DELAY-ON-BREAK TIMING RELAYS

KRDB, KSDB, TDUB SERIES

DESCRIPTION

The **KRDB Series** is a compact time delay relay measuring only 2 in. (50.8 mm) square. Its microcontroller timing circuit provides excellent repeat accuracy and stability. The **KSDB Series** is designed for general purpose commercial and industrial applications where a small, cost effective, reliable solid-state timer is required. This series is designed for popular AC and DC voltage. The **TDUB Series** combines digital timing circuitry with universal voltage operation and offers DIP switch selectable time delays ranging from 0.1 seconds to 102.3 minutes in three ranges.

KRDB421

KSDB421

TDUB3000A

FEATURES

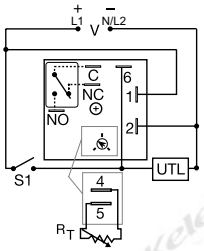
- ***Onboard adjustment knob***
- ***1A solid state or Isolated 10A output***
- ***Compact 2" x 2" sizing***
- ***Wide voltage and timing ranges***

COMMON SPECIFICATIONS

Operating Temperature	-40° to 140°F (-40° to 60°C)	**Mounting**	Surface mount with one #10 screw
Storage Temperature		**Dimensions**	2"W x 2"H x 1.21"D
KRDB/TDUB	-40° to 185°F (-40° to 85°C)		(5.08 x 5.08 x 3.07 cm)
KSDB	-40° to 176°F (-40° to 80°C)	**Approvals**	CE, CSA, UR File #E57310
Operating Humidity	95% RH non-condensing	**Warranty**	10 years

WIRING

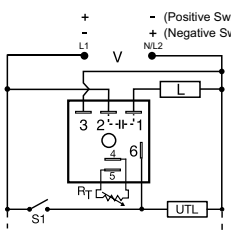
KRDB421 Series



V = Voltage
S1 = Initiate Switch
C = Common, Transfer Contact
NO = Normally Open
NC = Normally Closed
UTL = Untimed Load (optional)

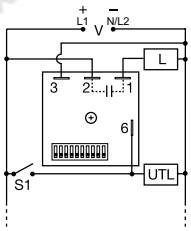
A knob is supplied for adjustable units. The untimed load is optional. Relay contacts are isolated.

KSDB Series



UTL = Optional Untimed Load
L = Load
S1 = Initiate Switch
R_T is used when external adjustment is ordered.

TDUB3000A



UTL = Optional Untimed Load
S1 = Initiate Switch
L = Timed Load

INDIVIDUAL SPECIFICATIONS

	KRDB Series	KSDB Series	TDUB Series
Supply Voltage	12 or 24 VDC; 24 or 120 VAC	12 or 24 VDC; 24 or 120 VAC	24 to 120 VAC, 100 to 240 VAC, 12 to 24 VDC
Output Type	Isolated Relay Contacts	Solid State	Solid State
Output Form	SPDT	NO, closed before & during timing	NO, closed before & during timing
Output Rating	10A resistive @ 125VAC; 5A resistive @ 28VDC; 1/4 hp @ 125VAC (@ 40°C)	1A steady state, 10A inrush @ 60°C	1A steady state, 10A inrush @ 60°C
Timing Range	0.1s-1000m in 6 adjustable ranges	0.1s-1000m in 6 adjustable ranges	1-1023s in 1s increments
Repeat Accuracy	±0.5% or 20ms, whichever is greater	±0.5% or 20ms, whichever is greater	±0.5% or 20ms, whichever is greater
Timing Tolerance	≤ ±5%	≤ ±5%	≤ ±5%
Reset Time	≤ 150ms	≤ 150ms	≤ 150ms
Circuitry Protection	Encapsulated	Encapsulated	Encapsulated
Isolation Voltage	≥1500V RMS input to output	≥2000V RMS terminals to mounting surface	≥2000V RMS terminals to mounting surface
Insulation Resistance	≥100 MΩ	≥100 MΩ	≥100 MΩ
Termination	0.25 in (6.35mm) Male quick connect terminals	0.25 in (6.35mm) Male quick connect terminals	0.25 in (6.35mm) Male quick connect terminals
Weight	0.16lb (0.08Kg)	0.15lb (0.07Kg)	0.15lb (0.07Kg)

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ORDERING INFORMATION

MODEL	DESCRIPTION
KRDB	Compact delay on break timer
KSDB	General purpose delay on break timer
TDUB	Universal voltage and DIP switch selectable delay on break timer

INPUT VOLTAGE RANGE	
1	12 VDC (K Series only)
2	24 VAC (K Series only)
3	24 VDC (K Series only)
4	120 VAC (K Series only)
3000	24 to 120 VAC (TDUB series only)
3001	100 to 240 VAC (TDUB series only)
3002	12 to 24 VDC (TDUB series only)

ADJUSTMENT	
2	Onboard adjustment knob (K series only)
blank	Leave blank for T Series

TIME DELAY/RANGE	
0	.1 to 10 seconds (K series only)
1	1 to 100 seconds (K series only)
2	10 to 1000 seconds (K series only)
3	.1 to 10 minutes (K series only)
4	1 to 100 minutes (K series only)
5	10 to 1000 minutes (K series only)
A	1 to 1023 seconds (TDUB series only)

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Example: KRDB421
Compact delay on break timer relay, 24 VAC, w/adjustment knob for 1 to 100 seconds