

SML 03 – SML 30

Electrical data Straight stroke actuators for open-close duty with 1-phase AC motors

Short-time duty S2 - 15 min, 220V-240V/50 Hz



Straight stroke actuator				Motor							
Type	Output speed [mm/ s]	Max. torque [kN]	Stroke Max. mm	Motor type	Nominal power ¹ P _N [kW]	Nominal current ² I _N [A]	Max. current ³ I _{max} [A]	Starting current I _A [A]	cosφ	kiket power class switchgears	
										Contacteur	Thyristor
SML03	0.75	3	25	MS03-0.02	0.02	0.28	0.38	0.87	0.32	C1	T1
	1.0			MS03-0.03	0.03	0.31	0.42	0.96	0.44	C1	T1
	1.5			MS03-0.03	0.03	0.31	0.42	0.96	0.44	C1	T1
SML05	0.75	5	40	MS05-0.025	0.025	0.39	0.53	1.21	0.29	C1	T1
	1.0			MS05-0.045	0.045	0.42	0.57	1.30	0.49	C1	T1
	1.5			MS05-0.045	0.045	0.42	0.57	1.30	0.49	C1	T1
SML08	0.75	8	60	MS08-0.04	0.04	0.57	0.77	1.77	0.32	C1	T1
	1.0			MS08-0.06	0.06	0.62	0.84	1.93	0.44	C1	T1
	1.5			MS08-0.06	0.06	0.62	0.84	1.93	0.44	C1	T1
SML10	0.75	10	60	MS10-0.06	0.06	0.73	0.99	2.27	0.37	C1	T1
	1.0			MS10-0.09	0.09	0.82	1.11	2.55	0.50	C1	T1
	1.5			MS10-0.09	0.09	0.82	1.11	2.55	0.50	C1	T1
SML16	0.75	16	60	MS16-0.06	0.06	0.69	0.93	2.14	0.40	C1	T1
	1.0			MS16-0.09	0.09	0.85	1.15	2.64	0.48	C1	T1
	1.5			MS16-0.09	0.09	0.85	1.15	2.64	0.48	C1	T1
SML20	0.75	20	60	MS20-0.06	0.06	0.72	0.97	2.24	0.38	C1	T1
	1.0			MS20-0.09	0.09	0.87	1.17	2.70	0.47	C1	T1
	1.5			MS20-0.09	0.09	0.87	1.17	2.70	0.47	C1	T1
SML25	0.75	25	100	MS25-0.09	0.09	1.09	1.47	3.38	0.38	C1	T1
	1.0			MS25-0.12	0.12	1.22	1.65	3.79	0.45	C1	T1
	1.5			MS25-0.12	0.12	1.22	1.65	3.79	0.45	C1	T1
SML30	0.75	30	100	MS30-0.09	0.09	1.16	1.57	3.6	0.35	C1	T1
	1.0			MS30-0.12	0.12	1.28	1.73	3.97	0.43	C1	T1
	1.5			MS30-0.12	0.12	1.28	1.73	3.97	0.43	C1	T1

Notes on table

1) Nominal power P_N

Mechanical power output at motor shaft at running torque of multi-turn actuator (corresponds to approx. 35 % of maximum torque).

Consumed electrical power can be calculated using the following formula:

$$P = U \times I \times \cos \phi$$

2) Nominal current I_N

Current at running torque.

3) 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:

Thermoswitches or PTC thermistors have to be considered within external controls (refer to terminal plan).

Note: Failure to connect thermoswitches or PTC thermistors shall void our warranty for the motor.

Rating of thermoswitches

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

Actuators with SC integral controls:

Thermal motor protection is already integrated.

Mains voltage, mains frequency

Permissible variation of mains voltage: ±10 %

Permissible variation of mains frequency: ±5 %

Switchgear Sizing**1. Actuators without Integral Controls**

For motor operation, reversing contactors (mechanically, electrically and electronically locked) or thyristors (electronically locked) can be used.

Switchgears are supplied by the customer. We recommend specifying switchgears suitable for their rated operating power/motor power in compliance with the assigned kiket power class.

Switchgear Assignment to Kiket Power Classes

Power Class	Rated power in accordance with EN 60947-4-1:2010 AC-3	Motor power in accordance with UL/CSMRL	
		480 V AC	600 V AC
C1	4.0 KW	5.0 hp	5.0 hp
C2	7.5 KW	10 hp	10 hp
C3	15 KW	20 hp	25 hp
C4	30 KW	60 hp	60 hp
C5	55 KW	75 hp	100 hp

2. Actuators with S-C Integral Controls

Required switchgears are already integrated.