

Recycling: (ProgramaCube®Functions RE, RD, RXE, RXD)  
(Flasher, Pulse Generator, Recycle Timing, Repeat Cycle, Duty Cycling)  
OPERATION: Upon application of input voltage, the output (relay or solid state) energizes and the ON time begins. At the end of the ON time, the output de-energizes and the OFF time begins. At the end of the OFF time, the output energizes and the cycle repeats as long as input voltage is applied. The OFF time may be the first delay in some recycling timers.  
RESET: Removing input voltage resets the output and time delays, and returns the sequence to the first delay.  
The time delays in some recycling timers are equal TD1=TD2. Flashers are an example of this type of recycling timer. Others have separately selectable time delays.

Delay-on-Make/Delay-on-Break: (ProgramaCube® Function MB)  
(ON-delay/OFF-delay, Delay on Operate/Delay on Release, Sequencing ON & OFF, Fan Delay, Prepurge & Postpurge)  
OPERATION: Input voltage must be applied at all times. The output (relay or solid state) is de-energized. Upon closure of the S1 initiate switch, the delay-on-make time delay (TD1) begins. At the end of TD1, the output (relay or solid state) energizes. Opening S1 starts the delay-on-break time delay (TD2). At the end of TD2, the output de-energizes.  
RESET: Removing input voltage resets time delays and the output.If S1 is a) opened during TD1, then TD1 is reset and the output remains de-energized. b) reclosed during TD2, then TD2 is reset and the output remains energized.  
See: HRPD, KRPD, KSPD, NHPD

Delay-on-Make/Interval: (ProgramaCube® Function MI)  
(Single Pulse Generator, Delayed Interval, Delay on Operate/Single Pulse on Operate)  
OPERATION: Upon application of input voltage, the delay-on-make time delay (TD1) begins, the output remains de-energized. At the end of this delay, the output (relay or solid state) energizes and the interval delay (TD2) begins. At the end of the interval delay (TD2), the output de-energizes.  
RESET: Removing input voltage resets the output, the time delays and returns the sequence to the first delay.  
See: ESD5, HRPD, KRPD, KSPD, NHPD, TRDU

Accumulative Delay-on-Make/Interval: (ProgramaCube® Function AMI)  
OPERATION: Input voltage must be applied before and during timing. The output is de-energized before and during the TD1 time delay. Each time S1 closes, the time delay progresses; when it opens, timing stops. When the amount of time S1 is closed equals the full TD1 delay, the output (relay or solid state) energizes for TD2. Upon completion of TD2, the output relay de-energizes. Opening S1 during TD2 has no affect.  
RESET: Removing input voltage resets the time delay, output relay, and the sequence to the first delay.  
See: HRPD, KRPD, KSPD, NHPD

Delay-on-Make/Recycle: (ProgramaCube® Function MRE)  
OPERATION: Upon application of input voltage, TD1 begins and the output (relay or solid state) remains de-energized. At the end of TD1, the TD2 recycle function begins and the output (relay or solid state) cycles ON and OFF for equal delays. This cycle continues until input voltage is removed.  
RESET: Removing input voltage resets the output and time delays, and returns the sequence to the first delay.  
See: KSPD, KRPD, NHPD, HRPD, TRDU

Delay-on-Make/Interval: (ProgramaCube® Function MI)  
(Single Pulse Generator, Delayed Interval, Delay on Operate/Single Pulse on Operate)  
OPERATION: Upon application of input voltage, the delay-on-make time delay (TD1) begins, the output remains de-energized. At the end of this delay, the output (relay or solid state) energizes and the interval delay (TD2) begins. At the end of the interval delay (TD2), the output de-energizes.  
RESET: Removing input voltage resets the output, the time delays and returns the sequence to the first delay.  
See: ESD5, HRPD, KRPD, KSPD, NHPD, TRDU

Accumulative Delay-on-Make/Interval: (ProgramaCube® Function AMI)  
OPERATION: Input voltage must be applied before and during timing. The output is de-energized before and during the TD1 time delay. Each time S1 closes, the time delay progresses; when it opens, timing stops. When the amount of time S1 is closed equals the full TD1 delay, the output (relay or solid state) energizes for TD2. Upon completion of TD2, the output relay de-energizes. Opening S1 during TD2 has no affect.  
RESET: Removing input voltage resets the time delay, output relay, and the sequence to the first delay.  
See: HRPD, KRPD, KSPD, NHPD

Delay-on-Make/Recycle: (ProgramaCube® Function MRE)  
OPERATION: Upon application of input voltage, TD1 begins and the output (relay or solid state) remains de-energized. At the end of TD1, the TD2 recycle function begins and the output (relay or solid state) cycles ON and OFF for equal delays. This cycle continues until input voltage is removed.  
RESET: Removing input voltage resets the output and time delays, and returns the sequence to the first delay.  
See: KSPD, KRPD, NHPD, HRPD, TRDU

Delay-on-Make/Single Shot: (ProgramaCube® Function MS)  
OPERATION: Upon application of input voltage and the closure of S1, TD1 begins and the output (relay or solid state) remains de-energized. The output (relay or solid state) energizes at the end of TD1, and TD2 begins. At the end of TD2, the output (relay or solid state) de-energizes. Opening or reclosing S1 during timing has no affect on the time delays.  
RESET: Reset occurs when the time delay is complete and S1 is open. Removing input voltage resets the time delay, output, and the sequence to the first delay.  
See: KSPD, KRPD, NHPD, HRPD, TRDU

Interval/Recycle: (ProgramaCube® Function IRE)  
OPERATION: Upon application of input voltage TD1 begins. At the same time, the TD2 ON time begins and the output (relay or solid state) energizes. At the end of the ON time, the TD2 OFF time begins and the output de-energizes. The equal ON time OFF time cycle continues until TD1 is completed at which time the output de-energizes.  
RESET: Removing input voltage resets the time delays, output, and the sequence to the Interval function.  
See: KSPD, KRPD, NHPD, HRPD, TRDU

Delay-on-Break/Recycle: (ProgramaCube® Function BRE)  
OPERATION: Upon application of input voltage and the closure of S1, the TD2 ON time begins and the output (relay or solid state) energizes. Upon completion of the ON time, the output de-energizes for the TD2 OFF time. At the end of the OFF time, the equal ON/OFF cycle repeats. When S1 opens, the TD1 delay begins. TD1 and TD2 run concurrently until the completion of TD1 at which time, the TD2 ON/OFF cycle terminates and the output de-energizes. The output energizes if S1 is closed when input voltage is applied.  
RESET: Reclosing S1 during timing resets the TD1 time delay. Removing input voltage resets the time delay, output, and the sequence to the Delay-on-Break function.  
See: KSPD, KRPD, NHPD, HRPD, TRDU

Single Shot/Recycle: (ProgramaCube® Function SRE)  
OPERATION: Upon application of input voltage and the closure of S1, TD1 begins. At the same time, the TD2 ON time begins and the output (relay or solid state) energizes. Upon completion of the ON time, the output de-energizes for the TD2 OFF time. At the end of the OFF time, the equal ON/OFF cycle repeats. TD1 and TD2 run concurrently until the completion of TD1 at which time, the TD2 ON/OFF cycle terminates and the output de-energizes. Opening or reclosing S1 during timing has no affect on the time delays. The output will energize if S1 is closed when input voltage is applied.  
RESET: Removing input voltage resets the time delay, output, and the sequence to the first delay.  
See: HRPD, KRPD, KSPD, NHPD, TRDU

Interval/Delay-on-Make: (ProgramaCube® Function IM)  
OPERATION: Upon application of input voltage, the output (relay or solid state) energizes and TD1 begins. At the end of TD1, the output de-energizes and TD2 begins. At the end of TD2, the output energizes.  
RESET: Removing input voltage resets the time delays, output, and the sequence to the first delay.  
See: HRPD, KRPD, KSPD, NHPD, TRDU

