D2_CalcStatFunc

Accessing historical values - D2_CalcStatFunc function

The function allows you to calculate the specified statistical archive function on demand.

Declaration

`D2_CalcStatFunc`

```
(archIdent, bt, et, statFuncID, validPerc, paramIdent, refresh)
```

Parameters

archIdent	**TEXT** type	• Reference to one value of historical value. • Reference to simple value of object (not structured variable). • In case of structured variable it is one item (SV.Struct[2]^Item), otherwise name of object (e.g. I/O tag). In this case the system will automatically look for a "suitable" objet of Historical value type. If the column "Item" is of the Object type it is possible to specify a string ",ALL" right after the name of column (e.g. SV.Struct[4]^Item,ALL). This causes the historical values to be obtained for the connected object, not for the item of a structured variable.
bt	**ABS. TIME** type	Interval begin time.
et	**ABS. TIME** type	Interval end time.
statFuncID	**INT** type	Statistical function type. The type is represented by a numerical value (see the table).
validPerc	**INT** type	Validation criteria.
paramIdent	**REAL** or **INT** types	Parameter for some types of functions.
refresh		Optional parameter of optional type.

Description

The function calculates the statistical function specified by the parameter *statFuncID* on the values represented by the historical value *archIdent* within the time interval given by the parameters *bt* and *et*. After successful execution, the function returns a result value.

The parameter *validPerctIdent_Int* represents Validation criteria used during evaluation of the statistical function. It can get the values within 0 .. 100 (the error ERR_RANGE_ERROR occurs if the condition is broken).

For some statistical function, it is required to enter the parameter *paramIdent* according to the table:

Statistical function	Parameter description
_STAT_F_INTEGRAL	Integral time units. For individual types, there are also established predefined local variables according to the table: **Constant** / **Description** _INTEGRAL_HOURUNIT — Hour integral _INTEGRAL_MINUNIT — Minute integral _INTEGRAL_SECUNIT — Second integral

_STAT_F_GE_TIME _STAT_F_GT_TIME _STAT_F_LE_TIME _STAT_F_LT_TIME _STAT_F_ADDITION_PARAM _STAT_F_INCREMENT_PARAM _STAT_F_DELTA_PARAM	Reference value