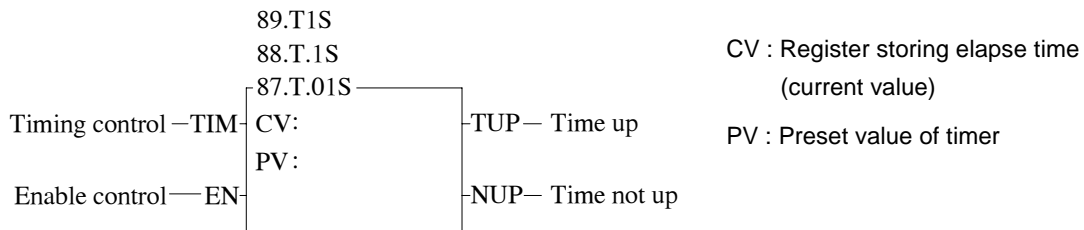


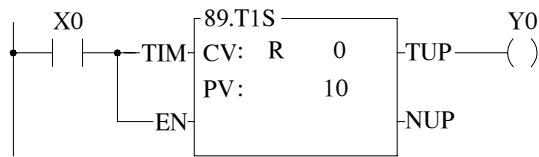
FUN87/FUN87D (T.01S) FUN88/FUN88D (T.1S) FUN89/FUN89D (T1S)	CUMULATIVE TIMER	FUN87/FUN87D (T.01S) FUN88/FUN88D (T.1S) FUN89/ FUN89D (T1S)
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Range	WX	WY	WM	WS	TMR	CTR	HR	IR	OR	SR	ROR	DR	K
Oper- and	WX0 WX240	WY0 WY240	WM0 WM1896	WS0 WS984	T0 T255	C0 C199	R0 R3839	R3840 R3903	R3904 R3967	R3968 R4167	R5000 R8071	D0 D4095	0~32767 or 0~2147483647
CV		○	○	○	○	○	○	○	○	○*	○*	○	
PV	○	○	○	○	○	○	○	○	○	○	○	○	○

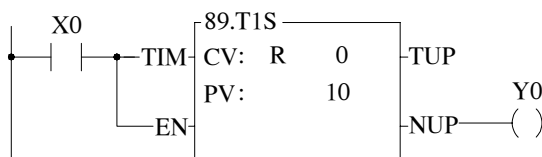
● The operation for this instruction is the same as that for the basic timer (T0~T255), except that the basic timer only has a "timing control" input - when its input is 1 it starts timing, and when input is 0 it get clear. Every time the input changes, it starts timing again and is unable to accumulate. Timing with this instruction is only permissible when enable control "EN" = 1. With this instruction, when timing control "TIM" is 1, it is the same as a basic timer, but when "TIM" is 0, it does not clear, but keeps the current value. If the timer need to clear, then change enable control "EN" to 0. When timing control "TIM" is once again to be 1, it will continue to accumulate from the previous value when the timer last paused. In addition, this instruction also has two outputs, "Time up TUP" (when time up it is 1, usually it is 0) and "Time not up" (usually it is 1, when time is up it is 0). Users can utilize input and output combinations to produce timers with various different functions. For example:

● On delay energizing timer:



● This timer's output (Y0 in this example) is normally not energized. When this timer's input control (X0 in this example) is activated (ON), only after delay by 10 sec will output Y0 become energized (ON).

● On delay de-energizing timer:

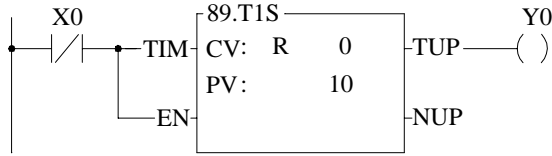


● The output Y0 of this timer is usually energized. When this timer's input control X0 is on, only after delay by 10 sec will the output become de-energized (OFF).

Cumulative timer instructions

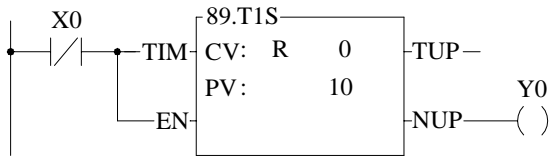
FUN87/FUN87D (T.01S) FUN88/FUN88D (T.1S) FUN89/FUN89D (T1S)	CUMULATIVE TIMER	FUN87/FUN87D (T.01S) FUN88/FUN88D (T.1S) FUN89/ FUN89D (T1S)
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- Off delay energizing timer:



- This timer's output Y0 is usually de-energized. When this timer's input control X0 is off, only after delay by 10 sec will output Y0 become energized (ON).

- Off delay de-energizing timer:



- This timer's output Y0 is usually energized. When this timer's timing control X0 is off, only after delay by 10 sec will output Y0 become de-energized (OFF).

- The diagram below shows the relation on input and output for the above 4 kinds of timers.

