### Timers

## Type and rating

Standard	Туре	Operation	Mounting	Indication	Contact arrangement	Control output	Input voltage	Power consumption	Timing range
<b>BAR</b> US	MS4SM MS4SA MS4SC MS4SR	On-delay Flicker One-shot momentary action Signal off-delay On-delay On-delay Repeat	Surface/ flush	Power-on Time up Power-on Time up Power-on Time up Power-on ON	Time-limit 2(NO+NC) Time-limit 2(NO+NC) Time-limit 1(NO+NC) + instantaneous 1(NO+NC) Time-limit 2(NO+NC)	See the UL approved type list shown at page 45	100 to 240V AC 50/60Hz 24V AC/DC 48 to 127V DC	Approx. 10VA for AC type. Approx. 1W for DC type.	From 0.6 seconds to 60 hours, 16 changeable ranges   Full Unit   scale x 0.1s s   6 0.05 to 0.6s 0.5 to 6s 0.5 to 6h   12 0.1 to 1.2s 1 to 12s 1 to 12h   30 0.25 to 3s 2.5 to 30s 2.5 to 30h   60 0.5 to 6s 5 to 60h 5 to 60h
	MS4SF MS4SF-R	Off-delay Off-delay		Power-on Power-on	Time-limit 2(NO+NC) Time-limit 1(NO+NC) + instantaneous reset		100 to 240V AC 50/60Hz 24V AC/DC 50/60Hz 48 to 127V DC	Approx. 1VA for AC type. Approx. 1W for DC type.	Full scale sec min
	MS4SY	λ-Δ		k contact input Δ contact output	Time-limit $1NO(\measuredangle)$ $1NO(\triangle)$ instantaneous 1NO		100 to 240V AC 50/60Hz	Approx. 10VA for AC type.	Full scale Timing range (𝔅)   6 0.5 to 6s   12 1 to 12s   60 5 to 60s   120 10 to 120s   𝔅 →𝔅switching time   0.05s 0.1s 0.25s 0.5s
	MS4SE	Electrically reset On-delay		Power-on	Time-limit 1(NO+NC)			Approx. 10VA for AC type.	Full Unit   scale s min hrs x 10 h   6 0.5 to 6s 0.5 to 6min 0.5 to 6hrs 5 to 60h   12 14 to 12s 1 to 12min 1 to 12hrs 10 to 120h   60 5 to 60s 5 to 60min 5 to 60hrs 50 to 600h   120 10 to 120s 10 to 120min 10 to 120hrs 100 to 120hr
	ST7P-2	On-delay	Surface	Power-on Time up	Time-limit 2(NO+NC)	240V AC 3A	100V AC 200V AC	100V AC approx. 1.2VA	0.06 to 0.5s 0.25 to 3min 0.1 to 1s 1 to 10min
	ST7P-4	On-delay	Surface	Power-on Time up	Time-limit 4(NO+NC)	(Resistive load)	24V DC	200V AV approx. 1.5VA 24V DC approx. 1.1W	0.3 to 3s 2 to 30min   0.4 to 5s 4 to 60min   1 to 10s 0.2 to 2h   2 to 30s 0.5 to 6h   4 to 60s 1 to 12h
	MD4E	8 operation modes	Surface/ flush	-	Time-limit 1(NO+NC)	250V AC 5A (Resistive load)	100 to 240V AC 50/60Hz 24V AC/DC 50/60Hz	100V AC approx. 1.1VA 200V AV approx. 1.5VA 24V DC approx. 0.8W 24V AC approx. 1.1VA	0.001% to 9999h 9.999s 99.99s 999.99s 999.99s 9999h 9999s
	MS7S1	On-delay	Surface	Time up	Time-limit 1(NO+NC)	220V AC 1A (Resistive load)	100/200V AC 110/220V AC 50/60Hz Terminal switchover 24V AC, 24V DC	Approx. 2VA for AC type. Approx. 1W for DC type.	0.2 to 1.2s 0.5 to 3s 1 to 6s 2 to 12s 5 to 30s 10 to 60s 0.5 to 3min 1 to 6min 2 to 12min 5 to 30min 10 to 60min

Note: For connection, use a socket applicable to the object type.

### • Supertimer

Standard	Туре	Operation	Control output	UL File No.
c <b>AL</b> us	MS4SM	On-delay	Contact rating: 5A, 250V AC (resistive load)	E44592
		Flicker		
		One-shot momentary action		
		Signal off-delay		
	MS4SA	On-delay		
	MS4SC	On-delay	Contact rating: 5A, 240V AC (resistive load)	
	MS4SR	Repeat	Contact rating: 5A, 250V AC (resistive load)	
	MS4SF	Off-delay	Contact rating: 3A, 250V AC (resistive load)	
	MS4SF-R	Off-delay	Contact rating: 5A, 250V AC (resistive load)	
	MS4SY	Star-delta	Contact rating: 5A, 240V AC (resistive load)	
	MS4SE	Electrically reset off-delay	Contact rating: 5A, 250V AC (resistive load)	
	MS7S1	On-delay	Contact rating: 1A, 220V AC (resistive load)	
	ST7P-2	On-delay	Contact rating: 3A, 240V AC (resistive load)	
	ST7P-4	On-delay		

# Digital timer

Standard	Туре	Operation	Control output	UL File No.
c <b>FL</b> °us	MD4E	8 modes	Contact rating: 5A, 250V AC (resistive load)	E42419

#### Sockets

Standard	Type Standard	Specification	Used with	UL File No.
C <b>AL</b> UL	TP411X	Rail mounting, screw terminal (11-pin)	MS4SM	E195744
	TP411SBA	Flush mounting, screw terminal (11-pin)	-	
	ATX2NS	Flush mounting, solder terminal (11-pin)	7	
	TP48X	Rail mounting, screw terminal (8-pin)	MS4SA	E90265
			MS4SC	
			MS4SF	
			MS4SY	
			MS4SE	
			MS4SR	
	TP48SB	Flush mounting, screw terminal (8-pin)	MD4E	
	ATX1NS	Flush mounting, solder terminal (8-pin)		
	TP88X1	Rail mounting, screw terminal (8-pin)	ST7P-2	E90265
	TP88X2			
	TP88	Surface mounting, solder terminal (8-pin)		
	TP88R2	Surface mounting, wire wrap (8-pin)		
	TP88B	Surface mounting, PC board (8-pin)		
	TP814X1	Rail mounting, screw terminal (11-pin)	ST7P-4	E90265
	TP814X2			
	TP814	Surface mounting, solder terminal (11-pin)		
	TP814R2	Surface mounting, wire wrap (11-pin)	1	
	TP814B	Surface mounting, PC board (11-pin)	1	