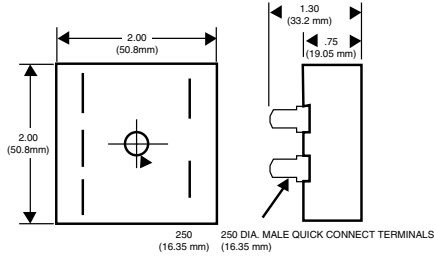


# GENERAL DETAILS OF TYPE Q TIMERS

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.



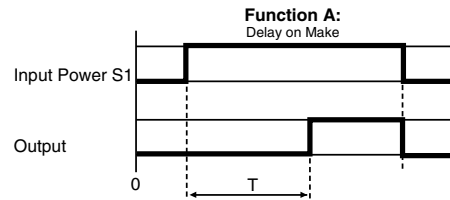
2

# QAS SERIES DELAY ON MAKE ELECTRONIC TIMER

UL listed CSA recognized

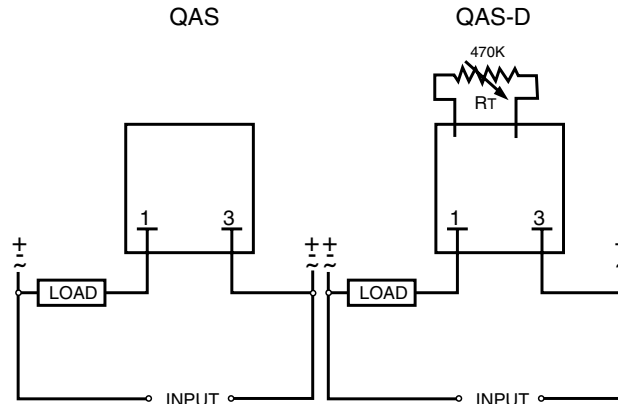
## SPECIFICATIONS:

- 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  $\mu$ 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**  
MOUNTING

**AS-D**  
SERIES

**100S**  
TIME RANGE

**220 AD**  
INPUT POWER

**L**  
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.

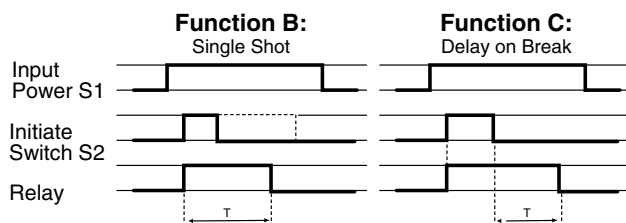
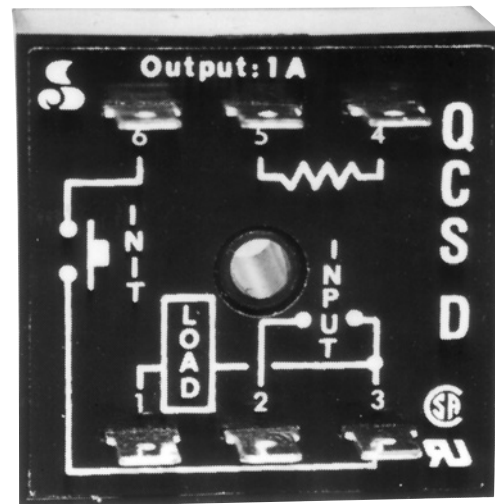
Order/Technical Support – Tel: (800) 677-5311 / FAX: (800) 677-3865 / www.crouzet-usa.com

# 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:**

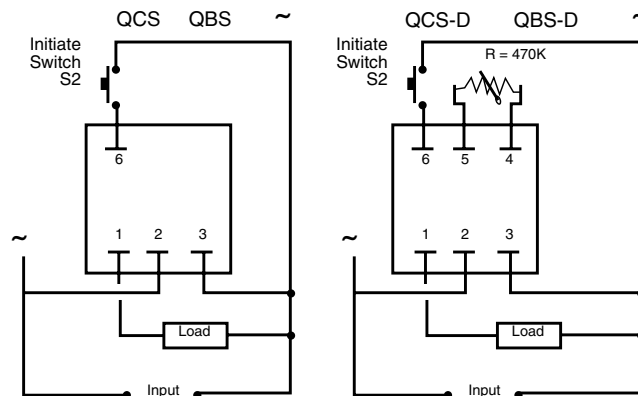
Input	24 VAC, 48 VAC, 110 VAC 220 VAC, ±15%, 50/60 Hz
Maximum power consumption	24 VAC: 0.2 VA 48 VAC: 0.3 VA 110 VAC: 0.6 VA 220 VAC: 1.2 VA
Output	SCR
Output Rating	max.: 1A at 20°C min.: 10 mA
Voltage drop after timing	3.5 V max. AC
Repetition accuracy	±0.5% at a constant ambient
Temp. rise derating	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 μs
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 kΩ, 1/4 W. Use with shielded cable at a maximum length of 50 feet.

**ORDERING INFORMATION: (100 pcs. minimum)**

**WIRING DIAGRAM:**



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

**DIMENSIONS** See page 4-34

<b>Q</b> MOUNTING	<b>CS</b> SERIES	<b>B</b> TIME RANGE	<b>110A</b> INPUT POWER	<b>L</b> 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

Products and specifications subject to change without notice.

# QDS SERIES

## REPEAT CYCLE

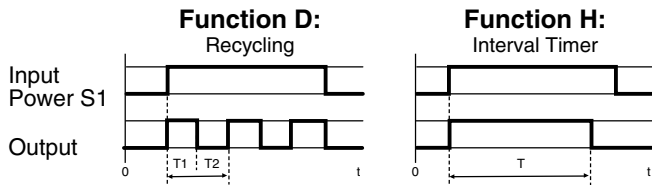
# QHS SERIES

## 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 sold 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, ±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	±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 µs
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)**

<b>Q</b> MOUNTING	<b>DS</b> SERIES	<b>10 min</b> TIME RANGE	<b>24A</b> INPUT POWER	<b>L</b> 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	<b>1 AMP</b>

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Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

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- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

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«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,  
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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