

Sequencer (Recycling) SQ Series Timing Module



10 YEAR WARRANTY

- Three or Four Channels
- Variable Delays From 0.1 s ... 100 m in Five Ranges
- Totally Solid State for Long and Reliable Life
- Encapsulated to Protect Against the Environment
- Digital Circuitry for Accuracy and Stability

Ordering Table

SQ Series	X # of Outputs	X Input	X Adjustment	X Time Delay *
	-3	-2 - 24 V AC	-1 - Fixed	-0 - 0.1 ... 10 s
	-4	-4 - 120 V AC	-2 - Adj. on Board	-1 - 1 ... 100 s
		-6 - 230 V AC	-3 - External Adjust	-2 - 10 ... 1000 s
				-3 - 0.1 ... 10 m
				-4 - 1 ... 100 m

Example P/N: SQ3421 Fixed - SQ44110S

* If Fixed Delay is selected, insert delay [0.1 ... 1000] followed by (S) sec. or [0.1 ... 100] (M) min.

Technical Data

Time Delay	
Type	Digital integrated circuitry
Range	0.1 s ... 100 m in 5 adjustable ranges or fixed
Repeat Accuracy	+/-1%
Tolerance (Factory Calibration)	+/-10%
Time Delay vs. Temperature & Voltage	≤ +/-10%
Input	
Voltage	24, 120, or 230 V AC
Tolerance	+/-20%
Line Frequency	50 ... 60 Hz
Output	
Type	Solid state
Form	SPST N.O. (three or four)
Rating	1 A steady state, 10 A inrush per output
Voltage Drop	≅ 1.5 V at 1 A
Protection	
Circuitry	Encapsulated
Dielectric Breakdown	≥ 2000 V RMS terminals to mounting surface
Insulation Resistance	≥ 100 MΩ
Mechanical	
Mounting	Surface mount with two #6 (M3.5 x 0.6) screws
Package	3.5 x 2.5 x 1.22 in. (88.9 x 63.5 x 31 mm)
Termination	0.25 in. (6.35 mm) male quick connect terminals
Environmental	
Operating Temperature	-20°C ... +60°C
Storage Temperature	-40°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≅ 5.4 oz (153 g)

Time Delay	VTP P/N
0 - 0.1 ... 10 s	VTP4C
1 - 1 ... 100 s	VTP4G
2 - 10 ... 1000 s	VTP4K
3 - 0.1 ... 10 m	VTP4N
4 - 1 ... 100 m	VTP4P

Description

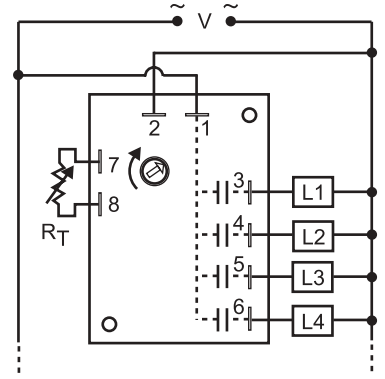
The SQ Series is available with either 3 or 4 outputs and an adjustable or fixed time delay. The time delay period is the same for each output. This makes the SQ ideal for applications like dust collection, automatic lubrication, air drying, lighting displays, merchandising displays, duty cycling, and energy management.

Operation

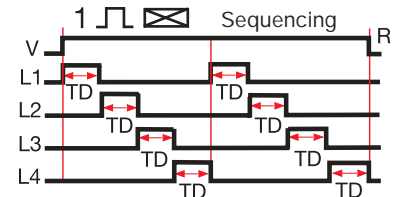
Upon application of input voltage, Load 1 energizes for the selected ON time delay. At the end of this ON time delay, Load 1 de-energizes and Load 2 immediately energizes starting another ON time delay. At the end of this ON time delay, Load 2 de-energizes and Load 3 immediately energizes. At the end of the ON time delay for Load 3 (Load 4 for 4 output devices), Load 1 re-energizes and the cycle repeats. The sequential operation continues as long as input voltage is applied.

Reset: Removing and re-applying input voltage resets the sequence to the Load 1 ON time delay.

Approvals: CE



RT is 3 megohms, when external adjustment is ordered.
SQ4 shown; for SQ3, terminal 6 & load L4 are eliminated.

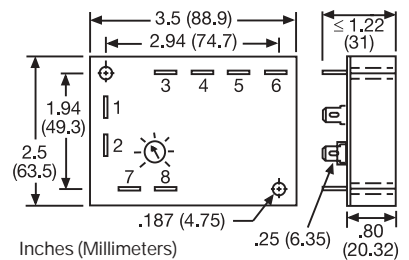


SQ4 shown; for SQ3, L4 is eliminated and L1 TD begins as soon as L3 TD is completed.

V = Voltage R = Reset TD = Time Delay
L = Load

RT Selection Chart						
Desired Time Delay*						
Seconds			Minutes		RT	
0	1	2	3	4	Megohm	
0.1	1	10	0.1	1	0.0	
1	10	100	1	10	0.3	
2	20	200	2	20	0.6	
3	30	300	3	30	0.9	
4	40	400	4	40	1.2	
5	50	500	5	50	1.5	
6	60	600	6	60	1.8	
7	70	700	7	70	2.1	
8	80	800	8	80	2.4	
9	90	900	9	90	2.7	
10	100	1000	10	100	3.0	

* When selecting an external RT add at least 20% for tolerance of unit and the RT.



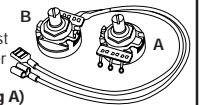
Accessories

Female quick connect



P/N: P1015 64 (AWG 14/16)

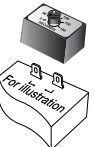
External adjust potentiometer
P/Ns: P1004 12 (fig A) P1004 12X (fig B)



Quick connect to screw adaptor
P/N: P1015 18



Plug-on adjustment module
P/N: VTP(X)(X)



Versa-knob
P/N: P0700 7



See accessory pages at the end of this section.