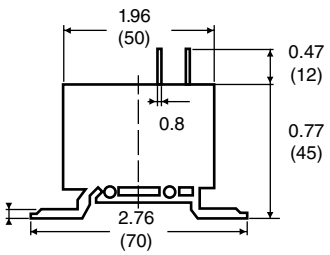
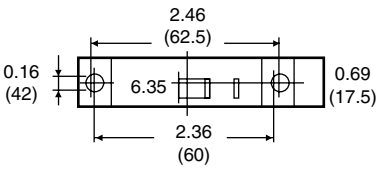
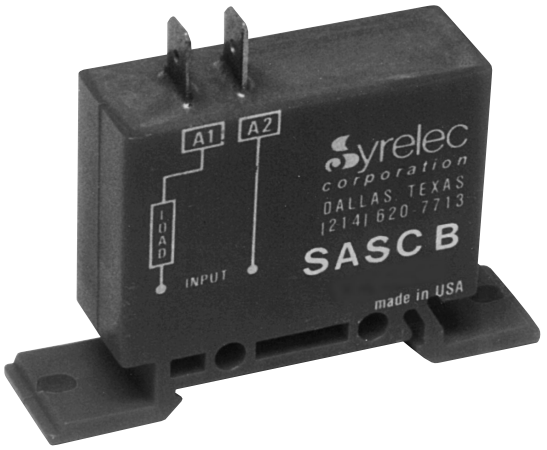
GENERAL DETAILS OF TYPE S TIMERS

S series are compact, low cost, precision devices designed to the most demanding specifications. The small size, epoxy filled case is highly resistant against dust, vibrations, shock or humidity. Creep and strike distance according to VDE 0110 Group C 250V. Case protection IP66. Case material - Polymid.



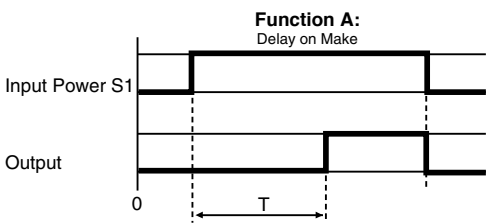




2

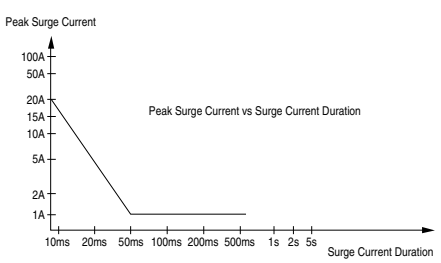
SAS SERIES
DELAY ON MAKE TIMER WITH SOLID STATE OUTPUT

UL listed CSA recognized



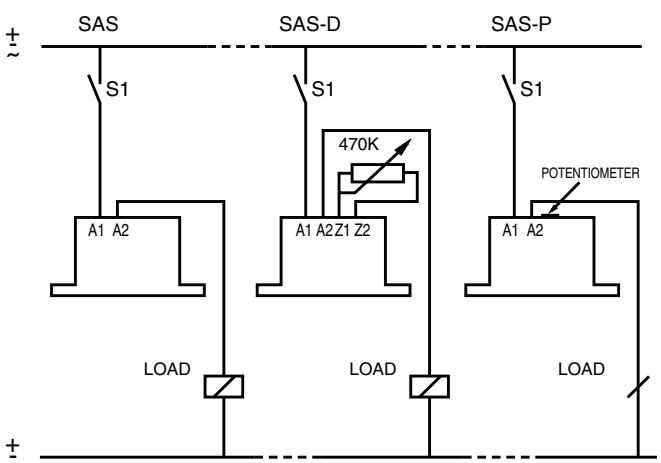
SPECIFICATIONS:

Input Power . . . . . 24 VAC/DC, 110 VAC/DC
220 VAC/DC, ±15%, 50/60 Hz
Output Rating . . . . . max.: 1.0 A at 20°C
min.: 10 mA
Repetition accuracy . . . . . ±0.5% at a constant ambient
Temp rise derating . . . . . 5 mA / °C
Reset time SAS-L & SAS-DL . . . . . 25 ms after timing
100 ms during timing
SAS-PL. . . . . 100 ms during timing
Leakage current during timing . . . 5 mA max
Peak surge current . . . . . 20 A < 10 ms
Peak surge voltage . . . . . 1400 V, 10 µs
Terminals . . . . . 1/4˝ (6.35mm) quick connect
Opertating temperature . . . . . -22°F to +140°F (-30°C to +60°C)
Weight . . . . . 1.9 oz. (55g)



Function A: When input power is applied, timing (t) begins. At the end of the preselected time, the solid state SCR output turns on. The output turns off when the input power is removed, resetting the timer for the next cycle.

WIRING DIAGRAM:



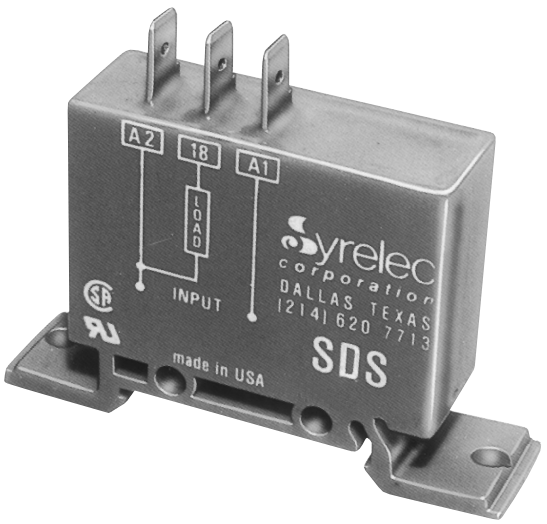
ORDERING INFORMATION: (100 pcs. minimum order)

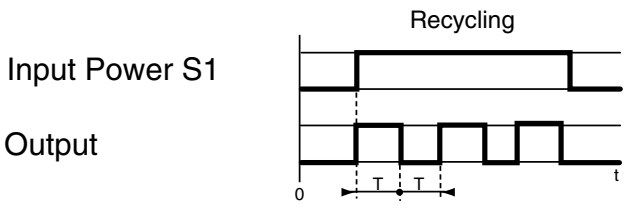
S	AS-D	100S	220 AD	L
MOUNTING	SERIES	TIME RANGE	INPUT POWER	UL
S=Encapsulated requiring DIN-Rail, Panel Adapter or use Base Mounting Holes	**AS** = standard relay **AS-D** = remote potentiometer **AS-P** = internal potentiometer	**AS** = Fixed .1 sec - 1 min **AS-D** = .1 sec - 60 min **Ex** = 10-100 sec maintain 10:1 ratio **AS-P** = .1 sec - 10 sec 1-100 sec maintain 100:1 ratio	**24AD** = 24 VAC/DC **110AD** = 110 VAC/DC **220AD** = 220 VAC/DC	**1 AMP**

SDS SERIES
REPEAT CYCLE TIMER

UL listed CSA recognized

- **Shock Resistant**
- **SCR Solid State Output**
- **Optional Remote Potentiometer**
- **DIN-Rail or Base Mounting**



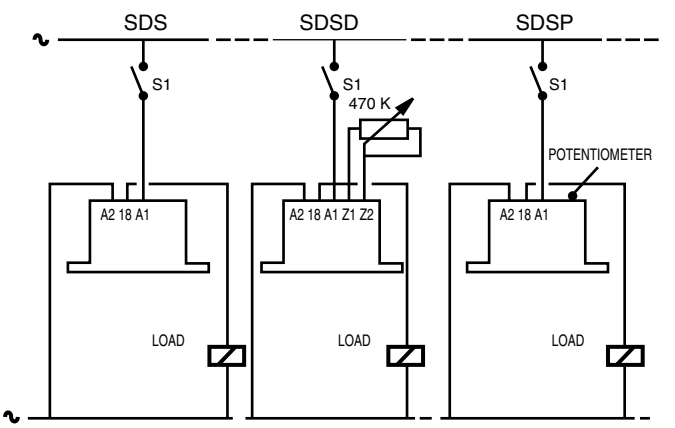


When input power S1 is applied, the solid state output turns on immediately for the timer period specified. It then turns OFF for that same time period and repeats continuously while power is applied.

SPECIFICATIONS:

Input	24 VAC, 48 VAC, 110 VAC 220 VAC, ±15%, 50/60 Hz
Maximum power consumption	24 VAC: 0.2 VA 48 VAC: 0.3 VA 110 VAC: 0.6 VA 220 VAC: 1.2 VA
Output	SCR
Output Rating	max.: 1.0 A at 20°C min.: 10 mA
Repetition accuracy	±0.5% at a constant ambient
Temp. rise derating	5 mA / °C
Reset time	100 ms after timing 150 ms during timing
Leakage current during timing	2 mA max.
Peak surge current	20 A < 10ms
Peak surge voltage	1400 V, 100 µs
Terminals	Faston 1/4″ (6.35mm)
Operating temperature	-22°F to +140°F -30°C to +60°C
Weight	1.9 oz. (55g)

WIRING DIAGRAM:



DIMENSIONS See page 3-34

ORDERING INFORMATION: (100 pcs. minimum order)

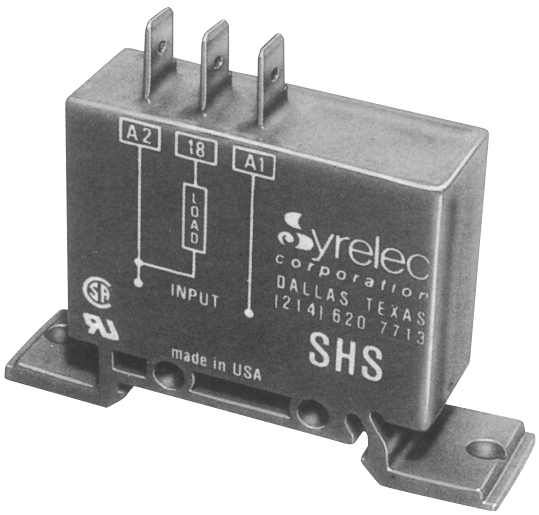
P.S.: Specify maximum time for "D" and "P" versions.

S	DS	10 min	24	L
MOUNTING	SERIES	TIME RANGE	INPUT POWER	UL
S = Encapsulated, requiring DIN-Rail, Panel Adapter or use Base Mounting Holes	**DS** = Fixed time **DS-D** = remote potentiometer **DS-P** = internal potentiometer	**DS** = Fixed .1s. - 120 min **DS-D** = .1 sec. - 120 min. Maintain 10:1 ratio **DS-P** = 1 -10 sec. or min., 10 - 100 sec. or min. Maintain 100:1 ratio	**24A** = 24 VAC **48A**= 48 VAC **110A** = 110 VAC **220A** = 220 VAC	**1 AMP**

SHS SERIES
INTERVAL TIMER WITH SOLID STATE OUTPUT

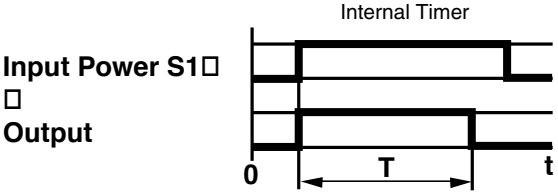
UL listed CSA recognized

- **Epoxy Encapsulated**
- **DIN-Rail or Base Mounting**
- **Internal or External Time Set**
- **Fixed Time**



2

Function H:
Internal Timer

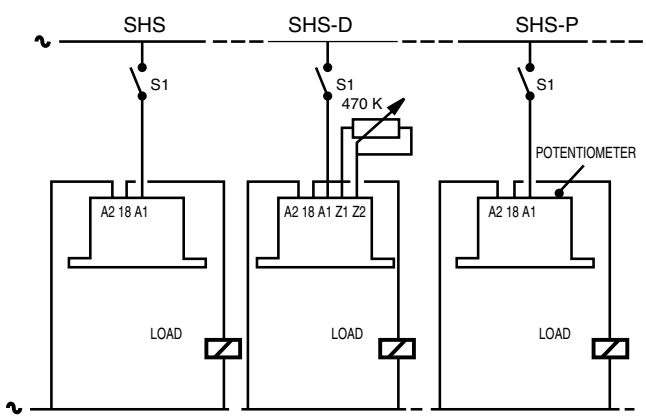


The solid state output turns on when the input power (S1) is applied. The output turns off at the end of time (T). The timer is reset when the input power is removed.

SPECIFICATIONS:

Input	24 VAC, 48 VAC, 110 VAC 220 VAC, ±15%, 50/60 Hz
Maximum power consumption	24 VAC: 0.2 VA 48 VAC: 0.3 VA 110 VAC: 0.6 VA 220 VAC: 1.2 VA
Output	SCR
Output Rating	max.: 1.0 A at 20°C min.: 10 mA
Repetition accuracy	±0.5% at a constant ambient
Temp. rise derating	5 mA / °C
Reset time	100 ms after timing 150 ms during timing
Leakage current during timing	2 mA max.
Peak surge current	20 A < 10 ms
Peak surge voltage	1400 V, 100 µs
Terminals	Faston 1/4˝ (6.35mm)
Operating temperature	-22°F to +140°F -30°C to +60°C
Weight	1.9 oz. (55g)

WIRING DIAGRAM:



Note: Available with internal potentiometer in HS-P Series.

ORDERING INFORMATION: (100 pcs. minimum order)

P.S.: Specify maximum time for "D" and "P" versions.

DIMENSIONS See page 3-34

S	**HS-D**	**300S**	**220A**	**L**
MOUNTING	**SERIES**	**TIME RANGE**	**INPUT POWER**	**UL**
S = Encapsulated, requiring DIN-Rail, Panel Adapter or Base Mounting Holes	**HS** = Fixed time **HS-D** = remote potentiometer **HS-P** = internal potentiometer	**HS =** Fixed .1s. - 120 min **HS-D** =.1 sec. - 120 min. Maintain 10:1 ratio **HS-P** =1-10 sec. or min., 10 - 100 sec. or min. Maintain 100:1 ratio	**24A** = 24 VAC **48A** = 48 VAC **110A** = 110 VAC **220A** = 220 VAC	**1 AMP**