

PC Elements Advant[®] Controller 160 Reference Manual
MOON

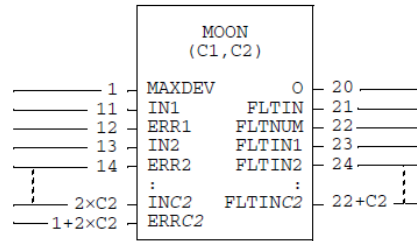
M out of N

MOON

Summary

The element MOON (M Out Of N) is a function for supervision and selection of analog values in the case of set error bits or discrepancies between the analog values.

Disturbed inputs will be sorted out. Then, the remaining inputs will be recognized being undisturbed, if their deviation from the average value is smaller than the value at input MAXDEV. At least M values out of N inputs must be identified as undisturbed ones, that the measurement function will be considered being good.



PC element MOON

Call MOON (C1, C2)

Parameter	Significance	Permissible values
C1	Selection number M of inputs which at least must be undisturbed.	2...C2
C2	Number N of inputs IN1...INC2.	2...5

Terminal Description

No	Name	Type	Description
1	MAXDEV	IR	MAX imum permitted DEV iation between an input I and average value O. Default value 0.
2	IN1	IR	IN put for analog value 1.
3	ERR1	IB	ERR or bit to input IN1. Default value 1.
4	IN2	IR	IN put for analog value 2.
5	ERR2	IB	ERR or bit to input IN2. Default value 1.
:			
2×C2	INC2	IB	IN put for analog value C2 .
1+2×C2	ERRC2	IB	ERR or bit to input INC2. Default value 1.
20	O	OR	Average value Output . O = Sum of undisturbed inputs/number of undisturbed inputs.
21	FLTIN	OB	FauLT , less than required number of undisturbed IN puts. FLTIN = 0 if at least M inputs are undisturbed (C1).
22	FLTNUM	OB	NUM ber of FauLT s, at least one disturbed input. FLTNUM = 0 if all inputs are undisturbed.
23	FLTIN1	OB	FauLT , input IN1 is disturbed. FLTIN1 = 0 if the 1st input is undisturbed.

Terminal Description

No	Name	Type	Description
24	FLTIN2	OB	FauLT , input IN2 is disturbed. FLTIN2 = 0 if the 2nd input is undisturbed.
:			
22+C2	FLTINC2	OB	FauLT , input INC2 is disturbed. FLTINC2 = 0 if the input C2 is undisturbed.