


The functions working with archive values

Function	Meaning
%GETC HTIME	The function returns a time of first change of object value ARCH_OBJECT1 from a time BT_BLOCK. An interval of browsing is limited from the top by the time ET_BLOCK. If the object value has not been changed in the interval <BT_BLOCK, ET_BLOCK>, the function returns the value of time constant ET_BLOCK.
%MAX	The function returns the maximal value from the archive object ARCH_OBJECT1 in the time <BT_BLOCK, ET_BLOCK> with parameter Step. If parameter Step is not defined, there is used 0.
%MIN	The function returns the minimal value from the archive object ARCH_OBJECT1 in the time <BT_BLOCK, ET_BLOCK> with parameter Step. If parameter Step is not defined, there is used 0.
%NUM	The function returns the number of valid values of archive object ARCH_OBJECT1 in the time <BT_BLOCK, ET_BLOCK> with Step. If parameter Step is not defined, there is used 0 – the function returns true number of object value during defined time interval.
%SUM	The function returns the sum of values of archive object ARCH_OBJECT1 in the time <BT_BLOCK, ET_BLOCK> with Step. If parameter Step is not defined, there is used 0 – for calculation of sum, there will be used all values from a defined time interval.
%SUMA	The function returns a length of time interval during which the archive object ARCH_OBJECT1 got stuck on the value that was higher than VALUE in time <BT_BLOCK, ET_BLOCK>.
%SUMB	The function returns the length of time interval during which the archive object ARCH_OBJECT1 got stuck on the value that is lower than VALUE in time <BT_BLOCK, ET_BLOCK>.
%SUMT	The function returns the length of time interval during which the archive object ARCH_OBJECT1 got stuck on the value VALUE in time <BT_BLOCK, ET_BLOCK>.
%SUMP	The function returns the sum of values of archive object ARCH_OBJECT1 from time interval <BT_BLOCK, ET_BLOCK>. Only the values, for which the archive object ARCH_OBJECT2 acquires TRUE during defined time interval, are included into the sum.

The functions SUM, NUM, MIN, MAX work with the archive block and return the proper value. *ARCH_OBJECT1* must be numerical.

The functions SUMT, SUMB, SUMA calculate the total time when *ARCH_OBJECT1* fulfilled the condition that has been defined by the function type and the parameter *VALUE*.

 **Related pages:**
[Requirement for final value of archive function](#)