

Clock Week simple

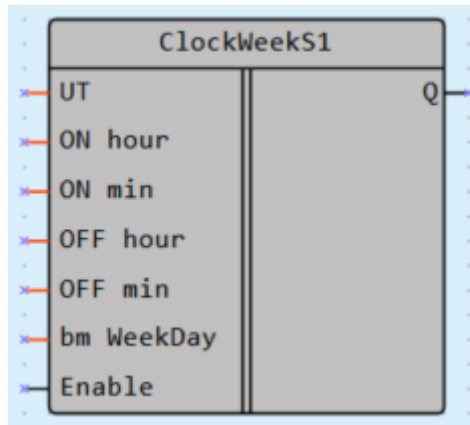


Figure 1 – Symbol

Inputs	Data type	Description	Range
UT	Int	Unix time	>0
ON hour	Int	Turn ON hour	0..23
ON min	Int	Turn ON min	0..59
OFF hour	Int	Turn OFF hour	0..23
OFF min	Int	Turn OFF min	0..59
bm WeekDay	Int	Day of the week bit mask	0..255
Enable	Bool	Enable signal	
Outputs	Data type	Description	Range
Q	Bool	Output	

Explanation of how macro works

The macro allows you to control the output Boolean signal depending on the time and day of the week. UNIX time is the number of seconds that have passed since midnight (0:00:00) January 1, 1970 until the current time.

Operating modes

The timer will be active (Q=1) if:

- 1) Timer operation is enabled (Enable=1)
- 2) The current day of the week matches the selected one (bm WeekDay)
 - 3.1) The on time (ON hour and ON min) is less than the off time (OFF hour and OFF min). Current time is greater than the ON time AND less than the OFF time
 - 3.2) The on time (ON hour and ON min) is longer than the off time (OFF hour and OFF min). The current time is greater than the ON time OR less than the off time. If the next day of the week is not used, the timer will turn off.

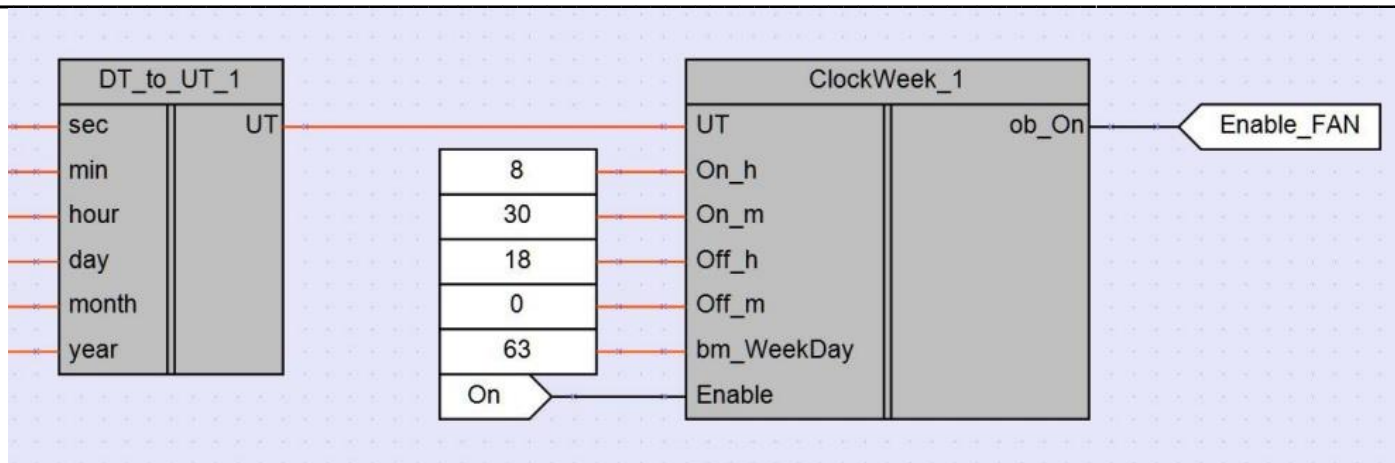


Figure 2 – example of connecting a macro

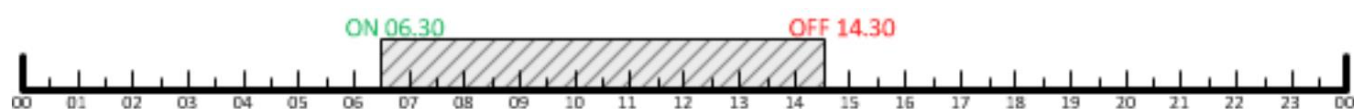


Figure 3 – Example of setting the range ON 06.30-OFF 14.30

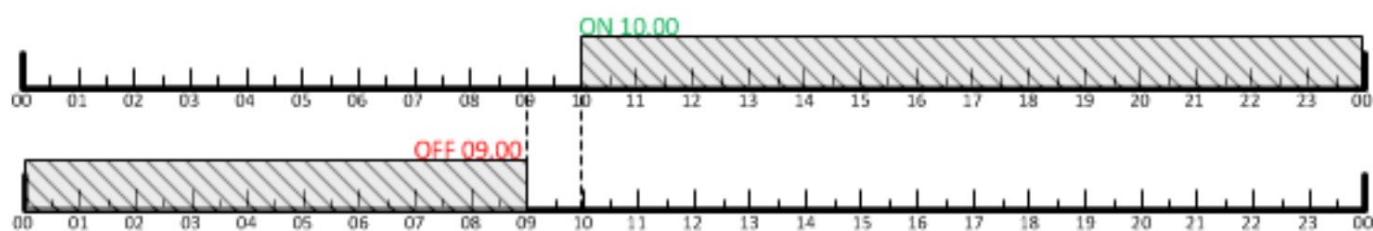


Figure 4 – Example of setting the range ON 10.00-OFF 09.00

Version	1.0
Last modification	22.04.2025.