

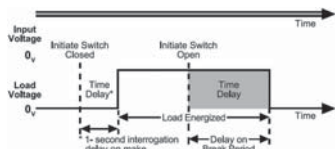
## TIME DELAY RELAYS



### Time Delay Relay – Off Delay on Break (Post Purge Timer)



Power must be applied before and during the time delay period. When the initiate contact closes, the load energizes and remains energized as long as the initiate contact is closed. The time delay begins when the initiate contact opens. At the end of the time delay period, the load is turned off. If the initiate contact recloses during the time delay period, the load remains energized and the time delay is reset to zero. Removal of input power during the delay turns off the load and resets the time delay to zero. A one second interrogation delay is provided to avoid nuisance trips. Common applications include control of the blower at the end of heating/cooling cycles to purge ducts of residual conditioned air.



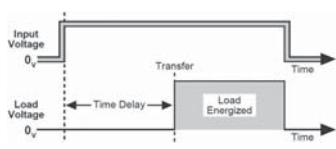
PART NO	TIME DELAY ADJUSTMENT	BREAK TIME DELAY (SECONDS)	BREAK TIME DELAY (MINUTES)	VOLTAGE RATING (VAC)	CURRENT RATING STEADY STATE (A)	ELECTRICAL CONNECTIONS
47-23433-02	Fixed	60	1.0	18-30	1	1/4 in. Quick Connects
47-ICM253	Variable	12 - 390	0.2 - 6.5	18-30	1	1/4 in. Quick Connects



### Time Delay Relays – On Delay on Make (Staging)



When power is applied to the input, the time delay begins. After the time delay is complete, the load energizes. Common applications include staggering multiple motor loads to reduce power surges.



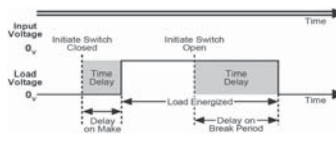
PART NO	TIME DELAY ADJUSTMENT	BREAK TIME DELAY (SECONDS)	BREAK TIME DELAY (MINUTES)	VOLTAGE RATING (VAC)	CURRENT RATING STEADY STATE (A)	ELECTRICAL CONNECTIONS
47-22288-04	Fixed	1200	20	18-30	1.0	1/4 in. Quick Connects
42-22906-01	Fixed	30	0.5	18-30	1.5	1/4 in. Quick Connects
42-ICM102FB	Variable	1.5 - 600	0.03 - 10	18-230	1.5	Stripped Wire Leads
42-ICM102	Variable	1.5 - 600	0.03 - 10	18-230	1.5	1/4 in. Quick Connects



### Time Delay Relay – On Delay on Make/Off Delay on Break (Pre/Post Purge Timers)



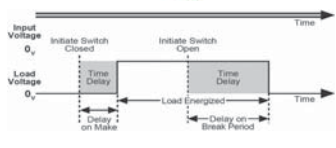
Power must be applied before and during the time delay period. When the initiate contact closes, the delay on make period begins. The load then energizes and remains energized as long as the initiate contact is closed. The delay on break period begins when the initiate contact opens. At the end of the time delay, the load is turned off. If the initiate contact recloses during the time delay, the load remains energized and the time delay is reset to zero. Removal of input power during the delay turns off the load and resets the time delay to zero. Common applications include control of the blower during heating/cooling cycles to let air reach proper temperature before turning on the blower, and to purge ducts of residual condition air.



PART NO	TIME DELAY ADJUSTMENT	MAKE TIME DELAY (SECONDS)	BREAK TIME DELAY (SECONDS)	MAKE TIME DELAY (MINUTES)	BREAK TIME DELAY (MINUTES)	VOLTAGE RATING (VAC)	CURRENT RATING STEADY STATE (A)	ELECTRICAL CONNECTIONS
42-41870-82	Fixed	50	100	0.83	1.67	18-30	1	1/4 in. Quick Connects
42-ICM254	Variable	1 - 180	12 - 390	0.02 - 3	0.2 - 6.5	18-30	1	1/4 in. Quick Connects



### Time Delay Relay – On Delay on Make/Off Delay on Break (Pre/Post Purge Timer) – Board Mount



PART NO	TIME DELAY ADJUSTMENT	MAKE TIME DELAY (SECONDS)	BREAK TIME DELAY (SECONDS)	MAKE TIME DELAY (MINUTES)	BREAK TIME DELAY (MINUTES)	VOLTAGE RATING (VAC)	CURRENT RATING STEADY STATE (A)	ELECTRICAL CONNECTIONS
42-ICM255	Fixed	60	60	1	1	18-230	20	1/4 in. Quick Connects



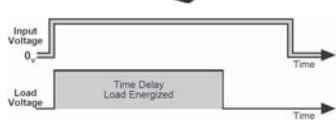
### Time Delay Relay – Bypass Timer



- Designed to bypass a control or device during startup; typically used to bypass a low pressure switch during compressor heat pump startup or to bypass an oil pressure switch upon startup
- With power applied to the input, the load energized immediately and remains energized

for the length of the time delay, regardless of the state of the switch being bypassed

- Helps eliminate nuisance lockouts
- At the end of the time delay, the condition of the load is determined by the state of the switch



PART NO	TIME DELAY ADJUSTMENT	BYPASS TIME DELAY (SECONDS)	BYPASS TIME DELAY (MINUTES)	VOLTAGE RATING (VAC)	CURRENT RATING STEADY STATE (A)	ELECTRICAL CONNECTIONS
42-ICM175	Variable	10 - 1000	0.17 - 16.6	18-230	1	1/4 in. Quick Connects