

765 XS VALVE WITH SA ELECTRIC ACTUATOR

FEATURES

The 765 XS + SA 2-way ball valve is designed for automatic shut-off of high-temperature fluid networks such as saturated steam up to 15 bar. With a 3-piece construction with external tie rods, it is easy to dismantle for maintenance. The valve has full bore, an antistatic device and double sealing at the gland. It is CE, ATEX, fire safety and TA-LUFT approved. The SA actuator is mounted with a heat dispersion arch. It is perfectly suited for industrial use both indoors and outdoors.

AVAILABLE MODELS

Diameters DN 15 to DN 80.

PN40 RF flange connection.

Supply voltages : 12 Vdc, 24 Vac-dc and 230 Vac.



SA 05
SA 09



SA-X 05
SA-X 09

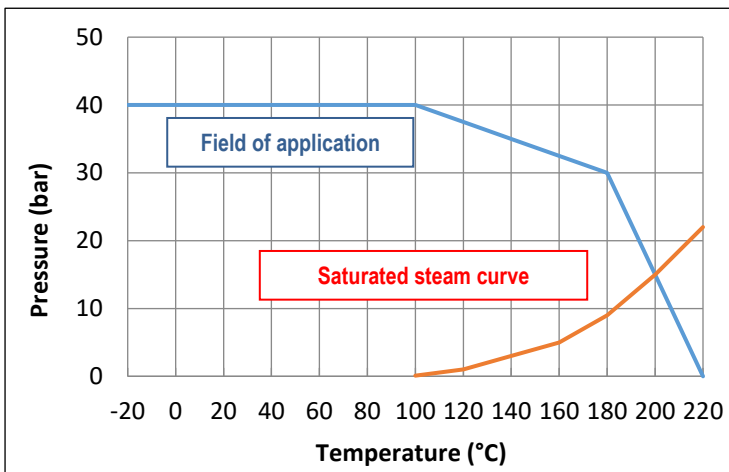


With
SA-X 05
SA-X 09



LIMITS OF USE

Fluid pressure : WP	40 bar (20°C)
Fluid temperature : WT°	-25°C / +220°C
Use on steam	15 bar / +200°C
Ambient temperature	- 20°C / + 80°C
Service factor	S2 : 15mn - S4 : 50% (SA 05)
	S2 : 15mn - S4 : 30% (SA 09)



DIRECTIVES AND MANUFACTURING STANDARDS

OBJET	Standard	ON	OBJET	Standard
EC Pressure Equipment Directive 2014/68	DN15 and 20 : not submitted		Final test	EN 12266
	DN25 to 100 : category III	TÜV 0035	Certificate of material	EN 10204
Dimensioning	EN 12516-1		Motorization connection	ISO 5211 / EN 15081
Steel grades	EN 1503-1		Fire safety	API 607/4 – ISO 10497-5
ATEX Directive	Valve	SIRA 0518	II 2G/D Tx for areas 1,2,21 and 22	
	Actuator (option SA-X)	KEMA 0344	II 2G EEx d II C T4 for areas 1 and 2	

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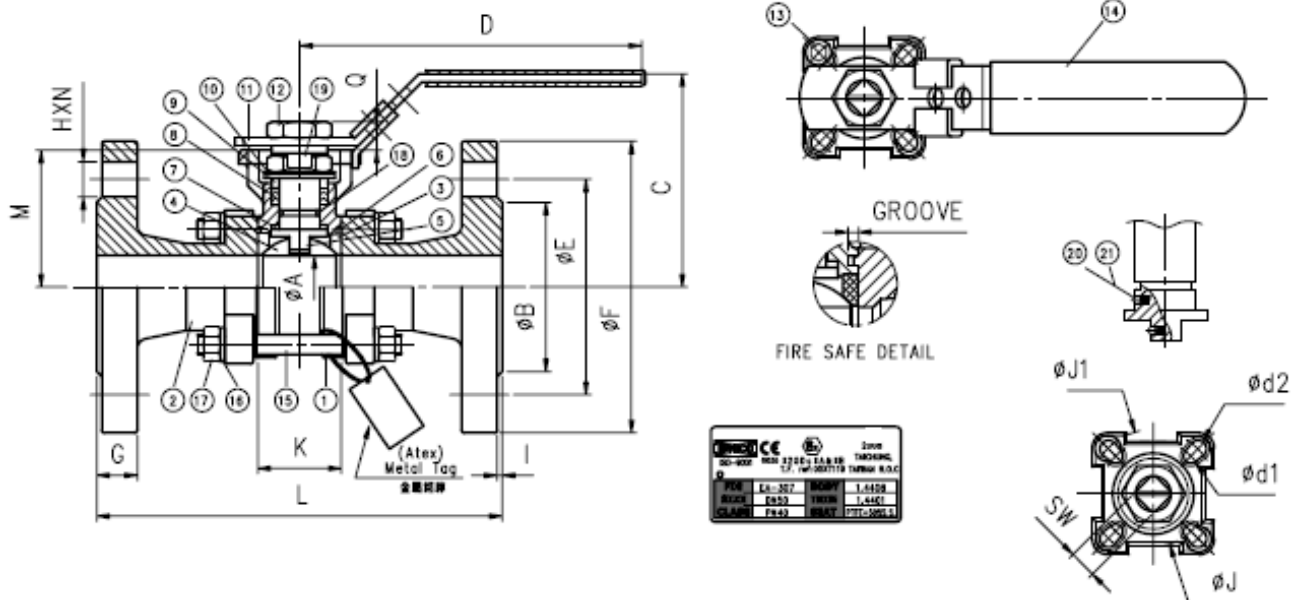
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CONSTRUCTION

N°	Name	Material	N°	Name	Material
1	Body	1.0619	12	Nut	SS 304
2	End caps	1.0619	13	Stop	SS 304
3*	Seat	PTFE+50% SS	14	Sleeve	PVC
4	Sphere	CF8M / 316	15	Tie rods	SS 304
5	Stem	SS 316	16	Washer	SS 304
6*	Body seal	Graphite	17	Nuts	SS 304
7*	Washer	PTFE+15%GF	18*	O-ring	FPM
8*	Garniture	Graphite	19	Nut brake	SS 304
9	Spacer	SS 301	20	Anti-static	SS 316
10	Washer B.	SS 301	21	Spring	SS 304
11	Lever	SS 304			



DIMENSIONS (mm)

DN	A	B	C	D	E	F	SW	d1	d2	M	Q	K	L
15	16	45	70.9	125	65	95	9	6	6	42.3	8	25.2	130
20	20	58	73.4	125	75	105	9	6	6	44.8	8	27.2	150
25	24.5	68	84.1	150	85	115	11	6	7	54	12	33	160
32	32	78	89.3	150	100	140	11	6	7	59.2	12	41.2	180
40	38	88	109.5	165	110	150	14	7	9	73.5	14.8	49.3	200
50	50	102	118.9	165	125	165	14	7	9	82.9	14.8	63.6	230
65	65	122	155	300	145	185	17	9	11	107	17.1	82.1	290
80	80	138	165	335	160	200	17	9	11	117.3	17.1	95.8	310
100	100	162	180	335	190	235	17	9	11	132.3	17.1	117.8	350

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SA ELECTRICAL MOTORIZATION

The SA motorization offered as standard is intended for:

- actuator with epoxy-coated aluminium housing, IP67, and steel gearbox,
- minimum safety factor of 1.3 in relation to the nominal torque of the valve,
- Upstream/downstream pressure difference $\Delta P=10$ bar max,

The actuator is mounted using an arcade + stainless steel driver in accordance with standard EN 15081.

DN	Actuator	Power	Intensity 230V AC	Time*	Intensity 24V AC-DC	Time*	Standard actuator equipment
15	SA 05	6 W	0,23 A	17 s	1,8 A	10 s	2 adjustable limit switches. 2 dry auxiliary contacts. 5W anti-condensation resistor. Motor thermal protection. Manual emergency control via key. Backlit position indicator (except SA-X) Electrical connection: 2 P.E. M20x1.5
20	SA 05	6 W	0,23 A	17 s	1,8 A	10 s	
25	SA 05	6 W	0,23 A	17 s	1,8 A	10 s	
32	SA 05	6 W	0,23 A	17 s	1,8 A	10 s	
40	SA 05	6 W	0,23 A	17 s	1,8 A	10 s	
50	SA 05	6 W	0,23 A	17 s	1,8 A	10 s	
65	SA 09	6 W	0,23 A	32 s	2,1 A	22 s	
80	SA 09	6 W	0,23 A	32 s	2,1 A	22 s	
65	See assembly 765 XS + NA						
80							
100							

For any other terms and conditions, please contact us.

* servomotor idle time

MOTORIZATION OPTIONS

There are numerous options available, so please consult our sales department :

1	2	3	4	5
SA 05 S : slow actuator 100 s	SA 05 PCU : 4-20mA or 0-10V control actuator	SA 05 SCP : supercapacitor safety actuator	SA 05 X : actuator for use in ATEX areas 1 and 2	SR 05 : spring-return safety actuator
				
6	SA PUI actuator with feedback potentiometer			
7	heat dispersion arch for high-temperature fluids			
8	100 mm high stainless steel riser for insulation passage			
9	actuator designed for upstream/downstream pressure difference ΔP greater than 10 bar			
10	NA actuator with emergency control that can be disengaged by means of a steering wheel			

INSTALLATION IN ATEX AREAS

If installing the 765XS+SA-X automatic tap in ATEX areas 1 or 2, this must be specified when ordering. Our services will check the assembly, install a grounding braid and issue an assembly certificate. These operations are carried out in the workshop by our certified technicians. Please consult us.

It is also necessary to follow the special installation and maintenance instructions for motorized valves in ATEX areas. ATEX cable glands and plugs are not included in the supply. Use the following codes :

M20x1.5 ATEX aluminium cable gland	Code 980179	M20x1.5 ATEX aluminium plug	Code 980180
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ASSEMBLY AND MAINTENANCE INSTRUCTIONS

1 - Assembly

1.1 - Verifications

- Check that the material of the tap body is chemically compatible with the fluid.
- Check that the pressure and operating conditions are compatible with the valve's (P,T) diagram. Voir § « Limites d'utilisation ».
- Check that the fluid is clean and free of particles. These can scratch the ball and damage the seats, causing the valve to leak. Install an upstream filter if necessary.
- Check that there is no risk of thermal expansion of the fluid that could damage the seats. In the open position, an orifice at the top of the sphere allows the pressure between the dead chamber and the fluid passage to be balanced. As an option, a decompression orifice on the upstream side of the valve to balance pressures is recommended for fluids such as ammonia, LPG, chlorine, etc.
- Ensure that the valve is not used to regulate flow or pressure, as it is not designed for this purpose and there is a risk of premature wear of the seats, particularly in the case of high pressure and/or temperature. For this particular application, we recommend using our "V-port" version with a V-shaped bore. Please consult us.
- Ensure that the valve is not used with gas that could condense at certain stages of the process. In this case, the pressure in the dead chamber could become negative, which could cause significant deformation of the seats. Please consult us.
- Static electricity: the tap is supplied with an internal sphere-axis-body electrical continuity device. If the conditions of use require electrical continuity of the installation, check that it is earthed.
- If the tap is installed in an explosive area, it is essential to follow the additional instructions "IMEVMATEX".

1.2 - Storage prior to assembly

- Comply with our general storage instructions "IMESTOCK"
- Check that the tap handles are not loose during transport.

1.3 - Assembly

- Before installation, isolate the upstream and downstream pipes, depressurize the pipe and bring the installation to room temperature. Carefully clean the pipe of any particles (foreign bodies, dust, rust, etc.) or shavings by rinsing with water or blowing with air.
- For valves larger than DN50, provide for the use of a hoist.
- Remove the protective flanges from the tap flanges.
- Check that the internal surfaces of the tap are clean and clean them if necessary.
- Installation direction: these valves have no preferred installation direction, unless a pressure relief hole has been drilled in the ball.
- Check that the upstream and downstream pipes and the valve are perfectly aligned and properly supported. Misalignment causes mechanical deformation, which can block the valve or cause leaks at the body joints.
- Check that the flange standards for the tap (PN40 according to 1092-1) and the pipes are the same.
- Select flange gaskets suitable for the fluid and the valve flange standard (PN40).

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- Supply hexagon head screws as indicated in the table below :

DN	Screw	Number	Tightening torque (Nm)	DN	Screw	Number	Tightening torque (Nm)
15	M12 x 35	4	35	50	M16 x 55	4	86
20	M12 x 40	4	35	65	M16 x 55	4	86
25	M12 x 45	4	35	80	M16 x 60	8	86
32	M16 x 45	4	86	100	M16 x 60	8	86
40	M16 x 50	4	86				

- Screw the screws through the flanges, applying the torques specified in the table above. Follow a symmetrical cross-tightening pattern to apply uniform tightening torque to the joint surfaces.
- Hydraulic testing of the installation
 - The taps have been factory tested at 1.5 PS.
 - When performing a hydraulic test on the installation, do not exceed the authorized pressure.

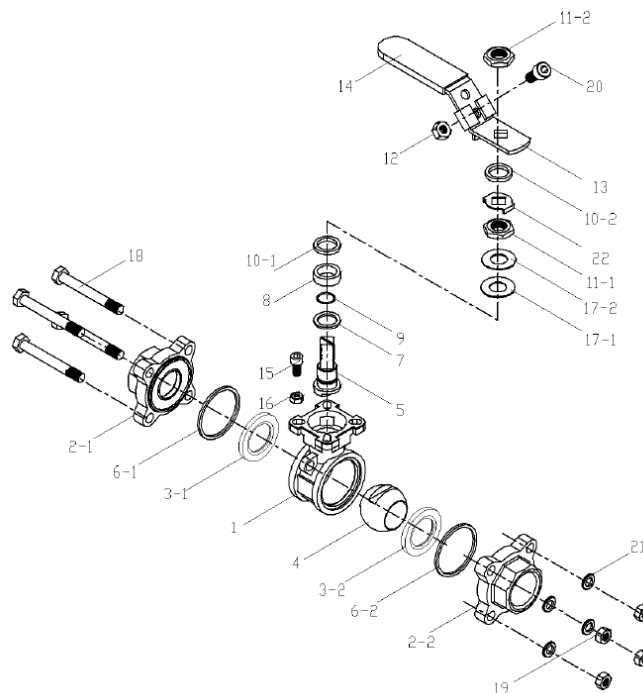
2 - Usage

- If the fluid flowing through the tap is hot, do not touch the surface of the tap.
- Always operate the tap slowly and smoothly.
- Open clockwise, close anticlockwise.

3 - Maintenance

3.1 - Maintenance frequency

- The frequency of maintenance depends on the use of the valve, the type of fluid, its speed, the frequency of operation, and the pressure and temperature rise and fall cycles.
- Before carrying out any work, isolate the upstream and downstream pipes using the taps provided for this purpose. Depressurize the pipe and bring the installation to ambient temperature.
- If the lever needs to be removed, do so before dismantling the body.
- To dismantle the central body, unscrew the tie rods symmetrically. Then carefully remove the central part, taking care not to drop the sphere.
- To remove the sphere from the body, turn the shaft a quarter turn.



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3.2 - Inspection of the condition of the tap and repair if necessary

- Check the condition of the sphere (Marker 4): it must be clean and free of scratches. If cleaning or polishing is not possible, replace it (see § spare parts).
- Check the condition of the seats (3.1 and 3.2): they must not be deformed, scratched, worn or dirty. If they are, replace them using the parts in the seal kit.
- Check the condition of the gland (7, 8 and 9): there must be no leakage at the shaft and the rings must not be excessively worn. Replace these seals if necessary.
- Check the condition of the body seals (6.1 and 6.2). Replace them if necessary.
- Reassemble the various parts of the tap, observing the tightening torques indicated in the table below.
- Check that the axle moves smoothly. Perform about ten movements.

TABLE OF TIGHTENING TORQUES FOR TIE RODS AND LEVER NUTS

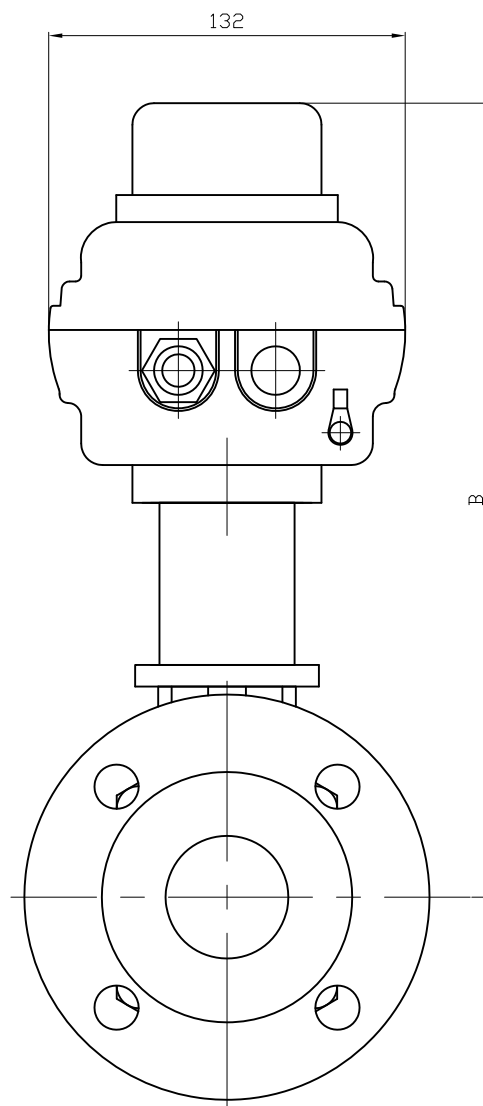
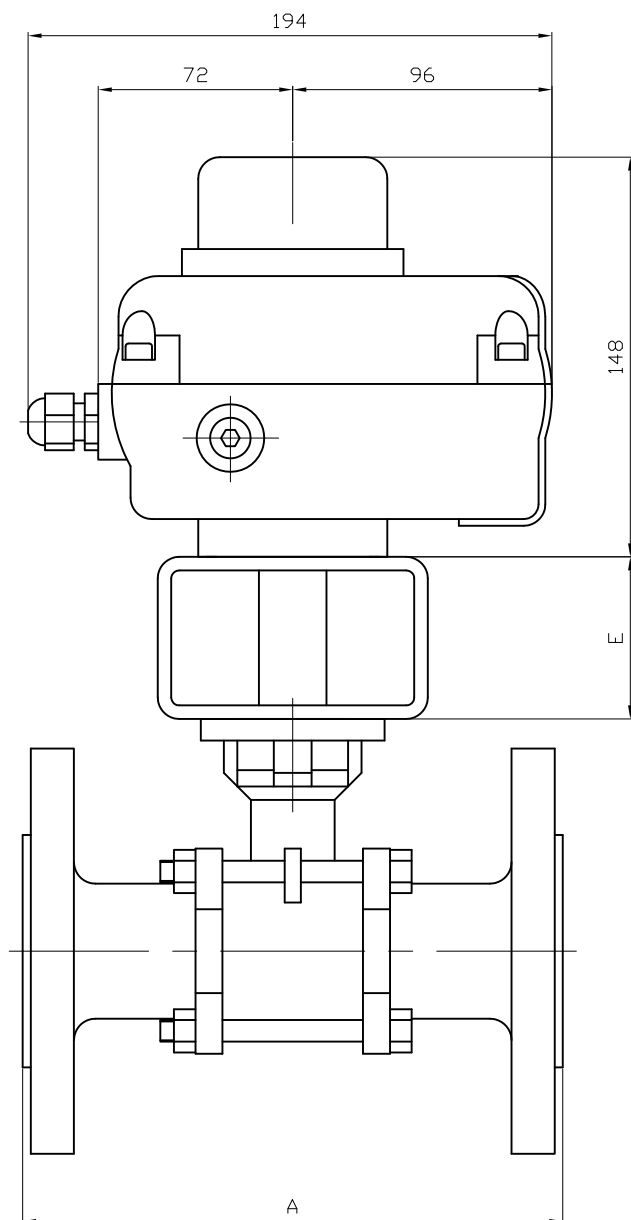
DN	Tie rods	Torque (Nm)	Lever nut (Nm)
15	M6	10	4
20	M8	20	4
25	M8	20	4,5
32	M10	35	4,5
40	M10	35	5,5
50	M10	40	5,5
65	M12	70	7
80	M16	120	7
100	M16	120	7

SPARE PARTS

DN	Seal kit	Sphere	Sphere V30°	Sphere V60°	Tie rod kit	Lever
Repère	6-7-8-18	4	4	4	15-16-17	11
15	982872	980032	980042	980052	982832	982802
20	982873	980033	980043	980053	982833	982802
25	982874	980034	980044	980054	982834	982804
32	982875	980035	980045	980055	982835	982804
40	982876	980036	980046	980056	982836	982806
50	982877	980037	980047	980057	982837	982806
65	982878	Please contact us	Please contact us	Please contact us	982838	982808
80	982879	Please contact us	Please contact us	Please contact us	Please contact us	982808
100	982880	Please contact us	Please contact us	Please contact us	Please contact us	982808

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DN	15	20	25	32	40	50
A	130	150	160	180	200	230
B	250.3	252.8	262	267.2	281.5	290.9
E	60	60	60	60	60	60
KG	5.22	5.6	6.87	8.67	10.4	13.1

Informations données à titre indicatif et sous réserve de modifications éventuelles
data subject to alteration

				Ajout poids	03/07/2012	A
Ech: /	Date :19/11/2009	Dessiné par : E.D.	Tolérances générales : +/- 0.2	Modifications	Date	REV.
ROBINET A TOURNANT SPHERIQUE 765XS/BALL VALVE 765XS + SERVOMOTEUR SA05/ELECTRIC ACTUATOR SA05				Matière :		
				Poids (Kg) :		
				Traitement : SANS		
 45, Rue du Ruisseau 38297 SAINT QUENTIN FALLAVIER				Plan n° Ens 1057A		

SA 05 - SA 09 ELECTRIC ACTUATOR

FEATURES

The SA 05 / SA 09 electric actuator are intended for motorising industrial 1/4 turn valves. The torques are 50 Nm and 90 Nm. With a compact, robust construction and IP67 epoxy-coated aluminium housing, the SA actuator is especially well suited for motorising ball valves and butterfly valves installed in workshops or outdoors. The SA has a manual key control and a 3D visual position indicator. Compliant with the EN 15714-2 standard.

AVAILABLE MODELS

Supply voltages: 230 Vac (50-60Hz), 24 Vac/dc and 12 Vdc.

Options: 110 Vac, feedback potentiometer, local command.



LIMITS OF USE

IP rating	IP 67
Ambient temperature	- 20°C / +70°C
Service factor	S2: 15mn - S4: 50% (SA 05)
	S2: 15mn - S4: 30% (SA 09)



MECHANICAL FEATURES

Gear box	treated steel pinions
Torque	50 Nm / 90 Nm
Angle of rotation	90° +/- 5°
Declutching	Without
Override control	by key (except for SA 05 S)

Actuator	SA 05 / SA 09			SA 05 S	
Voltage	230V AC	24V AC/DC	12V DC	230V AC	24V AC/DC
Torque (Nm)	50 / 90			50	
Manoeuvring time (s)	17 / 32	10 / 22	11 / 25	100	100
ISO 5211	F03/F05/F07 star 14				

ELECTRICAL FEATURES

Motor protection	Thermal switch	Anti-condensation	5W heater
Limit switches	2 adjustable switches	Electrical connection	2 x P.E. M20x1.5
Auxiliary switches	2 adjustable dry switches		

Actuator	SA 05 / SA 09			SA 05 S	
Voltage	230V AC	24V AC/DC	12V DC	230V AC	24V AC/DC
Power (W)	6 W	15 W	6 W	6 W	6 W
Current (A)	0,23 / 0,25	1,8 / 2,1	3,2 / 3,4	0,23	1,8

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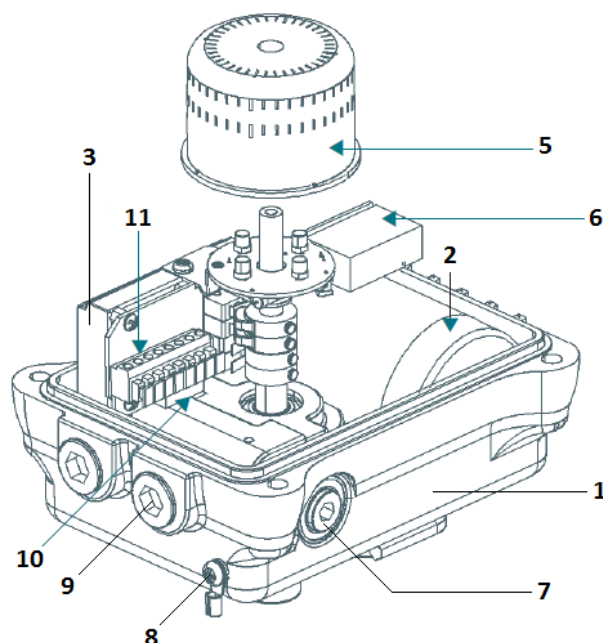
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SA 05 - SA 09 ELECTRIC ACTUATOR

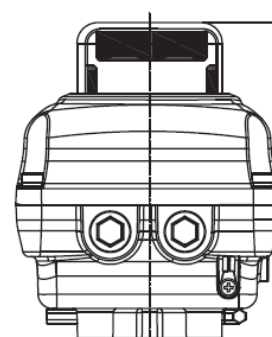
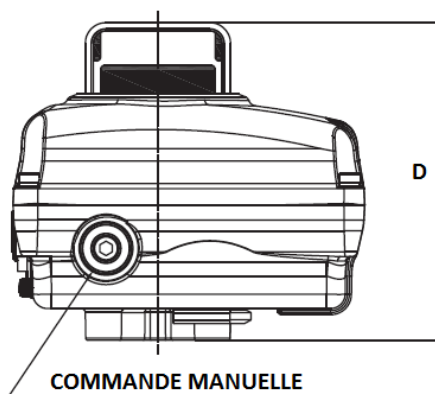
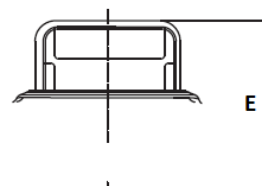
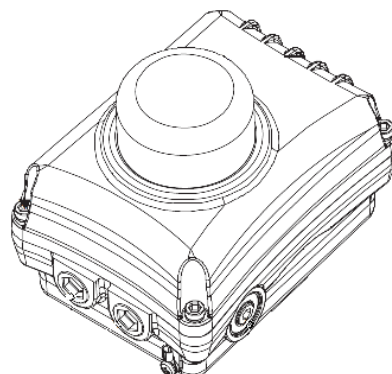
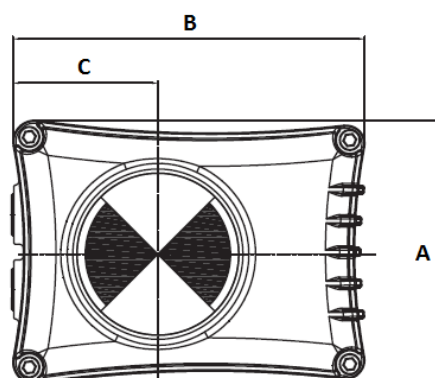
CONSTRUCTION

1	Housing	Polyester-coated aluminium
2	Electrical motor	
3	Gear box	Treated steel pinions
4	Cover	Polyester-coated aluminium
5	Position indicator	Polycarbonate plastic
6	Condenser	
7	Handle override	
8	Earthing	
9	Cable inlet	
10	Anti-condensation heater	
11	Terminal box	



DIMENSIONS (mm) AND WEIGHT (kg)

Dimensions (mm)	A	B	C	D	E	Weight (kg)
SA 05 / SA 09	127	170	70	153	80	3.2



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SA 05 - SA 09 ELECTRIC ACTUATOR

WIRING DIAGRAM 230V AC 50Hz/60Hz

1	common	CLS : Close Limit Switch (250VAC 3A) OLS : Open Limit Switch (250VAC 3A) ACLS : Aux Close Limit Switch (250VAC 3A) AOLS : Aux Open Limit Switch (250VAC 3A) TP : Thermal Protector (250VAC 3A) RM : Motor Regulation
2	anti-condensation heater	
3	closing command	
4	opening command	
5	closing auxiliary	
6	closing auxiliary	
7	opening auxiliary	
8	opening auxiliary	

WIRING DIAGRAM 24V AC/DC-12V DC

1	common or +	CLS : Close Limit Switch (250VAC 3A) OLS : Open Limit Switch (250VAC 3A) ACLS : Aux Close Limit Switch (250VAC 3A) AOLS : Aux Open Limit Switch (250VAC 3A) TP : Thermal Protector (250VAC 3A) RM : Motor Regulation
2	closing command	
3	opening command	
4	closing auxiliary	
5	opening auxiliary	
6	auxiliaries common	
7	anti-condensation heater power supply	
8	anti-condensation heater power supply	

OPTIONS

1	SA 05 / SA 09 X: version for ATEX zone
2	SA 05 / SA 09 PIU: version with feedback potentiometer
3	SA 05 / SA 09 CPT: version with position transmitter 4-20 mA
4	SA 05 / SA 09 PCU: version with adjustment card 0-10, 2-10V, 2-20 mA, 4-20 mA
5	SA 05 / SA 09 LCU: version with local control
6	SA 05 / SA 09 SCP: version with super capacitor safety

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SA 05 - SA 09 ELECTRIC ACTUATOR

SPARE PARTS

SA05 Electric actuator	
Gear box	
Printed circuit board	
Electrical motor	
Pinion	
https://www.sectoriel.com/fr/sa05-servomoteur-electrique-aluminium-1-4-tour-50-nm-on-off-ip67.html	

SA09 Electrical actuator	
Gear box	
Printed circuit board	
Electrical motor	
https://www.sectoriel.com/fr/sa09-servomoteur-electrique-aluminium-1-4-tour-90-nm-on-off-ip67.html	

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SA 05 - SA 09 ELECTRIC ACTUATOR

ASSEMBLING AND MAINTENANCE INSTRUCTIONS



SA05 - SA05S - SA09



SA05X - SA09X

1. DESCRIPTION

- 1.1 Electric actuator for motorising 90° turn valves.
- 1.2 The full features of this device are given in sheet FT23010 / FT23310.
- 1.3 Before operating this device, read the present instructions carefully.

2. GUARANTEE

- 2.1 Before any contact with our services, identify the type of actuator.
- 2.2 SECTORIEL actuators have a 12-month guarantee from the delivery date. Parts recognized as defective by an assessment at our facility, will be replaced at our expense. Complaints generated by incorrect use or a modification of the actuator cannot be taken into account.

3. VERIFICATIONS AND ACCEPTANCE

- 3.1 At acceptance, check that:
 - the packaging is in good condition;
 - the actuator is as ordered;
 - the equipment is not damaged.
- 3.2 It is recommended to install the actuator as soon as accepted and not to leave it unused. If the equipment has to be stored, it has to be in a dry place protected from weather.

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SA 05 - SA 09 ELECTRIC ACTUATOR

4. PRECAUTIONS FOR OPERATION

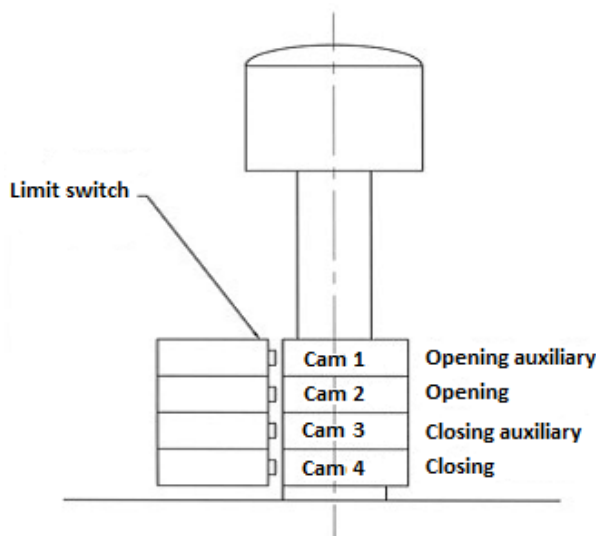
- 4.1 Before installing, make sure that the installation is completely depressurized and brought to ambient temperature.
- 4.2 In a zone classified as explosive, install only model SA05X / SA09X.
- 4.3 The protection class of the actuator is IP67 for indoors or outdoors installation. Do not install this actuator in a marine environment and do not immerse it.
- 4.4 The actuator must not be electrically powered during the installation and maintenance of the valve on the pipework, and of the actuator on the valve
- 4.5 Before proceeding to the electrical connection, check the supply voltage of the actuator.
- 4.6 Do not mount the actuator in series or in parallel with other electrical motors. If need be, use relays.
- 4.7 Do not mount the actuator on valves with higher torque than the nominal torque of the actuator.
- 4.8 The anti-condensation heater must be wired, indoors and outdoors, on special applications.

5. INSTALLATION AND OPERATION

- 5.1 Install the actuator on the valve (already done for units assembled in our workshops)
- 5.2 Perform the electrical wiring as shown in the diagram below.
- 5.3 Adjust the switch stops (already done for units assembled in our workshops).
- 5.4 View the valve's movement using the indicator light on the cover.
- 5.5 SA05 / SA09 and SA05X / SA09X actuator: to actuate the handle override, first disconnect the electrical power supply, then turn the hollow hex-head screw with an Allen key.
No handle override for SA05S.
- 5.6 SA05X actuator: the electrical connection must be carried out using an ATEX approved cable gland (CG) CG M20x1.5 which corresponds to the same operation zones as SA05X / SA09X.
SA05X has 2 connections M20x1.5. If using only one CG ATEX cable gland, the 2nd connection must be provided with an ATEX-approved plug which corresponds to the same operation zones as SA05X / SA09X.
CG and ATEX plug are not provided as standard. Option when ordering.

6. SWITCH SETTING

- 6.1 The cams are attached to the drive stem.
- 6.2 Clockwise rotation = valve closing. The micro-switch stops the actuator.
- 6.3 Anti-clockwise rotation = valve opening. The micro-switch stops the actuator.



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SA 05-X - SA 09-X ELECTRIC ACTUATOR

FEATURES

SA05-X - SA09-X electric actuators are intended for motorising 1/4 turn valves in hazardous areas. The torque are 50 Nm (SA05-X) and 90 Nm (SA09-X). The protection mode is a "d" explosion-proof. With a compact, robust construction and IP67 epoxy-coated aluminium housing, the SA05-X and SA09-X actuator are especially well suited for motorising ball valves and butterfly valves installed in hazardous areas. The SA05-X and SA09-X are equipped with a key-operated hand control and a 3D visual position indicator. It is compliant with the EN 15714-2 standard.

AVAILABLE MODELS

Supply voltages: 230V AC (50-60Hz), 24V AC/DC.

LIMITS OF USE

IP Code	IP 67
Ambient temperature	- 20°C / +55°C
Service factor	S2 : 15mn - S4 : 50%



ATEX APPROVAL

Protection mode	"d" according to the EN 60079-1 standard
Category of material	2
Operation zones	1G and 2G
Marking	II 2 G Ex d IIB T4 (ON KEMA no. 0344)



MECHANICAL FEATURES

Gear box	treated steel pinions
Torque	50 Nm (SA05-X) / 90 Nm (SA09-X)
Angle of rotation	90° +/- 5°
Declutching	Without
Override control	By key

Actuator	SA05-X (50Hz)		SA05-X (60Hz)	SA09-X (50Hz)	SA09-X (50Hz)	SA09-X (60Hz)
Voltage	230V AC	24V AC/DC	230V AC	230V AC	24V AC/DC	230V AC
Torque (Nm)	50		50	90		90
Manoeuvring time (s)	17	10	14	36	17	30
ISO 5211	F03/F05/F07 star 14					

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SA 05-X - SA 09-X ELECTRIC ACTUATOR

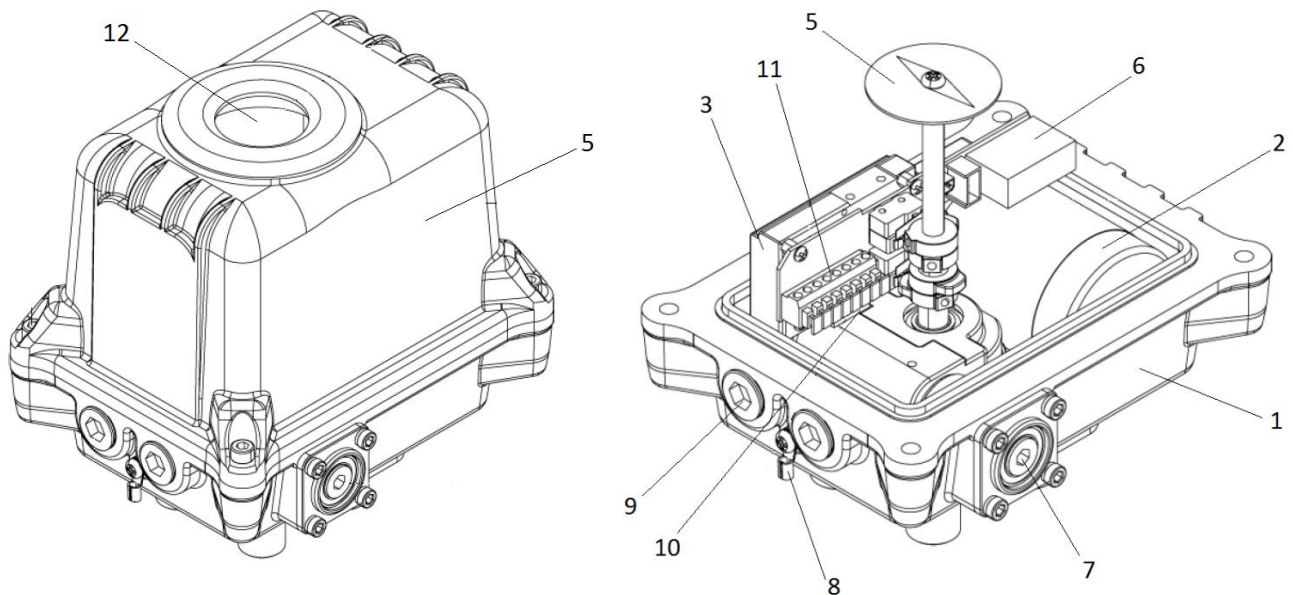
ELECTRICAL FEATURES

Motor protection	Thermal switch	Anti-condensation	5W heater
Limit switches	2 adjustable switches	Electrical connection	2 x C.G. M20x1.5 ATEX (NOT SUPPLIED on option)
Auxiliary switches	2 adjustable dry switches		

Actuator	SA05 X		SA09 X	
Voltage	230V AC	24V AC/DC	230V AC	24V AC/DC
Power (W)	6 W	15 W	6 W	15 W
Current (A)	0.23	1.8	0.19	1.8

CONSTRUCTION

1	Housing	Polyester-coated aluminium
2	Electrical motor	
3	Gear box	Treated steel pinions
4	Cover	Polyester-coated aluminium
5	Position indicator	Polycarbonate plastic
6	Condenser	
7	Handle override	
8	Earthing	
9	Cable inlet	
10	Anti-condensation heater	
11	Terminal box	
12	Indicator light	Toughened glass



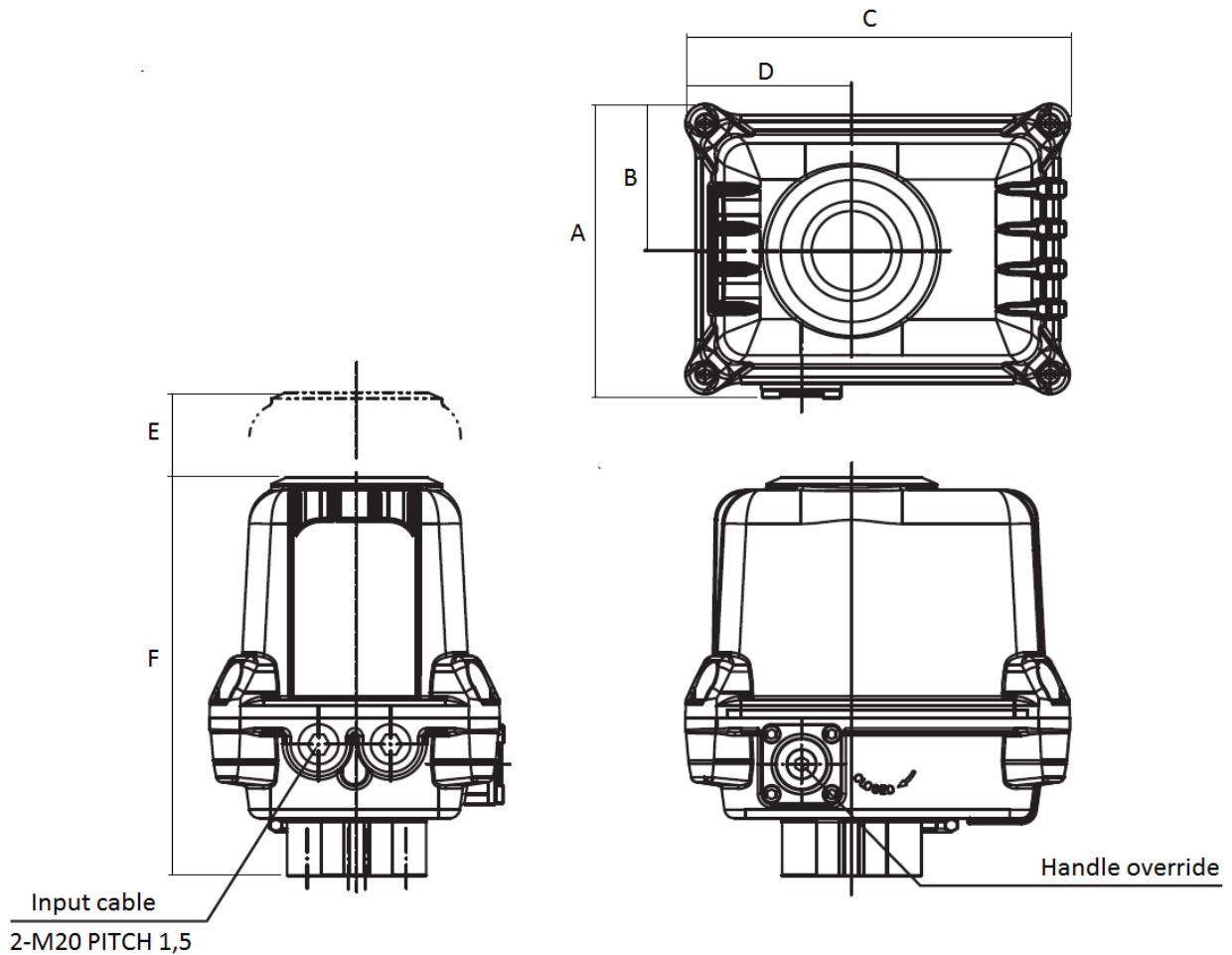
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SA 05-X - SA 09-X ELECTRIC ACTUATOR

DIMENSIONS (mm) AND WEIGHT (kg)

Dimensions (mm)	A	B	C	D	E	F	Weight (kg)
SA05-X / SA09-X	147	73	193	83	100	199	5

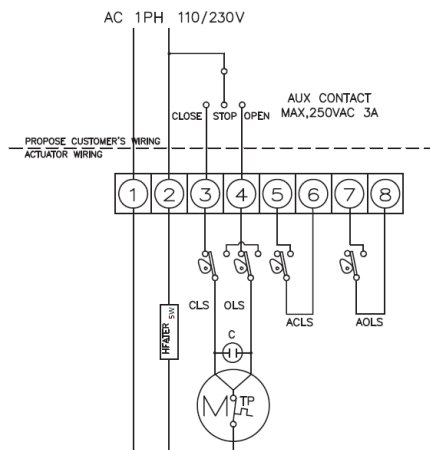


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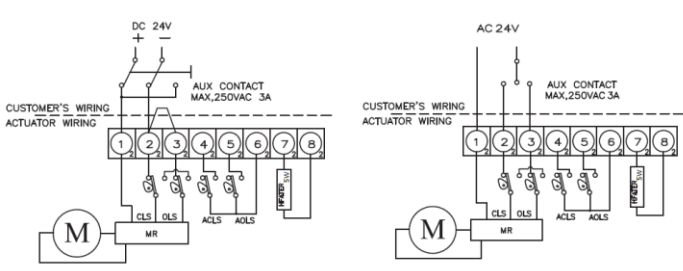
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SA 05-X - SA 09-X ELECTRIC ACTUATOR

WIRING DIAGRAM 230V AC 50Hz/60Hz

1	common	CLS : Close Limit Switch (250VAC 3A) OLS : Open Limit Switch (250VAC 3A) ACLS : Aux Close Limit Switch (250VAC 3A) AOLS : Aux Open Limit Switch (250VAC 3A) TP : Thermal Protector (250VAC 3A) RM : Motor Regulation 
2	anti-condensation heater	
3	closing command	
4	opening command	
5	closing auxiliary	
6	closing auxiliary	
7	opening auxiliary	
8	opening auxiliary	

WIRING DIAGRAM 24V AC/DC

1	common or +	CLS : Close Limit Switch (250VAC 3A) OLS : Open Limit Switch (250VAC 3A) ACLS : Aux Close Limit Switch (250VAC 3A) AOLS : Aux Open Limit Switch (250VAC 3A) TP : Thermal Protector (250VAC 3A) RM : Motor Regulation 
2	closing command	
3	opening command	
4	closing auxiliary	
5	opening auxiliary	
6	auxiliaries common	
7	anti-condensation heater power supply	
8	anti-condensation heater power supply	

OPTIONS

1	SA 05 X / SA 09 PIU : version with feedback potentiometer
2	SA 05 X / SA 09 X CPT : version with position transmitter 4-20 mA
3	SA 05 X / SA 09 PCU : version with adjustment card 0-10, 2-10V, 2-20 mA, 4-20 mA

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SA 05-X - SA 09-X ELECTRIC ACTUATOR

SPARE PARTS

SA05-X / SA09-X Electric actuator	
Gear box	
Printed circuit board	
Pinion (SA05-X)	
Electrical motor	
https://www.sectoriel.com/fr/sa05x-servomoteur-electrique-atex-1-4-tour-50-nm-on-off-ip67.html	

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SA 05-X - SA 09-X ELECTRIC ACTUATOR

ASSEMBLING AND MAINTENANCE INSTRUCTIONS



SA05 - SA05S - SA09



SA05X - SA09X

1. DESCRIPTION

- 1.1 Electric actuator for motorising 90° turn valves.
- 1.2 The full features of this device are given in sheet FT23010 / FT23310.
- 1.3 Before operating this device, read the present instructions carefully.

2. GUARANTEE

- 2.1 Before any contact with our services, identify the type of actuator.
- 2.2 SECTORIEL actuators have a 12-month guarantee from the delivery date. Parts recognized as defective by an assessment at our facility, will be replaced at our expense. Complaints generated by incorrect use or a modification of the actuator cannot be taken into account.

3. VERIFICATIONS AND ACCEPTANCE

- 3.1 At acceptance, check that:
 - the packaging is in good condition;
 - the actuator is as ordered;
 - the equipment is not damaged.
- 3.2 It is recommended to install the actuator as soon as accepted and not to leave it unused. If the equipment has to be stored, it has to be in a dry place protected from weather.

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SA 05-X - SA 09-X ELECTRIC ACTUATOR

4. PRECAUTIONS FOR OPERATION

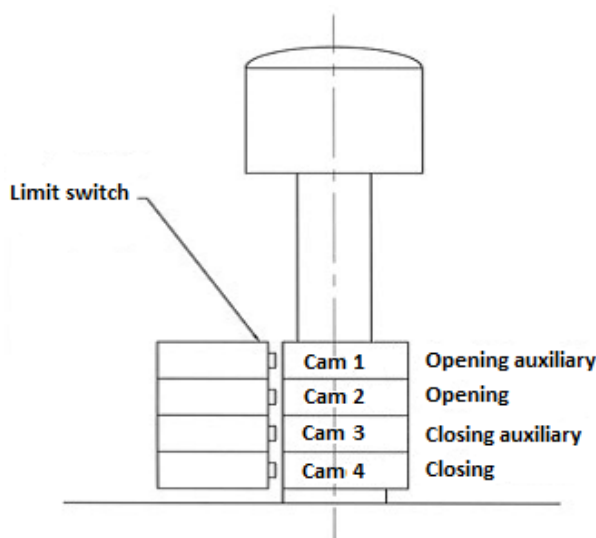
- 4.1 Before installing, make sure that the installation is completely depressurized and brought to ambient temperature.
- 4.2 In a zone classified as explosive, install only model SA05X / SA09X.
- 4.3 The protection class of the actuator is IP67 for indoors or outdoors installation. Do not install this actuator in a marine environment and do not immerse it.
- 4.4 The actuator must not be electrically powered during the installation and maintenance of the valve on the pipework, and of the actuator on the valve
- 4.5 Before proceeding to the electrical connection, check the supply voltage of the actuator.
- 4.6 Do not mount the actuator in series or in parallel with other electrical motors. If need be, use relays.
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