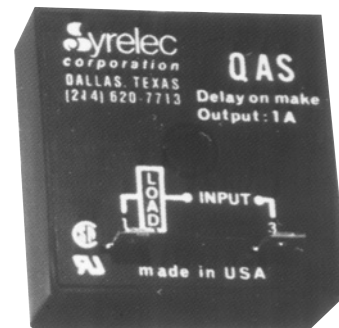
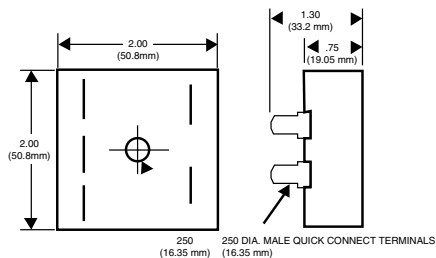


GENERAL DETAILS OF TYPE Q TIMERS

Q series timers 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 and humidity. Creep and strike distance according to VDE 0110 Group C 250V. Case protection IP66. Case material - Phenolic.

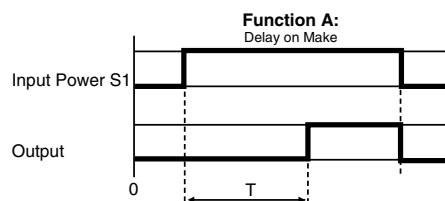
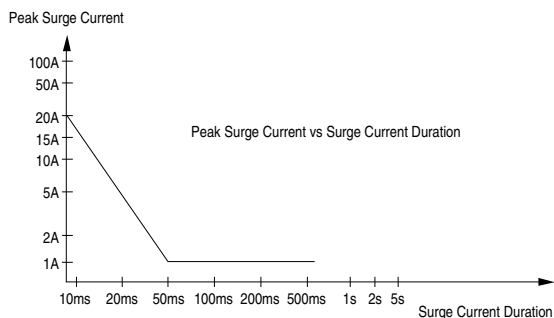


QAS SERIES DELAY ON MAKE ELECTRONIC TIMER

UL listed CSA recognized

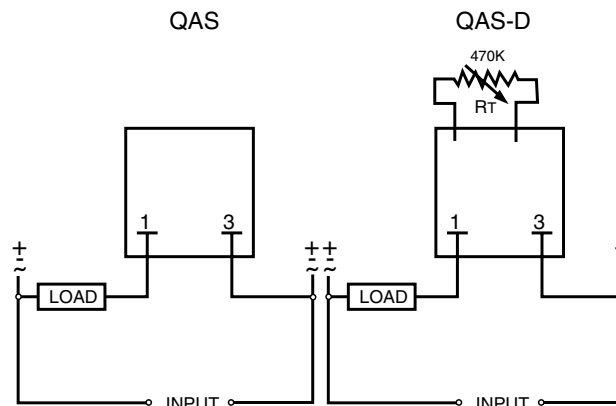
SPECIFICATIONS:

Input Power	24 VAC/DC, 110 VAC/DC 220 VAC/DC $\pm 15\%$, 50/60 Hz
Output Rating	max.: 1.0 A at 20°C min.: 10 mA
Voltage drop after timing	3.5 VAC/DC
Repetition accuracy	$\pm 0.5\%$ at a constant ambient
Temp rise derating	5 mA / °C
Reset time SAS & SAS-D	25 ms after timing 50 ms during timing
Leakage current during timing	5 mA max
Peak surge current	20 A < 10 ms
Peak surge voltage	1400 V, 10 μ s
Terminals	1/4" (6.35mm) quick connect
Operating 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:



Note: Available with internal potentiometer in AS-P Series

ORDERING INFORMATION: (100 pcs. minimum)

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

Q	AS-D	100S	220 AD	L
MOUNTING	SERIES	TIME RANGE	INPUT POWER	UL
Q = Encapsulated	AS = fixed time AS-D = remote potentiometer AS-P = internal potentiometer	AS = Fixed .1 sec - 120 min AS-D = .1 sec - 60 min. 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

Products and specifications subject to change without notice.

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QBS SERIES

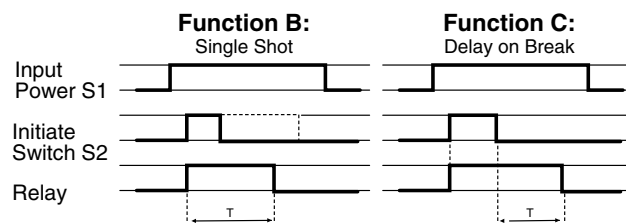
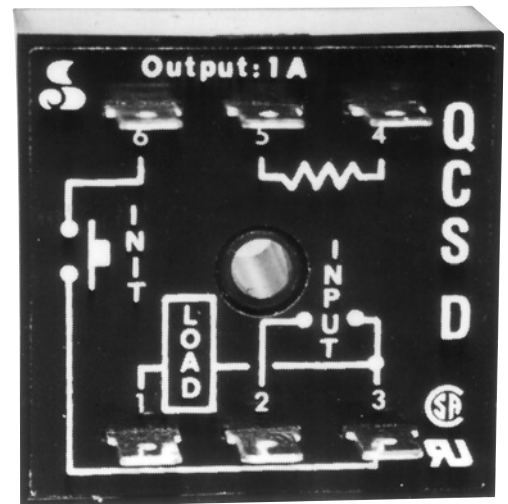
SINGLE SHOT TIMER

QCS SERIES

DELAY ON BREAK TIMER

UL listed CSA recognized

- **CMOS Technology**
- **Epoxy Encapsulated**
- **2" x 2" Compact Size**
- **.250" Quick Connect Terminals**



Function B: Input power (S1) is continuously supplied to the timer. When an external initiate switch (S2) is closed, momentarily or maintained, the output relay is energized. At the end of the delay time (T), the output is de-energized. The timer is ready for another cycle. Isolate the initiate switch (S2) from other circuits.

Function C: Input power (S1) is continuously supplied to the timer. When an external initiate switch (S2) is closed, the output relay is energized. Timing begins when the S2 switch opens. At the end of the delay time (T), the output is de-energized and the timer is ready for another cycle. Isolate the initiate switch (S2) from other circuits.

SPECIFICATIONS:

Input	24 VAC, 48 VAC, 110 VAC 220 VAC, $\pm 15\%$, 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.: 1A at 20°C min.: 10 mA
Voltage drop after timing	3.5 V max. AC
Repetition accuracy	$\pm 0.5\%$ at a constant ambient
Temp. rise derating	5 mA / °C
Reset time	80 ms
Minimum contact closure	100 ms during timing
Leakage current during timing	5 mA max.
Peak surge current	20 A < 10 ms
Peak surge voltage	1400 V, 100 μ s
Terminals	1/4" (6.35) quick connect
Operating temperature	-22°F to +140°F -30°C to +60°C
Weight	1.9 oz. (55g)

The initiate switch should be isolated from the other circuits. Contact will operate on the same supply as the timer and will have a max. load of 5 mA.

The remote potentiometer for the QCS-D and QBS-D should be 470 k Ω , 1/4 W. Use with shielded cable at a maximum length of 50 feet.

ORDERING INFORMATION: (100 pcs. minimum)

Q
MOUNTING

CS
SERIES

B
TIME RANGE

110A
INPUT POWER

L
UL

Q = Encapsulated

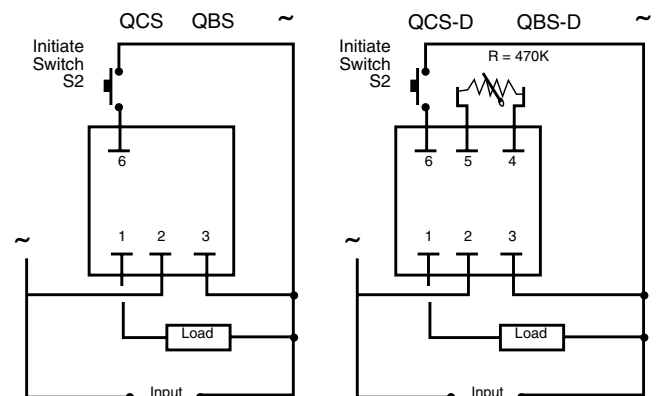
CS = Fixed time
BS = Fixed time
CS-D = Remote potentiometer
BS-D = Remote potentiometer
CS-P = Internal potentiometer
BS-P = Internal potentiometer

CS/BS = Fixed time
CS-D = .06 sec. - 120 min
BS-D = .06 sec. - 120 min. maintain 10:1 ratio
B or CSP = .1 - 10 sec. or min
1 - 100 sec. or min. maintain 100:1 ratio

24A = 24 VAC
48A = 48 VAC
110A = 110 VAC
220A = 220 VAC

1 AMP

WIRING DIAGRAM:



NOTE: Available with internal potentiometer in B or CS-P Series.

DIMENSIONS See page 4-34

Products and specifications subject to change without notice.

QDS SERIES

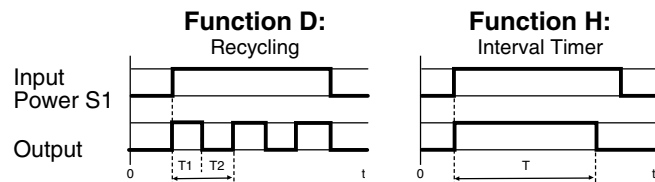
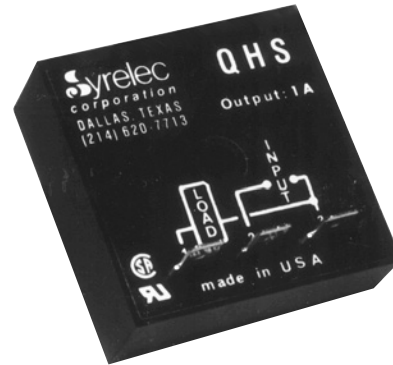
REPEAT CYCLE

QHS SERIES

INTERVAL ELECTRONIC TIMER

UL listed CSA recognized

- **Consistent Repeat Cycle**
- **Multiple Voltage**
- **2" Square Cases**
- **Fixed and Variable Time Ranges**



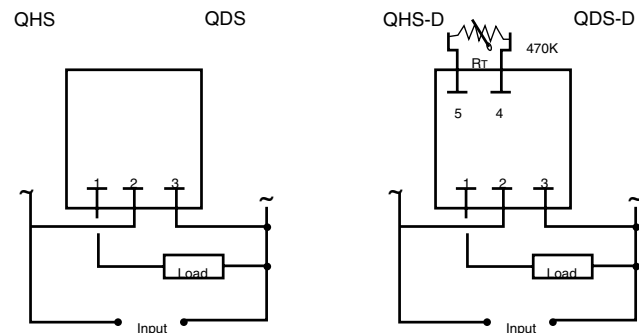
Function H: The solid state output turns on when the input power (S1) is applied. The output turns off at the end of time (T). The timer is reset when the input power is removed.

Function D: When input power (S1) is applied, the solid state output turns on immediately for the time 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, $\pm 15\%$, 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 A at 20°C min.: 10 mA
Voltage drop after timing	3.5 VAC
Repetition accuracy	$\pm 0.5\%$ at a constant ambient
Temp. rise derating	5 mA / °C
Reset time	100 ms after timing 150 ms during timing
Minimum contact closure	100 ms during timing
Leakage current during timing	2 mA max.
Peak surge current	20 A < 10 ms
Peak surge voltage	1400 V, 100 μ s
Terminals	Faston 1/4" (6.35)
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.

DIMENSIONS See page 4-34

ORDERING INFORMATION: (100 pcs. minimum)

Q MOUNTING	DS SERIES	10 min TIME RANGE	24A INPUT POWER	L UL
Q = Encapsulated	DS = Fixed time DS-D = Remote potentiometer HS = Fixed time HS-D = Remote potentiometer DS-P = Internal potentiometer HS-P = Internal potentiometer	DS/HS = Fixed .1s - 120 min. DS-D/HS-D = .1 sec - 120 min. maintaining 10:1 ratio DS-P/HS-P = .1-10 sec or min 1-100 sec. or min. maintain 100:1 ratio	24A = 24 VAC 48A = 48 VAC 110A = 110 VAC 220A = 220 VAC	1 AMP

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