

# Knob Adjustable Universal Timer ASQU/ASTU MicroTime Timing Module



- 17.5 mm Package for High Rail Density
- Microprocessor Controlled with +/-1% Repeat Accuracy
- Multimode: 5 Selectable Modes of Operation
- Multirange: Knob Adjustable from 0.1 s ... 100 m
- Multivoltage: 24 ... 240 V AC or 9 ... 110 V DC
- 0.7 A Steady, 10 A Inrush Rated Solid State Output

## Description

The ASQU/ASTU Series of 17.5 mm, knob adjustable, universal solid state timers offer multiple modes, voltages, and time delay ranges. Choose one of 5 modes of operation and 4 time delay ranges via 4 selection switches located on top of the unit. Adjustment through the time range is accomplished by an onboard knob.

DOM	A <input type="checkbox"/> B <input type="checkbox"/>	R	M	S	C <input type="checkbox"/> E <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/>
SS	A <input type="checkbox"/> B <input type="checkbox"/>	0.1...10s	X1s		C <input type="checkbox"/> E <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/>
R	A <input type="checkbox"/> B <input type="checkbox"/>	1...100s	X10s		C <input type="checkbox"/> E <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/>
DOB	A <input type="checkbox"/> B <input type="checkbox"/>	10...1000s	X100s		C <input type="checkbox"/> E <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/>
		1...100m	X10m		C <input type="checkbox"/> E <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/>

DOM = Delay On Make      R = Range  
 SS = Single Shot/Interval      M = Multiplier  
 R = Recycling      S = Setting  
 DOB = Delay On Break

Approvals:

## Ordering Table

<b>X</b> Series	<b>X</b> Input	<b>X</b> Base Adaptors
- ASQU - Quick Connects - ASTU - Terminal Blocks	- A - Universal AC Voltage (24 ... 240 V AC) - D - Universal DC Voltage (9 ... 110 V DC)	- 3 - Both - Surface & DIN Rail Adaptors, with Quick Mount Fasteners

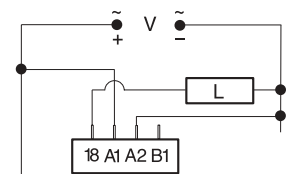
Example P/N: **ASQUA1**

## Technical Data

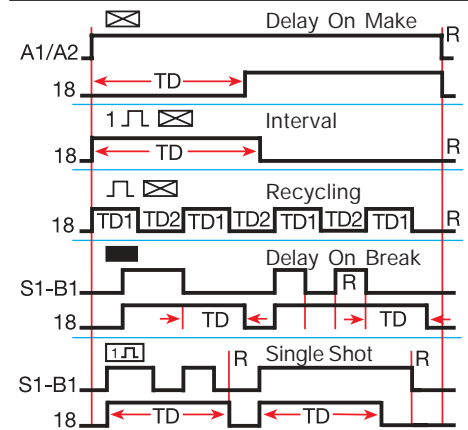
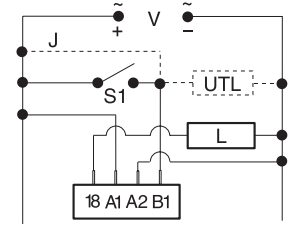
<b>Time Delay</b>	
Type	Microcontroller based with ceramic resonator and watchdog circuitry
Adjustment and Range*	Knob with dial; 2 switches select 1 of 4 multipliers x1s = 0.1 ... 10 s; x10s = 1 ... 100 s x100s = 10 ... 1000 s; x10m = 1 ... 100 m
Repeat Accuracy	+/-1%, or +/-50 ms, whichever is greater
Tolerance (Factory Calibration)	+/-2%, or +/-50 ms, whichever is greater
Recycle Time	≤300 ms
Initiate Time	Single Shot & Delay on Break: ≤32 ms
Time Delay vs. Temperature & Voltage	+/-2%, or +/-50 ms, whichever is greater
<b>Input</b>	
Voltage	AC: 24 ... 240 V AC; -20%, +10% DC: 9 ... 110 V DC; -0%, +20% @ -25°C 9.4 ... 110 V DC; -0%, +20% @ -40°C
AC Line Frequency	50 ... 60 Hz
<b>Output</b>	
Type	Solid state
Form	Normally Open
Rating	0.7 A steady state, 10 A inrush
Voltage Drop	AC: ≅ 2.5 V at 0.7 A DC: ≅ 1.5 V at 0.7 A
<b>Protection</b>	
Surge	IEEE C62.41-1991 Level A
Circuitry	Encapsulated
Dielectric Breakdown	≥ 2000 V RMS terminals to mounting surface
Polarity	DC units are reverse polarity protected
<b>Mechanical</b>	
Mounting	Two base adaptors are available
DIN Rail	Snap on to 32 mm DIN 1 & 35 mm DIN 3 rail
Surface	2 #6 (M3.5 x 0.6) screws or quick mount fasteners
Termination	
ASQU	0.25 in. (6.35 mm) male quick connect terminals
ASTU	0.197 in. (5 mm) push-on terminal blocks for up to #14 AWG (2.5 mm <sup>2</sup> ) wire
<b>Environmental</b>	
Operating Temperature	-40°C ... +60°C
Storage Temperature	-40°C ... +85°C
Humidity	95% relative, non-condensing
Weight	≅ 4 oz (113 g)

\*For CE approved applications, power must be removed from the unit when a switch position is changed.

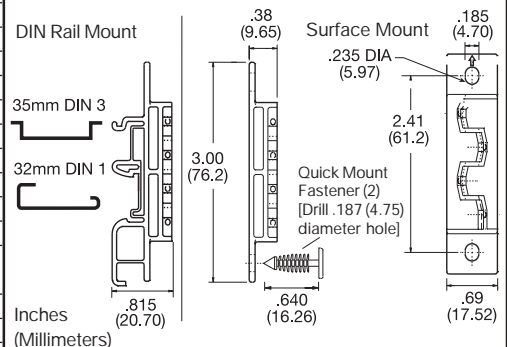
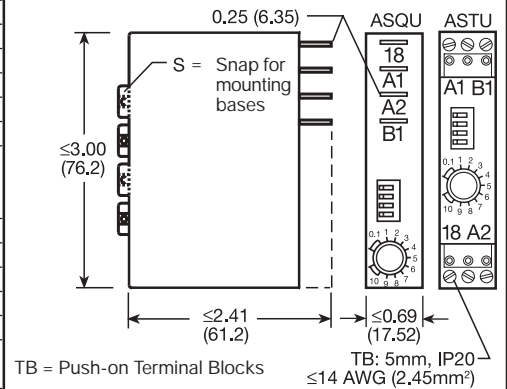
## Delay on Make & Recycling



## Single Shot, Interval & Delay on Break

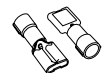


V = Voltage L = Load R = Reset  
 J = Wire Required for Interval Operation  
 S1 = Initiate Switch TD = Time Delay  
 UTL = Optional Untimed Load



## Accessories

Female quick connect P/Ns:  
 P1015-13 (AWG 10/12)  
 P1015-64 (AWG 14/16)  
 P1015-14 (AWG 18/22)



See accessory pages at the end of this section.