 1 min. between open contacts	
Vibration	Malfunction durability: 10 to 55Hz, 0.5mm double amplitude Mechanical durability: 10 to 55Hz, 0.75mm double amplitude	
Shock	Malfunction durability: 100m/s ² Mechanical durability: 500m/s ²	
Life Expectancy	Mechanical: 20 million operations Electrical: 100,000 operations at 250VAC 5A resistive load	
Weight	Approx. 100g (3.527 oz.)	

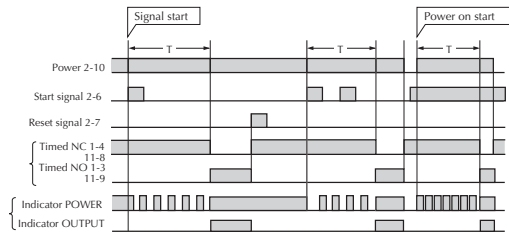


FUJI 1/16 DIN TIMERS TIMING AND WIRING DIAGRAMS

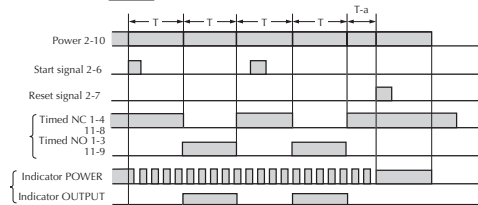
Timing and wiring diagrams

MS4SM

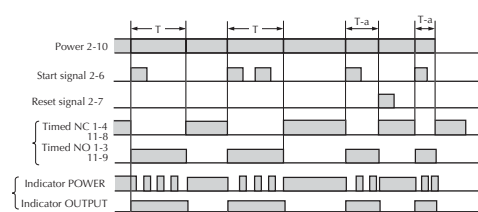
1. On-delay **PO**



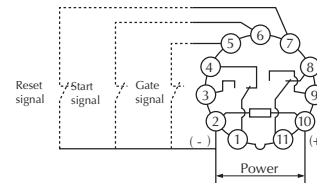
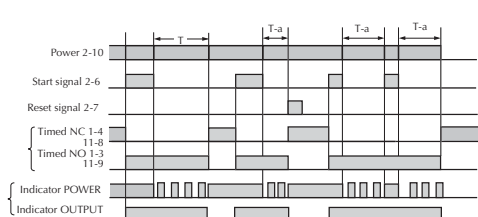
2. Flicker **FL**



3. One-shot **OS**



4. Signal off-delay **SF**



- With power off turn the mode selector until **PO** is displayed.
- When power is on, applying the start signal turns the timed N.O. (normally open) contact on after the set time has elapsed.
- When using a power-on start, pins 2 and 6 (start signal) must be jumpered together

- With power off, turn the mode selector until **FL** is displayed.
- When power is on, applying the start signal turns the timed contact on and off repeatedly at the set time intervals.

- With power off, turn the mode selector until **OS** is displayed.
- When power is on, applying the start signal instantly turns the timed N.O. contact on and turns it off after the set time has elapsed.

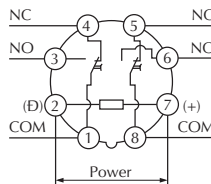
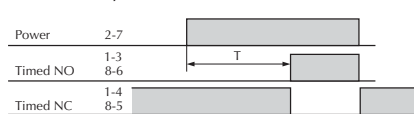
- With power off, turn the mode selector until **SF** is displayed.
- When power is on, applying the start signal instantly turns the timed N.O. contact on. Removing the start signal turns the contact off after the set time has elapsed.

Notes:

1. T = set time. t = time period within set time.
2. The gate signal is used to interrupt the timing operation.

MS4SA

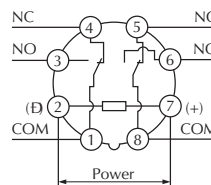
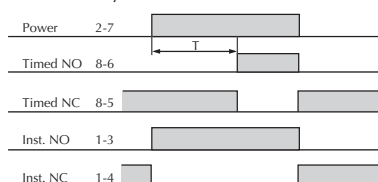
On-delay



- When power is applied, the timed N.O. contacts make after the set time has elapsed.
- When power is removed, the contacts reset.

MS4SC

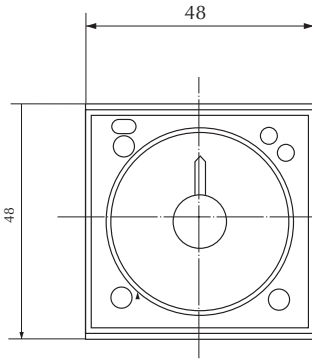
On-delay



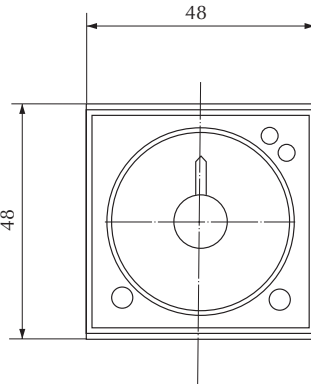
- Timed contact
When power is applied, the N.O. contact makes after the set time has elapsed. When power is removed, the contacts reset.
- Instantaneous contact
When power is applied, the N.O. contact makes instantly. When power is removed, the contacts reset.

FUJI 1/16 DIN SUPER TIMERS DIMENSIONS

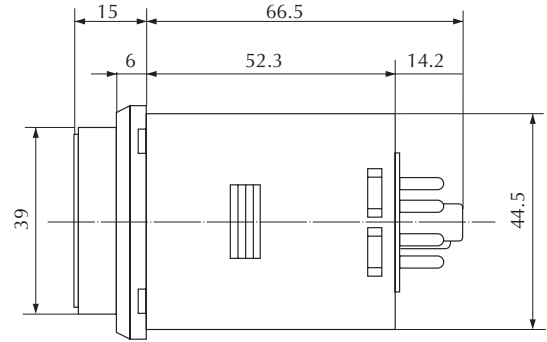
MS4SM



MS4SA and MS4SC



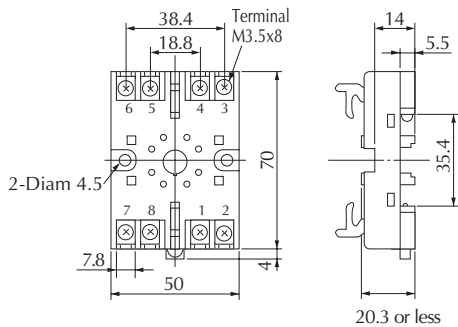
Side View



Wt : Approx. 100g (3.53oz)

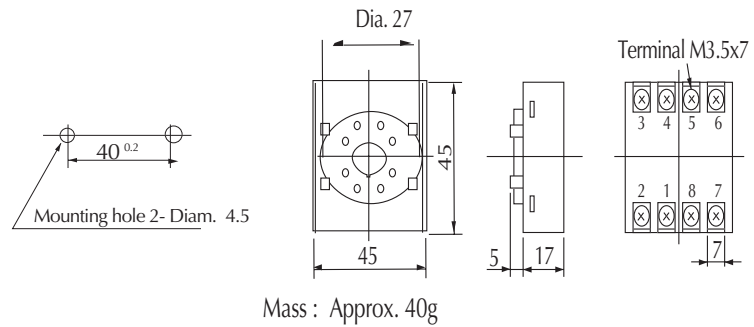
Dimensions in mm

Socket for MS4SA, MS4SC (8-pin)
TP48X

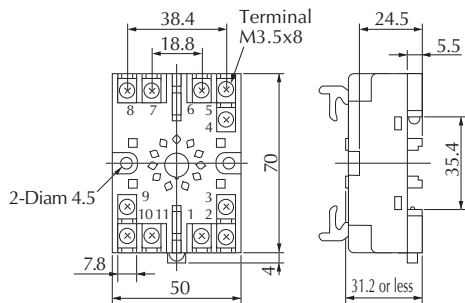


Wt: Approx. 50g (1.76oz)

Sockets for MS4SA, MS4SC (8-pin)
TP48SBA

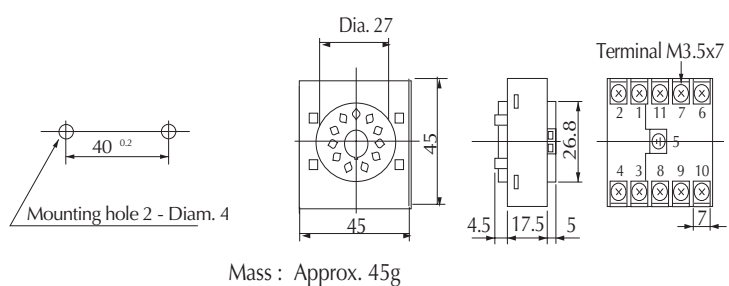


Socket for MS4SM (11-pin)
TP411X



Wt: Approx. 70g (2.47oz)

Sockets for MS4SM (11-pin)
TP411SBA



Using the super timer

