S-Series Sequential Timers
ST10-M2/ST15-M2/ST10-M2(IP)/ST15-M2(IP)

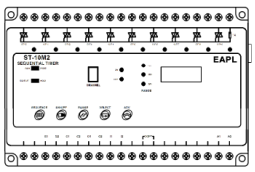
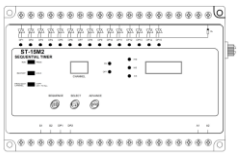
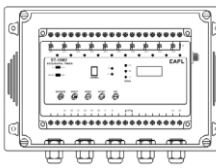
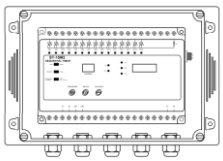
Features

- Suitable for screw mounting..
- Hold /Restart feature is available during power failure.
- 7 segment display indication for channel and timing operation.
- User-friendly programming of On / Off time selection for each relay.
- The copy feature is also provided to copy the programmed time of the first channel to all channels.
- Applicable for loads operating on 240V AC/110V AC.

Ordering Information

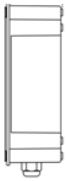
Models	Function	Source Voltage	Time Selection	Output
ST10-M2	Sequential Switching 4 channels	85V to 270V AC / DC	0.01Secs to 99Hrs 59Mins	Triac O/P for each channel. Suitable for 240V AC /110V AC loads only.
ST15-M2	Sequential Switching 6 channels			
ST10-M2(IP)	Sequential Switching 10 channels			
ST15-M2(IP)	Sequential Switching 10 channels with purging relay			

Front View ST10-M2 ST15-M2 ST10-M2(IP) ST15-M2(IP)

Side View ST10-M2 ST15-M2 ST10-M2(IP) ST15-M2(IP)






Over-all Dimension

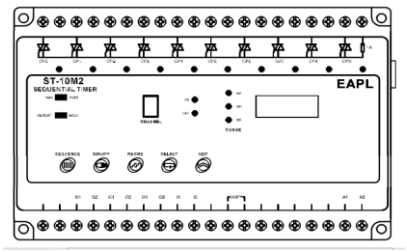
Models	Dimension Details in mm		
	W	H	D
ST10-M2/ST15-M2	200	130	45
ST10-M2(IP)/ST15-M2(IP)	291	214	68

■ Specifications

Parameters Models	ST10-M2	ST15-M2	ST10-M2(IP)	ST15-M2(IP)
Function	Sequential timer with 10 channels	Sequential timer with 15 channels	Sequential timer with 10 channels with IP66	Sequential timer with 15 channels with IP66
Rated supply Voltage	85V TO 270V AC/DC			
Rated Frequency	50 / 60Hz ± 5%			
Power consumption			AC Approx. 15VA / 3W.	AC Approx. 10VA / 2W.
Control output	10 (OP0 to OP9) TRAIC OUTPUT,500mA @ 250V AC resistive	15 (OP1 to OP15, TRIAC OUTPUT 500mA @ 250V AC resistive	10 (OP0 to OP9) TRAIC OUTPUT,500mA @ 250V AC resistive.	15 (OP1 to OP15, TRIAC OUTPUT 500mA @ 250V AC resistive
Start Signal (S1,S2)	Potential free closure for a minimum of 150mSec.	Potential free continuous	Potential free closure for a minimum of 150mSec.	Potential free continuous
Differential Pressure(DP1,DP2)	-	Potential free continuous	-	Potential free continuous
Conduction time (O1,O2)			>150m Sec.	-
On time range	0.01Sec to 99Hrs 59Min for each channel			
Off time range	0.01Sec to 99Hrs 59Min for each channel			
Setting accuracy	± 0.2% max. w.r.t Setting ± 20mSec			
Repeat Accuracy	± 0.3% max. ± 20mSec			
Recovery Time	2Sec minimum			
Variation due to voltage change	± 1% max. ±50mSec			
Variation due to temperature change	± 2% max. ±50mSec			
Variation due to frequency change	± 1% max. ±50mSec			
Ambient temperature	Operation: -10^{0}C to +55^{0}C Storage : -25^{0}C to +80^{0}C			
Humidity	MAX 85% RH @ 40^{0}C			
Electrical life (under full load)	105 operations minimum			
Service life (under no load)	106 operations minimum			
Rated frequency of operation	1800 ±5% operations per hour max			
Insulation resistance	>100M ohms @ 500V DC			
Electrical connection	Screw type terminals with self lifting clamps			
Dimension (W x H x D)	200 x 130 x 45 mm		291 x 202 x 82 mm	

Connection and Terminal Details

ST10-M2/ST15-M2



A1,A2 : Source(Power)
S1-S2 : Start signal for a minimum of 150mS(free from external voltage)
C1-C2 : SHORT – Single cycle operation) OPEN **–** Cyclic operation (i.e. timer continues to operate).
O1-O2: Cycle Complete Output (Output for cascade selection)- This output is available after completion of 1 cycle in single cycle operation mode (C1-C2 shorted).
I1-I2 : Time Pause Input. By shorting these terminals timing is temporarily stopped and relay status maintained, again by opening timing continues.
COPY : SHORT – First channel program shall be copied to all 10 channels during program mode. OPEN – Individual channel shall be programmed with different values.
OP0 – OP9, OP1 – OP15: Traic output
HOLD MODE: Upon resumption of power the timing continuous from the point where it had stopped
RESTART MODE: The timer resets in case of power failure & starts from the beginning upon power resumption.
1A: Common input terminals for all triacs

Cascading Connection