DSQU / DSTU SERIES

CE UL CSA

Description

The DSQU and 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 face of the unit. Six switches adjust the time delay through the selected range.

The DSQU Series has quick connect terminals and the DSTU Series has terminal blocks.

Features & Benefits

FEATURES	BENEFITS
Universal AC or DC voltage	Choose from 24 to 240VAC or 9 to 110VDC models
Compact 17.5mm size	Allows for high rail density
Microcontroller based	Repeat Accuracy + / -1%
Multifunction: 5 timing functions	Reduce stocking requirements
Knob Adjustable Time Delay	Field adjustable delay ranging from 0.1s - 100m
0.7A steady, 10A inrush solid-state output	Provides 100 million operations in typical conditions.
Mounting fasteners included	Each unit ships with both surface and DIN rail quick mount adapters
Watchdog circuitry	Self monitoring and self correcting for improved performance

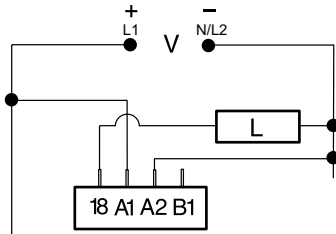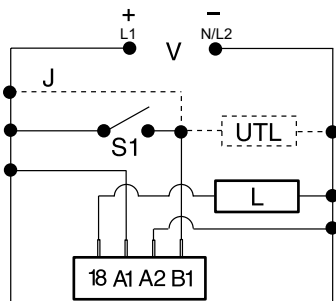## Wiring & Adjustment Diagrams

DELAY-ON-MAKE & RECYCLING

SINGLE SHOT, INTERVAL & DELAY-ON-BREAK

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

ADJUSTMENTS

DOM	A ▮☐ B ▮☐
SS	A ☐▮ B ▮☐
R	A ☐▮ B ☐▮
DOB	A ▮☐ B ☐▮

DOM = Delay-on-Make
SS = Single Shot/Interval
R = Recycling
DOB = Delay-on-Break

R	M	S	I
0.1-6.3s	X0.1s	C ☐▮☐ E D ☐▮ F	0.1s
1-63s	X1s	C ☐▮☐ E D ☐▮ F	1s
10-630s	X10s	C ☐▮☐ E D ☐▮ F	10s
1-63m	X1m	C ☐▮☐ E D ☐▮ F	1m

R = Range
M = Multiplier
S = Setting
I = Increments of time

→ ON

▮☐	1
☐▮	2
▮☐	4
▮☐	8
☐▮	16
▮☐	32

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

Accessories

P1015-13 (AWG 10/12), **P1015-64** (AWG 14/16), **P1015-14** (AWG 18/22) **Female Quick Connect** These 0.25 in. (6.35 mm) female terminals are constructed with an insulator barrel to provide strain relief.

P0500-178 Surface Mount Adapter
P0500-179 DIN Rail Mount Adapter
For use with the ASxx/DSxx Series timers.

Ordering Information

MODEL	INPUT VOLTAGE	CONNECTION
DSQUA3	24 - 240VAC	Quick Connects
DSQUD3	9 - 110VDC	Quick Connects
DSTUA3	24 - 240VAC	Terminal Blocks
DSTUD3	9 - 110VDC	Terminal Blocks

If you don't find the part you need, call us for a custom product 800-843-8848

DSQU / DSTU SERIES

Specifications

Time Delay

Type	Microcontroller based with ceramic resonator and watchdog circuitry
Adjustment	6 switches adjust the time delay; 2 switches select 1 of 4 multipliers
Range*	x0.1s = 0.1 - 6.3s in 0.1s increments
	x1s = 1 - 63s in 1s increments
	x10s = 10 - 630s in 10s increments
	x1m = 1 - 63m in 1m increments
Repeat Accuracy	±0.1% or ±20ms, whichever is greater
Setting Accuracy	±2% or ±50ms, whichever is greater
Reset Time	≤ 300ms
Initiate Time	Single Shot & Delay-on-Break: ≤ 32ms
Time Delay vs Temp. & Voltage	±2% or ±50ms, whichever is greater

Input

Voltage	AC: 24 to 240VAC; -20% - 10%
	DC: 9 to 110VDC; -0% - 20% @ -25°C
	9.4 to 110VDC; -0% - 20% @ -40°C
AC Line Frequency/DC Ripple	50/60Hz / ≤ 10%

Output

Type	Solid state
Form	NO
Rating	0.7A steady state, 10A inrush
Voltage Drop	AC ≅ 2.5V @ 0.7A; DC ≅ 1.5V @ 0.7A

Protection

Surge	IEEE C62.41-1991 Level A
Circuitry	Encapsulated
Dielectric Breakdown	≥ 2000V RMS terminals to mounting surface
Polarity	DC units are reverse polarity protected

Mechanical

Mounting	Two base adaptors are available
DIN Rail	Snap on to 32 mm DIN 1 & 35 mm DIN 3 rail
Surface	Two #6 (M3.5 x 0.6) screws or quick mount fasteners
Dimensions	**H** 76.2 mm (3.0"); **W** 17.52 mm (0.69"); **D** 61.2 mm (2.41")
Termination	
DSQU	0.25 in. (6.35 mm) male quick connect terminals
DSTU	0.197 in. (5 mm) push-on terminal blocks for up to #14 AWG (2.5 mm^2) wire

Environmental

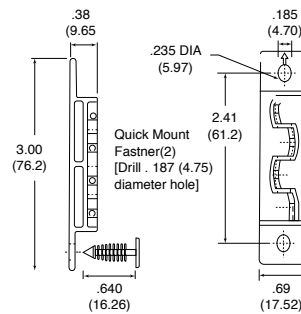|	
Operating/Storage Temperature	-40° to 60°C / -40° to 85°C
Humidity	95% relative, non-condensing
Weight	≅ 4.2 oz (119 g)

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

Mounting Diagrams

P0500-178
SURFACE MOUNT
Inches (Millimeters)

.38 (9.65)
.185 (4.70)
.235 DIA (5.97)
2.41 (61.2)
3.00 (76.2)
Quick Mount Fastner(2) [Drill .187 (4.75) diameter hole]
.640 (16.26)
.69 (17.52)

P0500-179
DIN RAIL MOUNT
Inches (Millimeters)

35mm DIN 3
32MM DIN 1
.815 (20.70)