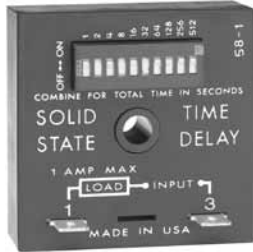


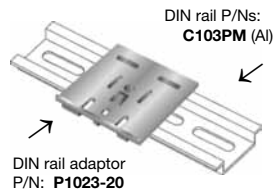
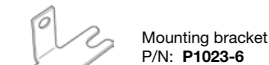
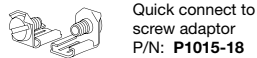
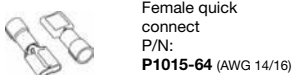
Delay On Make TDU, KSDU Digi-Set Timing Modules



- 2 Universal Voltage Ranges
From 24 ... 240 V AC/DC
- Digital Integrated Circuitry
- Switch Selectable Delays
From 0.1 s ... 2.8 h in 3
Ranges or Factory Fixed
- +/-0.5% Repeat Accuracy
- 1 A Steady - 10 A Inrush
- Totally Solid State and
Encapsulated

Approvals:

Accessories



See accessory pages for specifications.

Description

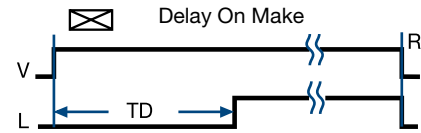
The TDU and KSDU Series are encapsulated solid state delay on make timers that combine digital timing circuitry with universal voltage operation. The TDU offers DIP switch adjustment allowing accurate selection of the time delay over the full time delay range. The KSDU is factory fixed from 0.1 s to 10,230 s and does not include the DIP switch. These series are excellent choices for process control systems and OEM equipment.

Operation

Upon application of input voltage, the time delay begins. The output is de-energized before and during the time delay. At the end of the time delay, the output energizes and remains energized until input voltage is removed.

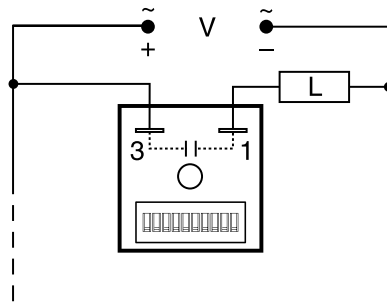
Reset: Removing input voltage resets the time delay and output.

Function



V = Voltage R = Reset TD = Time Delay
L = Load — = Undefined time

Connection



Dashed lines are internal connections.
Load may be connected to terminal 3 or 1.
TDU has DIP switch adjustment; KSDU is fixed.

Available Models-

- | | | |
|------------|------------|------------|
| •TDU3000A | •TDU3001A | •TDUH3000A |
| •TDUH3001A | •TDUL3000A | •TDUL3001A |
| KSDU8110 | KSDU8120 | KSDU81360 |
| KSDU815 | KSDU8160 | KSDU818.5 |
| KSDU915 | | |

Don't see what you need? Call us for a minimum quantity and price quote!

Ordering Table

TDU Series	Input Voltage Range	Time Range - Seconds	Part Number
	24 ... 120 AC/DC	0.1 ... 102.3	TDUL3000A
	100 ... 240 AC/DC	0.1 ... 102.3	TDUL3001A
	24 ... 120 AC/DC	1 ... 1023	TDU3000A
	100 ... 240 AC/DC	1 ... 1023	TDU3001A
	24 ... 120 AC/DC	10 ... 10230	TDUH3000A
	100 ... 240 AC/DC	10 ... 10230	TDUH3001A

KSDU Series	Input Voltage Range	Type	Time Delay (Seconds)
	8 - 24 ... 120 V AC/DC	1 - Fixed	Specify fixed delay in seconds 0.1 ... 10230
	9 - 100 ... 240 V AC/DC		

Example P/N: **KSDU81300, KSDU910.1**

Delay On Make

TDU, KSDU Digi-Set

Timing Modules

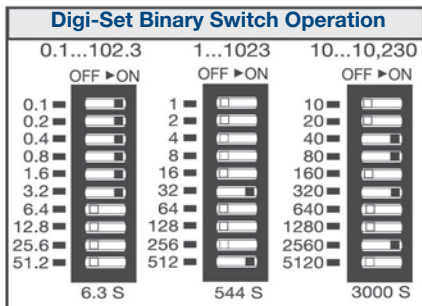
Dedicated
timers

Technical Data

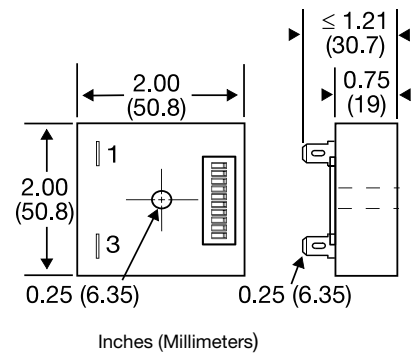
Time Delay		Digital integrated circuitry 0.1 ... 102.3 s in 0.1 s increments 1 ... 1023 s in 1 s increments 10 ... 10230 s in 10 s increments Fixed from 0.1 s ... 10,230 s +/-0.5% or 20 ms, whichever is greater +/-10% ≤ 150 ms +/-5%	* For CE approved applications, power must be removed from the unit when a switch position is changed.
Type	Adjustable (TDU)		
Range*	Fixed (KSDU)		
Repeat Accuracy			
Tolerance (Factory Calibration)			
Recycle Time			
Time Delay vs. Temperature & Voltage			
Input			
Voltage	24 ... 120 V AC/DC 100 ... 240 V AC/DC		
Line Frequency	50 ... 60 Hz		
Tolerance	+/-20%		
Output			
Type	Solid state		
Form	Normally Open, open during timing		
Maximum Load Current	1 A steady state, 10 A inrush at 60°C		
Minimum Holding Current	40 mA		
Voltage Drop	≅ 2.5 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 one #10 (M5 x 0.8) screw		
Package	2 x 2 x 1.21 in. (50.8 x 50.8 x 30.7 mm)		
Termination	0.25 in. (6.35 mm) male quick connect terminals		
Environmental			
Operating Temperature	-40°C ... +60°C		
Storage Temperature	-40°C ... +85°C		
Humidity	95% relative, non-condensing		
Weight	≅ 2.4 oz (68 g)		

5

TDU Adjustment



Mechanical View



Adjustment Switches Shown Not Included on KSDU Series.