

Part-turn actuator			Motor										
Type	Operating time for 90° [in seconds]	Max. torque [Nm]	Motor type	Nominal power ¹⁾ P _N [kW]	Speed [rpm]	Operating capacitor ²⁾ [μF]	Nominal current ³⁾ I _N [A]	Max. current ⁴⁾ I _{max} [A]	Starting current I _A [A]	cos φ	Overcurrent protection device setting [A]	AUMA power class switchgears	
												Contact-	Thyristor
												tor	unit
SQ 05.2	4	150	VW00063-2-0,06	0,06	2,800	16	1,7	1,9	6,3	0,69	1,9	A1	B1
	5,6						1,7	1,8	6,3	0,69	1,8	A1	B1
	8		VW00063-4-0,04	0,04	1,400	12	1,1	1,3	2,3	0,96	1,3	A1	B1
	11						1,1	1,3	2,3	0,96	1,3	A1	B1
	16		VW00063-4-0,02	0,02	1,400	8,0	1,0	1,0	2,1	0,76	1,0	A1	B1
	22						1,0	1,0	2,1	0,76	1,0	A1	B1
32	SW00063-4-0,01	0,01	1,400	8,0	1,0	1,0	2,1	0,74	1,0	A1	B1		
SQ 07.2	4	300	VW00063-2-0,12	0,12	2,800	25	1,8	2,7	6,4	0,98	2,7	A1	B1
	5,6						1,8	2,5	6,4	0,98	2,5	A1	B1
	8		VW00063-4-0,06	0,06	1,400	20	1,8	2,1	3,6	0,98	2,1	A1	B1
	11						1,8	2,0	3,6	0,98	2,0	A1	B1
	16		VW00063-4-0,03	0,03	1,400	12	1,1	1,2	2,3	0,96	1,2	A1	B1
	22						1,1	1,2	2,3	0,96	1,2	A1	B1
32	SW00063-4-0,01	0,01	1,400	8,0	1,0	1,0	2,1	0,74	1,0	A1	B1		
SQ 10.2	8	450	VW00063-4-0,10	0,10	1,400	20	1,9	2,2	3,6	0,99	2,2	A1	B1
	11						1,9	2,3	3,6	0,99	2,3	A1	B1
	16	600	SW00063-4-0,06	0,06	1,400	16	1,6	1,8	3,5	0,88	1,8	A1	B1
	22						1,6	1,7	3,5	0,88	1,7	A1	B1
	32	SW00063-4-0,04	0,04	1,400	12	1,1	1,3	2,3	0,96	1,3	A1	B1	
	45					1,1	1,3	2,3	0,96	1,3	A1	B1	
63	SW00063-4-0,02	0,02	1,400	8,0	1,0	1,0	2,1	0,76	1,0	A1	B1		
SQ 12.2	16	900	VW00063-4-0,10	0,10	1,400	20	1,9	2,2	3,6	0,99	2,2	A1	B1
	22						1,9	2,3	3,6	0,99	2,3	A1	B1
	32	1,200	SW00063-4-0,06	0,06	1,400	16	1,6	1,8	3,5	0,88	1,8	A1	B1
	45						1,6	1,7	3,5	0,88	1,7	A1	B1
63	SW00063-4-0,04	0,04	1,400	12	1,1	1,3	2,3	0,96	1,3	A1	B1		
SQ 14.2	24	1,800	VW00063-2-0,19	0,19	2,800	25	2,0	2,6	6,4	0,99	2,6	A1	B1
	36						1,9	2,2	3,6	0,99	2,2	A1	B1
	48	2,400	VW00063-4-0,10	0,10	1,400	20	1,9	2,3	3,6	0,99	2,3	A1	B1
	72						1,9	2,3	3,6	0,99	2,3	A1	B1
100	SW00063-4-0,06	0,06	1,400	16	1,6	1,8	3,5	0,88	1,8	A1	B1		
							1,6	1,7	3,5	0,88	1,7	A1	B1

Notes on table

1) Nominal power P _N	Mechanical power output at motor shaft at running torque of part-turn actuator (corresponds to approx. 35 % of maximum torque). The consumed electrical power can be calculated using the following formula: $P = U \times I \times \cos \varphi$
2) Operating/starting capacitor	For VW/SW motors, operating capacitors are integrated within the motor.
3) Nominal current I _N	Current at running torque
4) Max. current I _{max}	Current at maximum torque

Notes on installation and sizing

Motor data	Motor data is approximate. Due to usual manufacturing tolerances, there may be deviations from the values given.																
Thermoswitches/PTC thermistors	To protect against overheating, thermoswitches or PTC thermistors are embedded in the motor windings. Actuators without integral controls (AUMA NORM): Thermoswitches or PTC thermistors have to be considered within the external controls (refer to terminal plan). Note: Failure to connect thermoswitches or PTC thermistors shall void or warranty for the motor. Rating of the thermoswitches <table border="1" style="width: 100%; text-align: center;"> <thead> <tr> <th colspan="2">AC current</th> <th colspan="2">DC current</th> </tr> </thead> <tbody> <tr> <td colspan="2">250 V, 50 – 60 Hz</td> <td>60 V</td> <td>1.0 A</td> </tr> <tr> <td>cos φ = 1</td> <td>2.5 A</td> <td>42 V</td> <td>1.2 A</td> </tr> <tr> <td>cos φ = 0.6</td> <td>1.6 A</td> <td>24 V</td> <td>1.5 A</td> </tr> </tbody> </table> Actuators with AM or AC integral controls: Thermal motor protection is already integrated.	AC current		DC current		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
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Mains voltage, mains frequency	Permissible variation of the mains voltage: ±10 % Permissible variation of the mains frequency: ±5 %																

Terminal plan	<table border="1"> <thead> <tr> <th>Part-turn actuators</th> <th>Motor (type)</th> <th>Terminal plan</th> </tr> </thead> <tbody> <tr> <td>SQ 05.2 – SQ 14.2</td> <td>VW.../SW...</td> <td>TPA01R1AA-101-000</td> </tr> </tbody> </table>	Part-turn actuators	Motor (type)	Terminal plan	SQ 05.2 – SQ 14.2	VW.../SW...	TPA01R1AA-101-000																								
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<p>For further information refer to "Technical data Part-turn actuators SQ 05.2 – SQ 14.2 for open-close duty with 1-phase AC motors".</p>																															
Switchgear sizing	<p>For motor operation, reversing contactors (mechanically, electrically and electronically locked) or thyristors (electronically locked) can be used.</p> <p>Actuators without integral controls (AUMA NORM):</p> <p>Switchgears are supplied by the customer. We recommend specification of switchgears suitable for their rated operating power/motor power in compliance with the assigned AUMA power class.</p> <p>Switchgear assignment to AUMA power classes:</p>																														
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