

Electrical data Part-turn actuators for open-close duty with 3-phase AC motors Short-time duty S2 - 15 min, 380 V/50 Hz	SG 05.1 – SG 12.1
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Part-turn actuator			Motor									
Type	Operating time for 90°	Torque									AUMA Power class	
	in seconds	max. Nm	Type	Power ¹⁾ P _N (kW)	Speed rpm	Nominal current ²⁾ I _N (A)	Current ³⁾ approx. I _{max} (A)	Starting current I _A (A)	cos φ	Setting Overcurrent prot. device (A)	Contact ⁴⁾	Thyrist ⁴⁾
SG 05.1	4	150	SD00 50-2/60	0.160	2,800	0.60	0.8	1.7	0.67	0.60	A1	B1
	5.6		SD00 50-2/60	0.160	2,800	0.60	0.7	1.7	0.67	0.60	A1	B1
	8		SD00 50-2/40	0.090	2,800	0.50	0.6	1.4	0.58	0.50	A1	B1
	11		SD00 50-4/60	0.080	1,400	0.55	0.6	0.9	0.60	0.55	A1	B1
	16		SD00 50-4/40	0.045	1,400	0.35	0.4	0.5	0.60	0.35	A1	B1
	22		SD00 50-4/40	0.045	1,400	0.35	0.4	0.5	0.60	0.35	A1	B1
SG 07.1	32		SD00 50-4/40	0.045	1,400	0.35	0.4	0.5	0.60	0.35	A1	B1
	5.6	210	SD00 50-2/60	0.160	2,800	0.60	0.8	1.7	0.67	0.60	A1	B1
	8		SD00 50-2/60	0.160	2,800	0.60	0.8	1.7	0.67	0.60	A1	B1
	11	300	SD00 50-2/60	0.160	2,800	0.60	0.7	1.7	0.67	0.60	A1	B1
	16		SD00 50-2/40	0.090	2,800	0.50	0.6	1.4	0.58	0.50	A1	B1
	22		SD00 50-4/60	0.080	1,400	0.55	0.7	0.9	0.60	0.55	A1	B1
32	SD00 50-4/60		0.080	1,400	0.55	0.6	0.9	0.60	0.55	A1	B1	
SG 10.1	5.6	420	SD00 50-2/60	0.160	2,800	0.60	0.9	1.7	0.67	0.60	A1	B1
	8		SD00 50-2/60	0.160	2,800	0.60	0.9	1.7	0.67	0.60	A1	B1
	11	600	SD00 50-2/60	0.160	2,800	0.60	0.8	1.7	0.67	0.60	A1	B1
	16		SD00 50-2/40	0.090	2,800	0.50	0.7	1.4	0.58	0.50	A1	B1
	22		SD00 50-4/60	0.080	1,400	0.55	0.6	0.9	0.60	0.55	A1	B1
	32		SD00 50-4/60	0.080	1,400	0.55	0.6	0.9	0.60	0.55	A1	B1
SG 12.1	45	840	SD00 50-2/60	0.160	2,800	0.60	0.9	1.7	0.67	0.60	A1	B1
	63		SD00 50-2/60	0.160	2,800	0.60	0.9	1.7	0.67	0.60	A1	B1
	22		SD00 50-4/60	0.080	1,400	0.55	0.7	0.9	0.60	0.55	A1	B1
	32		SD00 50-4/60	0.080	1,400	0.55	0.7	0.9	0.60	0.55	A1	B1

Motor data is approximate. Due to usual manufacturing tolerances, there may be deviations from the values given.

The permissible fluctuation of the nominal voltage is ± 10 %. If the voltage drops below, there is a reduction of the nominal output torque.

To protect against overheating, thermoswitches or PTC thermistors are embedded in the motor windings. For actuators without integral controls (AUMA NORM), these have to be connected to the external control circuit (refer to terminal plan). If the thermoswitches or PTC thermistors are not connected, this will void our warranty for the motor.

Rating of the thermoswitches:

AC		DC	
250 V, 50 – 60 Hz		60 V	1.0 A
cos φ = 1	2.5 A	42 V	1.2 A
cos φ = 0.6	1.6 A	24 V	1.5 A

For further details refer to “Technical data Part-turn actuators for open-close duty with 3-phase AC motors SG 05.1 – SG 12.1”.

Assigning switchgears for NORM version (without AUMA controls)

We recommend to specify switchgears according to their rated power/motor power in compliance with the assigned AUMA power class.

AUMA power class	Rated power contactor acc. to IEC AC-3	Motor power contactor acc. to UL/CSA for	
		480 V AC	600 V AC
A1	4.0 kW	5.0 hp	5.0 hp
A2	7.5 kW	10 hp	10 hp
A3	15 kW	20 hp	25 hp
A4	30 kW	60 hp	60 hp
A5	55 kW	75 hp	100 hp

1) Mechanical power at the motor shaft at operating torque.

The consumed electrical power can be calculated using the following formula: $P = U \times I \times \cos \varphi \times \sqrt{3}$

2) Current at running torque according to “Technical data SG 05.1 – SG 12.1”

3) Current at max. torque. We recommend to select switching devices according to these values.

4) Assignment of switchgears when using AUMA controls of types AUMA AUMA MATIC and AUMATIC. For selection of switchgears for actuators in NORM version, please refer to notes.

We reserve the right to alter data according to improvements made. Previous documents become invalid with the issue of this document.