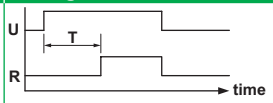
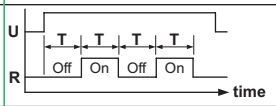
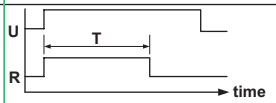
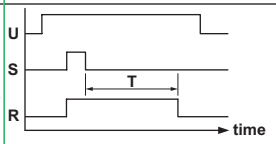
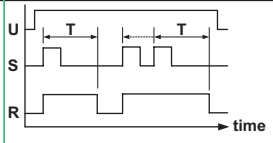
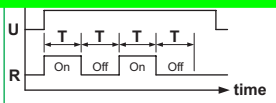
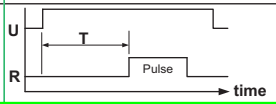
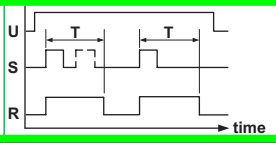
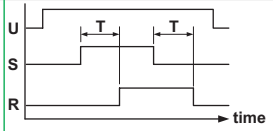
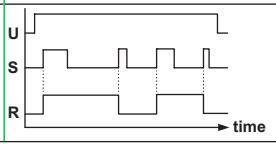
Time Delay Relay Functions

Function	Description	Timing Chart	Relays
On-Delay (A)	When the input voltage U is applied, time delay T begins. Relay contact(s) R change state after the time delay is complete. Contacts R return to their shelf state when input voltage U is removed. A trigger switch is not used in this function.		821, 822, TDR782, TDRPRO-5100, TDRPRO-5101, TDRPRO-5102, 831, 841
Repeat Cycle: Starting Open (B)	When input voltage U is applied, time delay T begins. When time delay T is complete, relay contact(s) R change state for time delay T. This cycle repeats until input voltage U is removed. A trigger switch is not used in this function.		821, 822, TDRPRO-5100, TDRPRO-5101, TDRPRO-5102
Interval (C)	When input voltage U is applied, relay contact(s) R change state immediately and the timing cycle begins. When time delay T is complete, contacts return to shelf state. When input voltage U is removed, contacts also return to their shelf state. A trigger switch is not used in this function.		821, 822, TDRPRO-5100, TDRPRO-5101, TDRPRO-5102
Off-Delay, with Switch Trigger (D)	Input voltage U must be applied continuously. When trigger switch S is closed, relay contacts R change state. When trigger switch S is opened, delay T begins. When delay T is complete, contacts R return to their shelf state. If trigger switch S is closed before time delay T is complete, then time is reset. When trigger switch S is opened, the delay begins again, and relay contacts R remain in their energized state. If input voltage U is removed, then relay contacts R return to their shelf state.		821, 822, TDRPRO-5100, TDRPRO-5101, TDRPRO-5102
Retriggerable One-Shot with Switch Trigger (E)	Upon application of input voltage U, the relay is ready to accept trigger signal S. Upon application of trigger signal S, relay contacts R transfer, and preset time T begins. At the end of preset time T, relay contacts R return to their normal condition—unless trigger switch S is opened and closed before before preset time T elapses. Continuous cycling of trigger switch S at a rate faster than preset time T causes relay contacts R to remain closed. If input voltage U is removed, relay contacts R return to their shelf state.		821, 822, TDRPRO-5100, TDRPRO-5101, TDRPRO-5102
Repeat Cycle: Starting Closed (F)	When input voltage U is applied, relay contacts R change state immediately and time delay T begins. When time delay T is complete, contacts return to their shelf state for time delay T. This cycle repeats until input voltage U is removed. A trigger switch is not used in this function.		821, 822, TDRPRO-5100, TDRPRO-5101
Pulse Generator (G)	Upon application of input voltage U, a single output pulse of 0.5 s is delivered to the relay after time delay T. Power must be removed and reapplied to repeat the pulse. A trigger switch is not used in this function.		821, 822, TDRPRO-5100, TDRPRO-5101
One-Shot with Switch Trigger (H)	Upon application of input voltage U, the relay is ready to accept trigger signal S. Upon application of trigger signal S, relay contacts R transfer, and preset time T begins. During time-out, trigger signal S is ignored. The relay is reset by applying trigger switch S when the relay is not energized.		821, 822, TDRPRO-5100, TDRPRO-5101
On- and Off-Delay with Switch Trigger (I)	Input voltage U must be applied continuously. When trigger switch S is closed, time delay T begins. When time delay T is complete, relay contacts R change state and remain transferred until trigger switch S is opened. If input voltage U is removed, relay contacts R return to their shelf state.		821, 822, TDRPRO-5100, TDRPRO-5101
Memory Latch with Switch Trigger (J)	Input voltage U must be applied continuously. The output changes state with every closure of trigger switch S. If input voltage U is removed, relay contacts R return to their shelf state.		821, 822, TDRPRO-5100, TDRPRO-5101

Note: G = Gate. R = Relay contacts or outputs. S = Switch trigger. Y1 = Control contact. T = Time delay setting. U = Input voltage (power supply).