

AG24

Function Block for TwinCAT®

Counter and Error Values



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1**Document History**

Date [dd.mm.jjjj]	Version [x.y]	Author	Description
11.06.2018	0.1	ch	Draft
29.06.2018	1.0	ch	Release

2**Counter Value**

Read	Write	Name	Value range (dec)	Default
1	1	Service Interface Baud Rate	0 ... 3	1
2	2	Generic Mapping Parameter	0 ... 10	0
3	3	Peak Current Limit	0 ... 12000	12000
4	4	Peak Current Time	0 ... 40	40
5	5	Continuous Current	0 ... 7500	7500
6	6	Digital Output 1 Functionality	0 ... 5	0
7		Digital Output Functionalities State		-
8	7	Digital Outputs Polarity	0 ... 1	0
9	8	Digital Input 1 Functionality	0 ... 15	0
10	9	Digital Input 2 Functionality	0 ... 15	0
11	10	Digital Input 3 Functionality	0 ... 15	0
12	11	Digital Input 4 Functionality	0 ... 15	0
13		Digital Input Functionalities State		-
14	12	Digital Inputs Polarity	0 ... 15	0
15	13	Controller Parameter P	1 ... 500	300
16	14	Controller Parameter I	0 ... 500	2
17	15	Controller Parameter D	0 ... 500	0
18	16	A-Pos	1 ... 100	50
19	17	V-Pos	Gear 30.6 ⇒ 1 ... 150 rpm 50.0 ⇒ 1 ... 90 rpm 70.8 ⇒ 1 ... 64 rpm	10
20	18	D-Pos	1 ... 101	101
21	19	A-Rot	1 ... 100	50
22	20	A-Inch	1 ... 100	50

Read	Write	Name	Value range (dec)	Default
23	21	V-Inch	Gear 30.6 ⇒ 1 ... 150 rpm 50.0 ⇒ 1 ... 90 rpm 70.8 ⇒ 1 ... 64 rpm	10
24	22	Pos Window	0 ... 1000	10
25	23	Gear Ratio Numerator	1 ... 10000	1
26	24	Gear Ratio Denominator	1 ... 10000	1
27	25	Spindle Pitch	0 ... 1000000	0
28	26	Calibration Value	-999999 ... 999999	0
29	27	Software Limit 1	-2097152 ... 2097151	999999
30	28	Software Limit 2	-2097152 ... 2097151	-199999
31	29	Delta Inch	-1000000 ... 1000000	1024
32	30	Sense of Rotation	0 ... 1	0
33	31	Pos Type	0 ... 2	0
34	32	Operating Mode	0 ... 1	0
35	33	Inching 2 Stop Mode	0 ... 1	0
36	34	Inpos Mode	0 ... 2	0
37	35	Loop Length	0 ... 30000	512
38	36	Contouring Error Limit	1 ... 30000	1024
39	37	Inching 2 Offset	10 ... 100	100
40	38	Inching 2 Acceleration Type	0 ... 1	0
41	39	Offset Value	-999999 ... 999999	0
42	40	Display Divisor	0 ... 3	0
43	41	Display Divisor Application	0 ... 1	0
44	42	Display Orientation	0 ... 1	0
45	43	Decimal Places	0 ... 4	0
46	44	Direction Indication Function	0 ... 2	0
47	45	Displayed Value 2nd Line	0 ... 9	0
48	46	Key Enable Time	1 ... 60	3
49	47	Key Function Enable	0 ... 1	0
50	48	PIN change	0 ... 99999	0
51	49	Travel Against Load Trigger	0 ... 7500	0
52	50	Travel Against Load Direction	0 ... 1	0
53	51	PCM Position 1	-2097152 ... 2097151	0
54	52	PCM Position 2	-2097152 ... 2097151	0
55	53	PCM Position 3	-2097152 ... 2097151	0
56	54	PCM Position 4	-2097152 ... 2097151	0
57	55	PCM Position 5	-2097152 ... 2097151	0
58	56	PCM Position 6	-2097152 ... 2097151	0
59	57	PCM Position 7	-2097152 ... 2097151	0
60	58	PCM Acceleration 1	1 ... 100	50
61	59	PCM Acceleration 2	1 ... 100	50

Read	Write	Name	Value range (dec)	Default
62	60	PCM Acceleration 3	1 ... 100	50
63	61	PCM Acceleration 4	1 ... 100	50
64	62	PCM Acceleration 5	1 ... 100	50
65	63	PCM Acceleration 6	1 ... 100	50
66	64	PCM Acceleration 7	1 ... 100	50
67	65	PCM Velocity 1	Gear 30.6 ⇒ 1 ... 150 rpm 50.0 ⇒ 1 ... 90 rpm 70.8 ⇒ 1 ... 64 rpm	10
68	66	PCM Velocity 2	see PCM Velocity 1	10
69	67	PCM Velocity 3	see PCM Velocity 1	10
70	68	PCM Velocity 4	see PCM Velocity 1	10
71	69	PCM Velocity 5	see PCM Velocity 1	10
72	70	PCM Velocity 6	see PCM Velocity 1	10
73	71	PCM Velocity 7	see PCM Velocity 1	10
74	72	PCM Deceleration 1	1 ... 101	101
75	73	PCM Deceleration 2	1 ... 101	101
76	74	PCM Deceleration 3	1 ... 101	101
77	75	PCM Deceleration 4	1 ... 101	101
78	76	PCM Deceleration 5	1 ... 101	101
79	77	PCM Deceleration 6	1 ... 101	101
80	78	PCM Deceleration 7	1 ... 101	101
81		Output Stage Temperature		-
82		Voltage of Control		-
83		Voltage of Output Stage		-
84		Motor Current		-
85		Actual Position		-
86		Actual Rotational Speed		-
87		Serial Number		-
88		Production Date		-
89		SW Motor Controller		-
90		Gear Reduction		-
91		System Status Word		-
92		Encoder Resolution		-
93		Device ID		-
94		Virtual Motor Temperature		-
95		Overload		-
96		Actual Contouring Error		-
97		Number of Errors		-
98		Error Number 1		-
99		Error Number 2		-
100		Error Number 3		-

Counter Value

Read	Write	Name	Value range (dec)	Default
101		Error Number 4		-
102		Error Number 5		-
103		Error Number 6		-
104		Error Number 7		-
105		Error Number 8		-
106		Error Number 9		-
107		Error Number 10		-
108	79	Configuration	0 ... 65535	-
109	80	S-Command	0 ... 9	-



3 Error Codes

If a communication error occurs, there is an ADS error code present at the output nErrId.