

ELECTRIC ACTUATOR SR SERIES 05, 10, 20, 30

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1. Standard Specification

Enclosure	Watertight Ingress Protection 67 Nema 4 and 6
Ambient Temperature	-20℃ ~ 55℃
Power Supply	110 / 120 / 220 / 230 V AC 50/60Hz , 380 / 440V AC 50/60Hz, DC24V
Limit Switches	Open / Close Limit Switch (250VAC 15A)
Travel Angle	90°± 5°
Indicator	Continuous Position Indicator
Manual Override	Hand / Auto Declutching Mechanism
Self Locking	Provided by Means of Worm Gearing
Space Heater	20W
Cable Entries	Two PF 3/4", Two NPT 3/4", Two M-20
Lubrication	Shell Gadus S2 V220 2
Materials	Aluminium
Surface Treatment	Anodizing
External Coating	Polyester (TGIC - Free)
Mechanical Stops	External Adjustable Screws

2. Optional Specification

EXP	Flameproof Enclosure Ex d IIB T4				
ALS	Auxiliary Open, Close Limit Switches				
CPT	Current Position Transmiter / Output : DC 4-20mA				
PIU	Potentiometer 1 K Ohm				
PCU	Proportional Contact Unit (Modulation) Input: 4-20mA DC 1~5VDC, 2~10VDC, 0~5VDC, 0~10VDC Output: 4-20mA DC				
IMS	Integral Motor Starter				
LCU	Local Control Unit				
GOV	Governor (SR05,10: Option / SR30: Standard)				
Mod-Bus					
Profi-Bus					
Can-Bus					

3. Performance

Type		SR05 SR10		SR20 SR30			
Max Output	Kg	.m	5	5 10 20		30	
Torque	Nm		50	50 100 200		300	
Spring Return Time (90°)	SE	eC	1 (When Governor Setting: 2 ± 1 sec)		1~2 (Governor Setting)	2 ± 1 (Governor Setting)	
	4.400.4	50hz	16/14	18/16	61/56	90/81	
	110V	60hz	14/12	16/14	51/46	72/68	
		50hz	16/14	20/19	62/57	89/82	
Operating	220V	60hz	13/12	17/15	51/47	75/68	
Time (90°)		50hz	17/15	21/19	62/57	87/82	
sec (Open/Close)	380V	60hz	15/13	19/16	52/47	74/68	
, ,	4.400.7	50hz	17/15	21/19	62/57	86/82	
	440V	60hz	15/13	17/16	52/47	73/67	
	DC24V		13/10	20/12	56/35	86/56	
Motor (W)		С	60	90	90	90	
IVIOLOT (VV)	D	0	40	40	40	40	
Duty(S2)	Min		15	15	15	15	
		50hz	1.75/1.68	2.4/2	2.8/2.43	2.3/1.8	
	110V	60hz	1.7/1	3/2.2	3.9/2.9	3.15/2.3	
		50hz	1/0.95	1.06/0.98	1.3/0.97	1.02/0.98	
Rated	220V	60hz	1.03/0.7	1.3/0.9	1.8/0.43	1.3/0.95	
Current (A)		50hz	0.24/0.18	0.4/0.33	0.38/0.3	0.35/0.3	
(Open/Close)	380V	60hz	0.25/0.15	0.4/0.22	0.35/0.3	0.29/0.2	
	4.400.7	50hz	0.28/0.27	0.5/0.5	0.5/0.5	0.62/0.6	
	440V	60hz	0.24/0.17	0.4/0.3	0.36/0.31	0.31/0.27	
	DC2	24V	6.3/1.9	8.6/1.65	9/1.8	7.6/1.8	
		50hz	3.72	4.0	4.78	4.7	
	110V	60hz	3.55	4.1	5	4.72	
		50hz	1.95	2,55	2.4	2.8	
Stall	220V	60hz	1.9	2.5	2.5	2.93	
Current (A)	000	50hz	0.82	0.8	1.3	0.7	
	380V	60hz	0.77	1,22	1.3	0.8	
	1400	50hz	0.92	0.83	1.54	0.6	
	440V	60hz	0.9	1	1.45	0.7	
	DC2	24V	15	13	15.7	13.5	
Mounting Base (ISO 5211)	ISO5211		F07	F07 / F10	F10/ F12	F10 / F12	
Number Of Handle Turns			25	25	75	113	
Weight	Kg		SR05:26 / SR05X:31	SR10:35 / SR10X40	51	SR30:62 / SR30X:67	

3. Actuator Configuration



Features

Sealing

Standard enclosure with o-ring sealing is watertight to IP67, NEMA 4 and 6. The actuator is available with optional explosion -proof enclosure.

Motor

Squirrel caged induction motor is totally emclosed type with high stall torque and low inertia force to suit seating/unseating of valves. Integral thermal protection to prevent damage to the single/three phase motor.

Heater

A space heater inside the actuator prevents condensation due to temperature and weather changes.

Standard 20W heater keeps all electrical components in the actuator lean and dry.

Adaption

Base mounting is standard to ISO 5211.

Drive bush is removavle for machining to valve stem requirement. The actuator position on the valve can be selected for 4 positions by means of 4 bolt holes in the drive bush.

Wiring

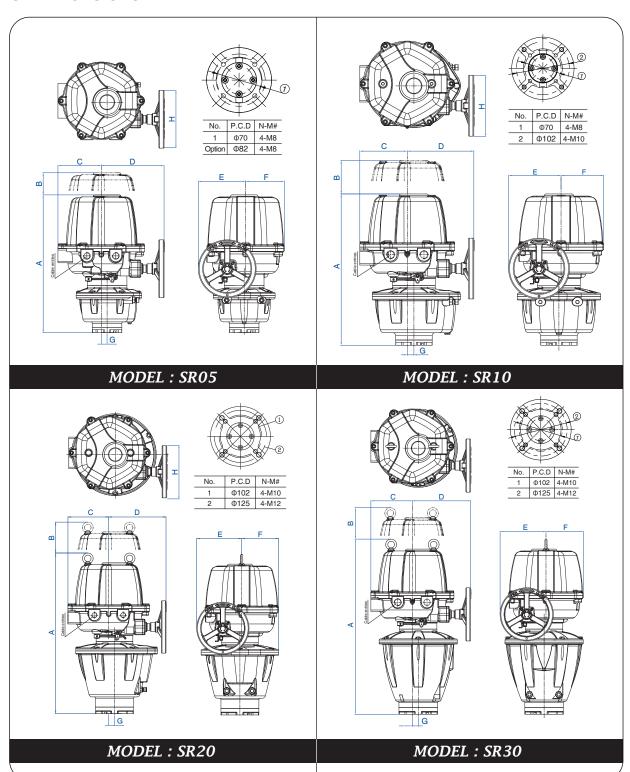
Electric wiring of control circuit is standard size for single and three phase power supply in a signal module.

Multiple terminal contacts sufficiently cover additional requirements such as auxiliary contacts for DCS, interlocking and other options.

Limit Switches

The limit switch is activated by means of a simple and yet reliable cam mechanism mounted and driven by the center column. The valve position can be accurately and easily set with the simple adjustable switch mechanism. The set position is permanent and is not affected by over-travel resulting from manual operation.

5. Dimensions



Model	Α	В	С	D	E	F	G	Н
SR05	477	155	150	206	164	134	20	200
SR10	498	212.5	156.5	219	172.5	141.5	22	200
SR20	614.5	212.5	156.5	217	172.5	141.5	22	200
SR30	658.5	212.5	156	219	173	141	22	200