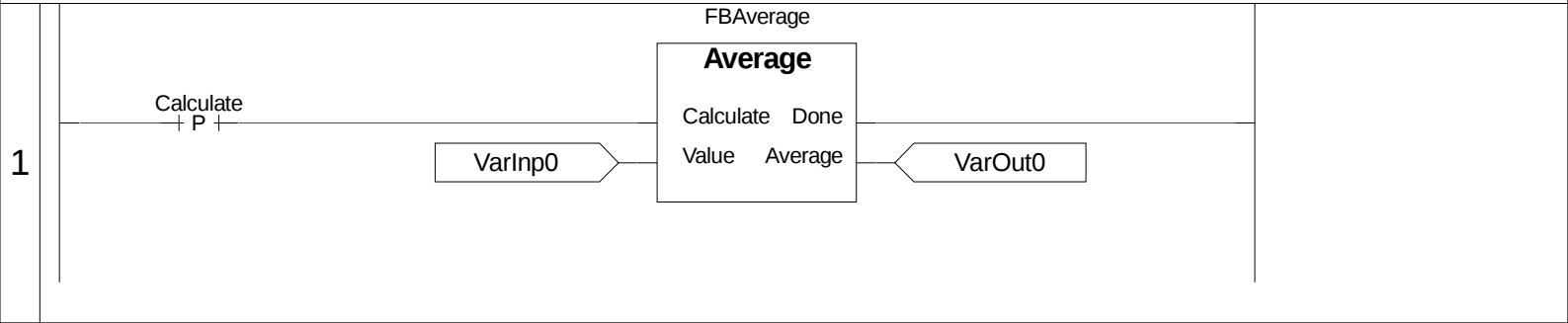


VARIABLES

```
VAR_GLOBAL
Calculate AT %IX0.0 : BOOL;
END_VAR
```

|  |                   |                 |
|--|-------------------|-----------------|
|  | Project : Average |                 |
|  | VARIABLES :       |                 |
|  | Release :         | Ver :1.00       |
|  | Author :          | Date:26/05/2012 |
|  | Note :            | Page:1 of 1     |

```
VAR
FBAverage : Average;
END_VAR
```



|  |                   |                 |
|--|-------------------|-----------------|
|  | Project : Average |                 |
|  | PROGRAM : LD      |                 |
|  | Release :         | Ver :1.00       |
|  | Author :          | Date:26/05/2012 |
|  | Note :            | Page:1 of 1     |

```
VAR_INPUT
Calculate : BOOL; (* Calculate command *)
Value : REAL; (* Value input *)
END_VAR

VAR_OUTPUT
Done : BOOL; (* FB done *)
Average : REAL; (* Average output *)
END_VAR

VAR
DArray : ARRAY[ 0..63 ] OF REAL; (* Data array *)
IDx : USINT; (* Array index *)
i : USINT; (* Auxiliary counter *)
END_VAR
```

```
1 (* ***** *)
2 (* FUNCTION BLOCK "Average" *)
3 (* ***** *)
4 (* Questo blocco funzione esegue la media su 64 valori. *)
5 (* ----- *)
6
7 (* ----- *)
8 (* INIZIALIZZAZIONI *)
9 (* ----- *)
10 (* Eseguo reset bit di one shot. *)
11
12 Done:=FALSE; (* FB done *)
13
14 (* Controllo se comando esecuzione calcolo. *)
15
16 IF NOT(Calculate) THEN RETURN; END_IF;
17
18 (* ----- *)
19 (* GESTIONE CALCOLO *)
20 (* ----- *)
21 (* Eseguo memorizzazione valore in array. *)
22
23 IF (IDx >= 64) THEN IDx:=0; END_IF;
24 DArray[IDx]:=Value; (* Data array *)
25 IDx:=IDx+1; (* Array index *)
26
27 (* Eseguo media tra i 64 valori dell'array. *)
28
29 Average:=0.0; (* Average output *)
30 FOR i:=0 TO 63 DO
31     Average:=(Average+DArray[i])/2.0; (* Average output *)
32 END_FOR;
33
34 (* [End of file] *)
35
36
```

Project : Average

FUNCTION BLOCK : Average

Release : Average

Ver :1.00

Author :

Date:26/05/2012

Note :

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