Usage of Accumlator and Pulse Coverter

Blinker is configured to generate impulses. (time base 1/10 sec)
Output of the blinker is connected to Blink_1 flag.
In our example 1 pulse represents 0.1kWh electrical energie.

Blink_1 flag is connected to Binary Value 1 BACnet object.
Binary Value 1 object is connected to Accumulator 1 BACnet object as Logging Object.
Accumulator 1 counts the pulses and scale according to Prescale (1,10)
and put the result into the Present Value. Present Value is connected to
Accumulated_cal register in the controller
It means we have one increment after every 10 impulses.
So the Present Value can be seen in: x1kWh

How prescale is working?
Prescale (multiplier , moduloDivide) both value are integers

Counting algorithm:
(additional hidden varibale ACCU is used)
For each input pulse:
  Add the value of 'multiplier' to the ACCU and then,
  while the ACCU is greater than or equal to the value of 'moduloDivide'
    Increment the value of 'Present_Value' by one, and
    decrease the value of ACCU by the value of 'moduloDivide'

Counting example:
Prescale (3,7)

Pulse	ACCU	Present Value	
1	3	0	
2	6	0	
3	9	1	ACCU >= moduloDivide
	9 - 7 = 2		ACCU=ACCU-moduloDivide
4	5	1	
5	8	2	
	8 - 7 = 1		
6	4	2	
7	7	3	
	7 - 7 = 0		
and so on			

Usage of Pulse converter

Pulse Converter 1 BACnet object is connected to
Accumulator 1 Present Value via its Input Reference
Pulse Converter 1 Present Value is connected to Pulsecounted_val
register in the controller.
A Scale Factor is applied (3.6) between Count and Present Value.

Scale factor -->
Count --> Value from the referenced accumulator or physical input
Adjust value --> Value to adjust the count and Present value of the Oulse Converter. Value is decremented from Present value.