

# Switch Adjustable Universal Timer DSQU/DSTU MicroTime Timing Module

4



10 YEAR WARRANTY

- 17.5 mm Package for High Rail Density
- Microprocessor Controlled with +/-0.1% Timing Accuracy
- Multimode: 5 Selectable Functions
- Multirange: Switch Adjust from 0.1 s ... 63 m
- Multivoltage: 24 ... 240 V AC or 9 ... 110 V DC
- 0.7 A Steady, 10 A Inrush Rated Solid State Output

Approvals:

## Accessories



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

See accessory pages for specifications.

## Description

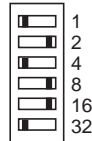
The DSQU/DSTU Series of 17.5 mm, switch adjustable, universal solid state timers offer multiple functions, voltages, and time delay ranges. Choose one of 5 functions and 4 time delay ranges via 4 selection switches located on top of the unit. Six switches adjust the time delay through the selected range.

## Adjustment

DOM	A <input type="checkbox"/> B <input type="checkbox"/>
SS	A <input type="checkbox"/> B <input type="checkbox"/>
R	A <input type="checkbox"/> B <input type="checkbox"/>
DOB	A <input type="checkbox"/> B <input type="checkbox"/>

R	M	S	I
0.1 ... 6.3s	X0.1s	C <input type="checkbox"/> E <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/>	0.1s
1 ... 63s	X1s	C <input type="checkbox"/> E <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/>	1s
10 ... 630s	X10s	C <input type="checkbox"/> E <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/>	10s
1 ... 63m	X1m	C <input type="checkbox"/> E <input type="checkbox"/> D <input type="checkbox"/> F <input type="checkbox"/>	1m

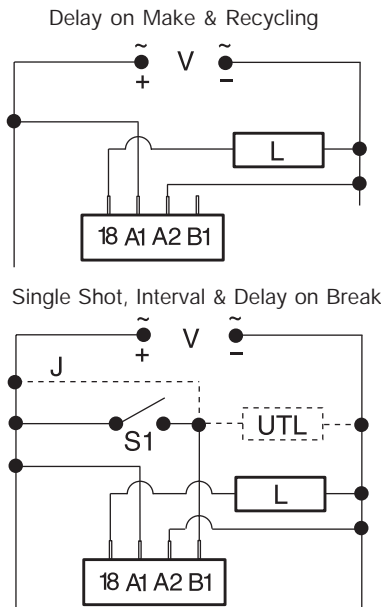
Time Delay Adjustment



Add switches in ON Position  
TD = 2+8+16=26

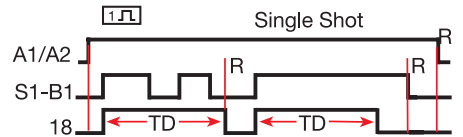
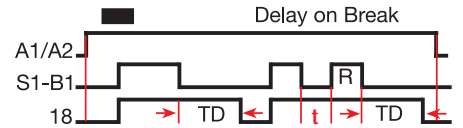
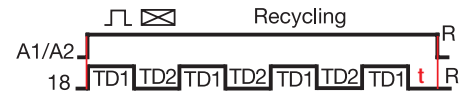
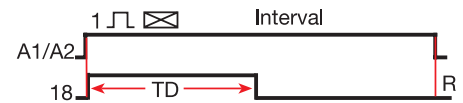
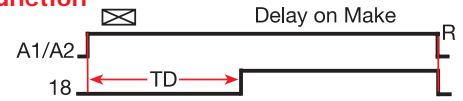
DOM = Delay On Make R = Range  
SS = Single Shot/Interval M = Multiplier  
R = Recycling S = Setting  
DOB = Delay On Break I = Increments of Time

## Connection



V = Voltage L = Load J = Wire Required for Interval Operation  
S1 = Initiate Switch UTL = Optional Untimed Load

## Function



R = Reset TD = Time Delay  
t = Incomplete Time Delay  
TD1 = TD2

For Function Descriptions, See Timer Function Section

## Ordering Table

X Series	X Input
DSQU - Quick Connects	A - Universal AC Voltage (24 ... 240 V AC)
DSTU - Terminal Blocks	D - Universal DC Voltage (9 ... 110 V DC)

X Base Adaptors
3 - Both - Surface & DIN Rail Adaptors, with Quick Mount Fasteners

Example P/N: DSQUA3, DSTUD3

# Switch Adjustable Universal Timer

## DSQU/DSTU MicroTime

### Timing Module

#### Technical Data

<b>Time Delay</b> Type Adjustment and Range*	Microcontroller based with ceramic resonator and watchdog circuitry 6 switches adjust the time delay; 2 switches select 1 of 4 multipliers; x0.1s = 0.1 ... 6.3 s in 0.1 s increments x1s = 1 ... 63 s in 1 s increments x10s = 10 ... 630 s in 10 s increments x1m = 1 ... 63 m in 1 m increments +/-0.1% or +/-20 ms, whichever is greater +/-2% or +/-50 ms, whichever is greater ≤ 300 ms Single Shot & Delay on Break: ≤ 32 ms +/-2% or +/-50 ms, whichever is greater
Repeat Accuracy Setting Accuracy Reset Time Initiate Time Time Delay vs. Temp. & Voltage	
<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 DC Ripple	50 ... 60 Hz ≤ 10%
<b>Output</b> Type Form Rating Voltage Drop	Solid state Normally Open 0.7 A steady state, 10 A inrush AC: ≅ 2.5 V at 0.7 A; DC: ≅ 1.5 V at 0.7 A
<b>Protection</b> Surge Circuitry Dielectric Breakdown Polarity	IEEE C62.41-1991 Level A Encapsulated ≥ 2000 V RMS terminals to mounting surface DC units are reverse polarity protected
<b>Mechanical</b> Mounting DIN Rail Surface Termination DSQU DSTU	Two base adaptors are available Snap on to 32 mm DIN 1 & 35 mm DIN 3 rail Two #6 (M3.5 x 0.6) screws or quick mount fasteners 0.25 in. (6.35 mm) male quick connect terminals 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 Storage Temperature Humidity Weight	-40°C ... +60°C -40°C ... +85°C 95% relative, non-condensing ≅ 4.2 oz (119 g)

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

#### Mechanical View

