

# 513-514 VALVES WITH SA 03 ELECTRIC ACTUATOR

## FEATURES

The 513+SA03 L-port and 514+SA03 T-port stainless steel 3-way ball valves are dedicated to the mixing, diverting or automatic discharging of industrial unloaded fluids. It is a reduced bore ball valve. With EC and the French ACS certification, it is suitable for drinking water applications. The ISO 5211 pad allows a direct mounting of the SA actuator. It is perfectly suitable for an indoor or outdoor industrial use.

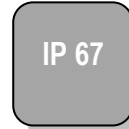
## AVAILABLE MODELS

Brass body - reduced bore.

Diameters 1/4" to 1".

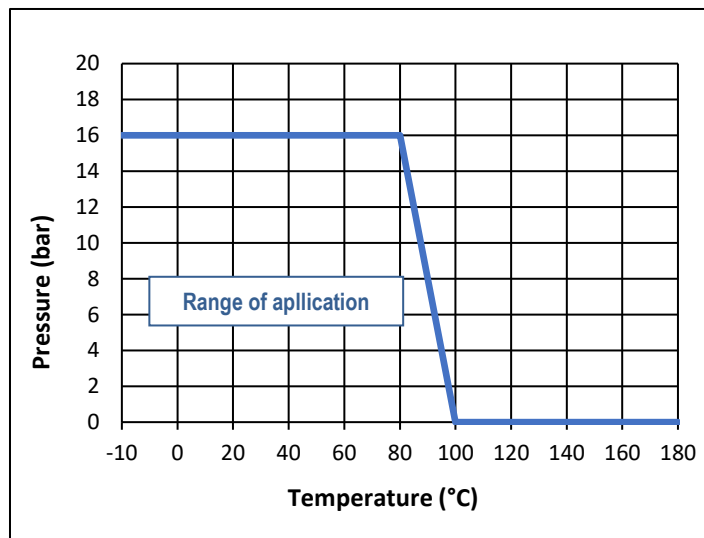
BSP threaded connections.

**Supply voltages** : 24 Vdc, 24 Vac and 230 Vac.



## LIMITS OF USE

<b>Fluid pressure: PS</b>	16 bar
<b>Fluid temperature: WT</b>	- 10°C / +100°C
<b>Ambient temperature</b>	- 20°C / + 70°C
<b>Service factor</b>	<b>S2</b> : 15 minutes / <b>S4</b> : 50%



## DIRECTIVES AND MANUFACTURING STANDARDS

OBJET	Standard	ON	OBJET	Standard
Pressure Equipment Directive 2014/68/EC	<b>1/4" to 1"</b> : not subject		Connection Motorisation	ISO 5211
	<b>1"1/4 to 2"</b> : category II	PASCAL 1115		
Operates on drinking water	ACS	CARSO		

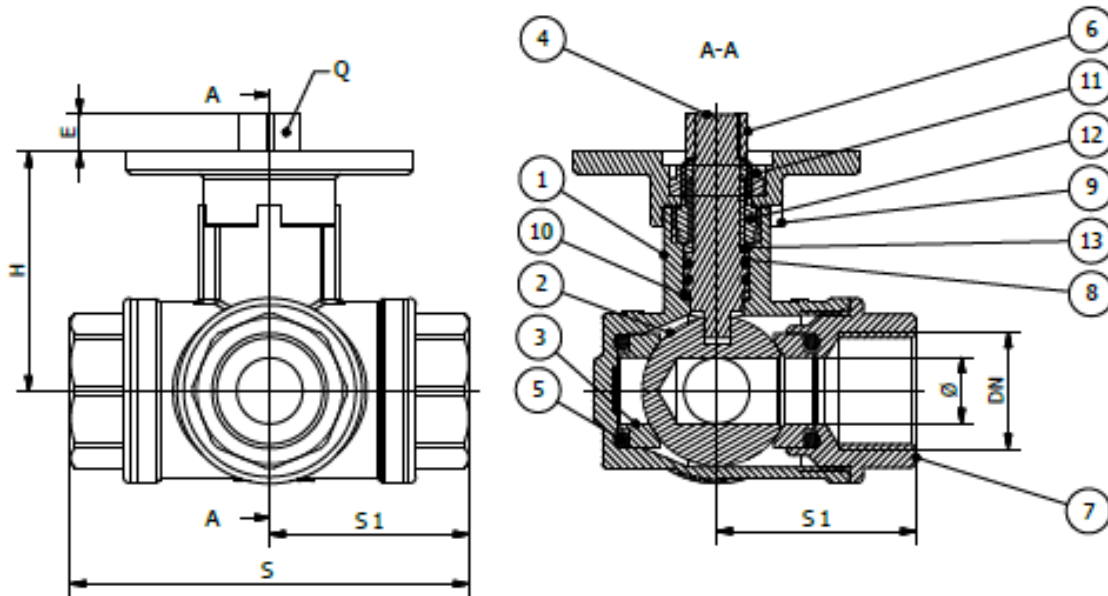
Information given as an indication only, and subject to possible modifications



# 513-514 VALVES WITH SA 03 ELECTRIC ACTUATOR

## CONSTRUCTION

No.	Name	Material	No.	Name	Material
1	Body	CW 617N brass	8	O-ring	FPM
2	Ball	CW 614N brass	9	ISO 5211 mounting pad	CW 617N brass
3	Seat	PTFE	10	Anti-friction washer	PTFE
4	Stem	CW 614N brass	11	Nut	CW 614N brass
5	O-ring	FPM	12	Nut	CW 614N brass
6	Square shank	CW 614N brass	13	Anti-friction bearing	PTFE
7	End	CW 617N brass			



## DIMENSIONS (mm)

DN	1/4"	3/8"	1/2"	3/4"	1"	1"1/4	1"1/2	2"
S	76	76	82	90	106	120	142	165
S1	38	38	41	45	53	60	71	82,5
Ø	10	10	10	15	20	25	32	40
P	18	18	17	18,5	20	23,5	28,5	32
H	50,5	50,5	50,5	53,5	63	67	73	80
E	8	8	8	10	10	12	12	12
Q	11	11	11	11	11	14	14	14
ISO	F05	F05	F05	F05	F05	F05/F07	F05/F07	F05/F07

Information given as an indication only, and subject to possible modifications



# 513-514 VALVES WITH SA 03 ELECTRIC ACTUATOR

## SA 03 ELECTRICAL MOTORIZATION

Suggested standard SA actuation under the following conditions:

- Electric actuator with an IP 67 epoxy coated aluminium enclosure and steel gears,
  - A minimum 1.3 safety factor compared with the valve nominal torque rating,
  - A maximum pressure differential up/downstream of 10 bar (=ΔP),
- Direct mounting of the electric actuator.

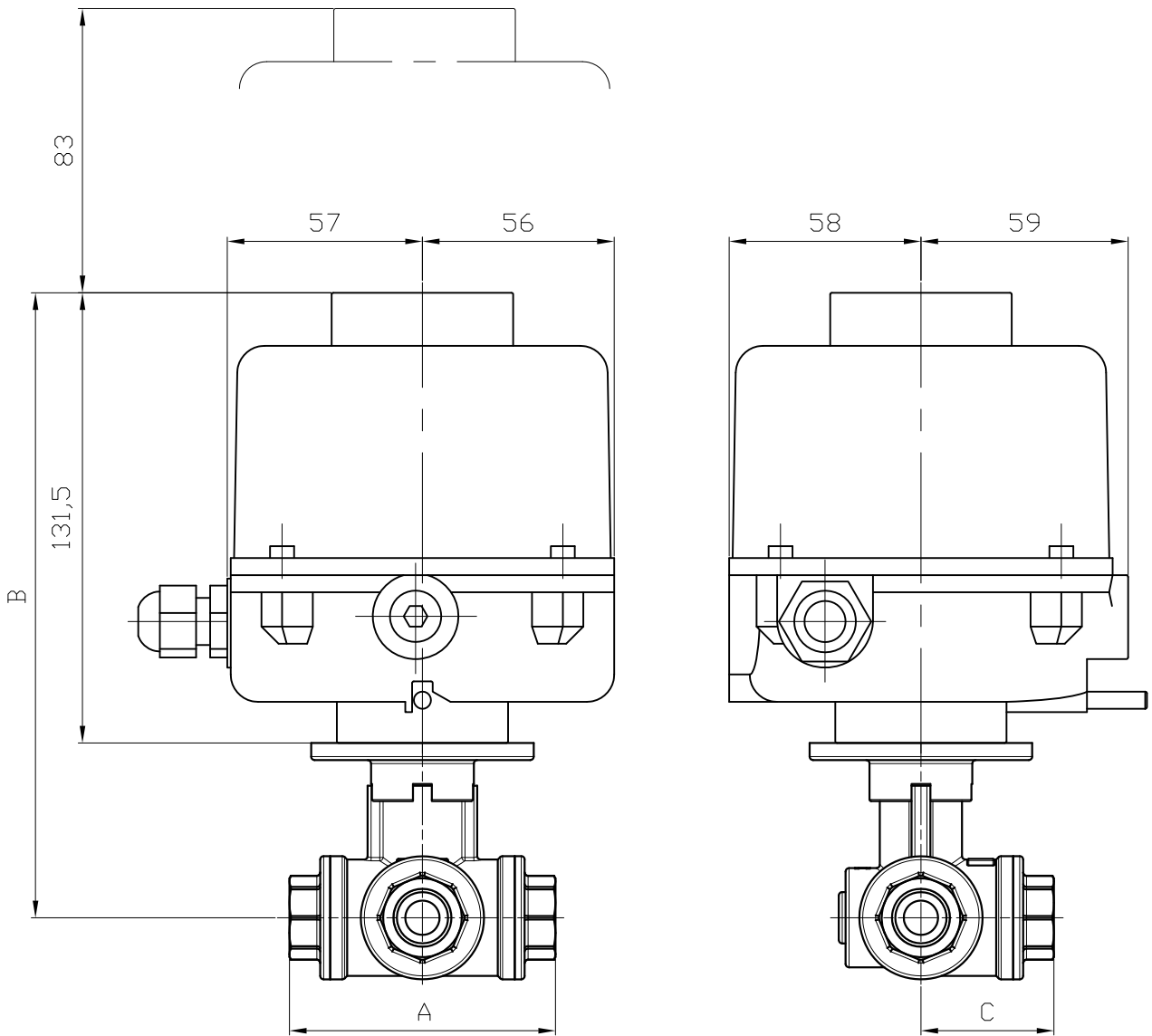
DN	Actuator	Power	Intensity 230V AC	Intensity 24V AC-DC	Time*	Standard equipment of the actuator	
1/4"	SA 03	3 W	0,8 A	0,8 A	8 s	2 adjustable limit switches 2 dry auxiliary switches 2 W anti-condensation heater Actuator thermal cut-out Declutching by lever Manual override by key Backlit position indicator <b>Electrical connection:</b> 1 gland pack. M20x1.5	
3/8"	SA 03	3 W	0,8 A	0,8 A	8 s		
1/2"	SA 03	3 W	0,8 A	0,8 A	8 s		
3/4"	SA 03	3 W	0,8 A	0,8 A	8 s		
1"	SA 03	3 W	0,8 A	0,8 A	8 s		
1"1/4	See 513-514 + SA 05						
1"1/2							
2"							

For any other operating conditions, please contact us.

\* indicative time for actuator running empty

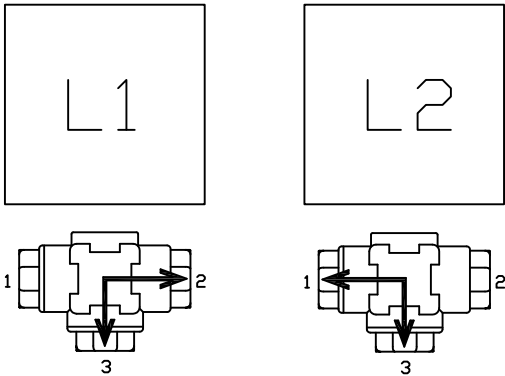
Information given as an indication only, and subject to possible modifications





DN	1/4"	3/8"	1/2"	3/4"	1"
A	76	78	82	90	106
B	182	182	182	185	194.5
C	38	39	41	45	53
KG	2.28	2.28	2.28	2.43	2.95

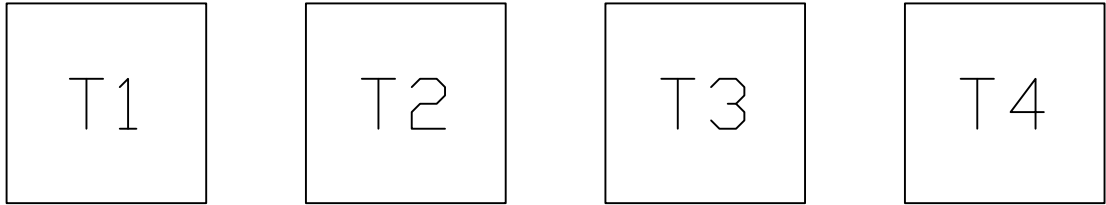
# PERÇAGE EN L



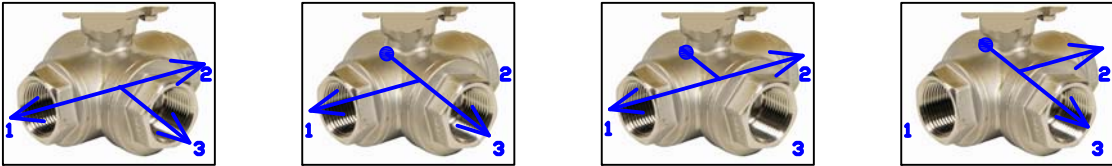
Les flèches indiquent les voies en communication

# PERÇAGE EN T

Pour commander indiquer 2 positions successives



CORPS DU ROBINET



SPHERE DU ROBINET



Les flèches indiquent les voies en communication

# SA 03 ELECTRIC ACTUATOR

## FEATURES

The SA03 electric actuator is intended for motorising under on/off operation the 1/4 turn valves with a torque of at most 30 Nm. With a compact construction and epoxy-coated aluminium housing, it is especially well suited for motorising small diameter ball valves. Backlit dome position indicator. IP67 leak-tightness: it can be used both indoors and outdoors. Compliant with the EN 15714-2 standard.

## AVAILABLE MODELS

**Supply voltages:** 230V AC and 24V AC/DC

## LIMITS OF USE

IP Code	IP 67
Ambient temperature	- 20°C / + 70°C
Service factor	<b>S2</b> : 15 minutes / <b>S4</b> : 50%



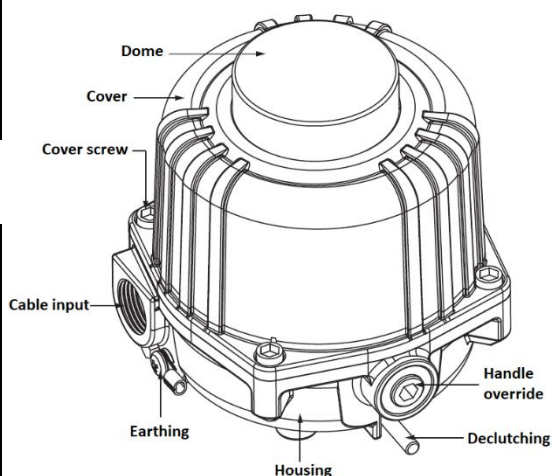
## MECHANICAL FEATURES

Gear box	treated steel pinions	
Torque	30 Nm	
Angle of rotation	90° +/- 5°	
Manoeuvring time	24V AC/DC	230V AC
	<b>AC</b> : 9 s / <b>DC</b> : 7 s	12 s
ISO 5211	F03 / F05 star 11	
Declutching	key-controlled	
Override control	using a 6 mm hex key	
Weight	1.5 kg	



## ELECTRICAL FEATURES

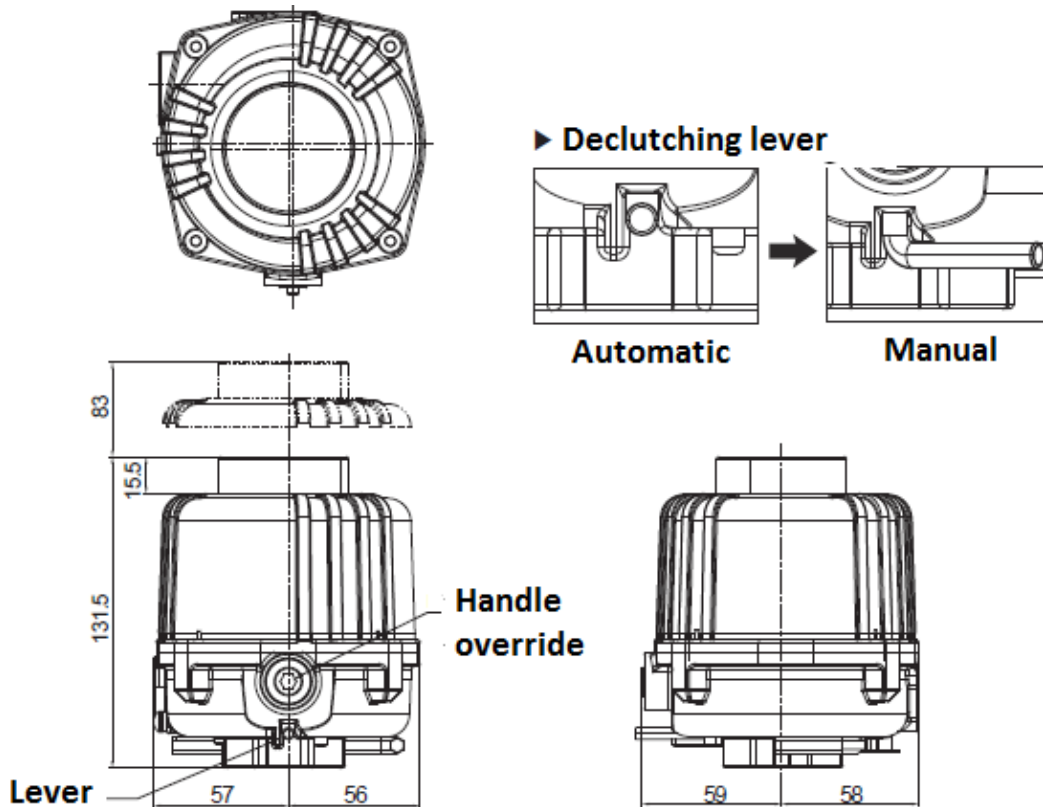
Power	18 W	
Current	24V AC/DC	230V AC
	0.8 A	0.1 A
Motor protection	thermal	
Limit switches	2 adjustable switches	
Auxiliary switches	2 adjustable dry switches 250V AC 5A	
Anti-condensation	2x1.5W heater	
Electrical connection	2 x M20 x 1.5 (one PE and one plug provided)	



Information given as an indication only, and subject to possible modifications

# SA 03 ELECTRIC ACTUATOR

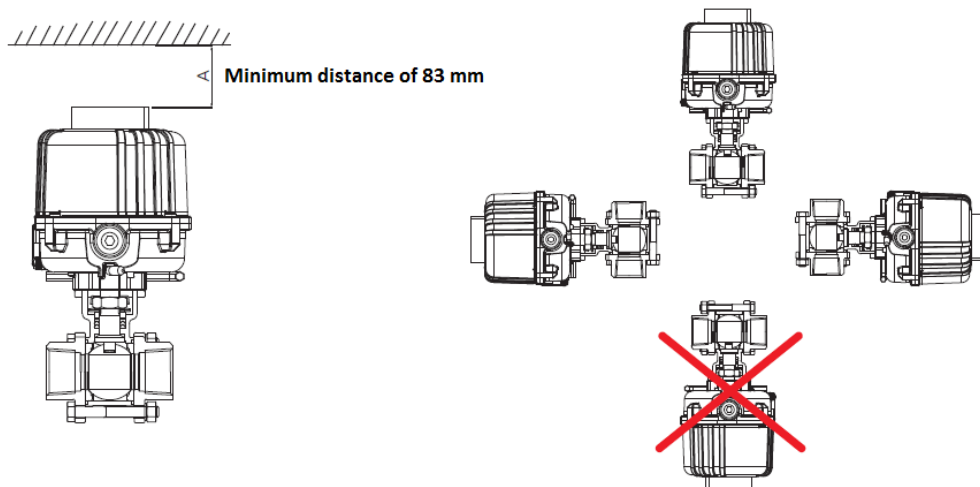
## DIMENSIONS (mm)



## CONSTRUCTION

No.	Item	Material
1	Housing	Epoxy-coated aluminium alloy
2	Cover	Epoxy-coated aluminium alloy
3	Cover screw	Stainless steel
4	Dome	polycarbonate

## ASSEMBLY POSITIONS



Information given as an indication only, and subject to possible modifications

# SA 03 ELECTRIC ACTUATOR

---

## GUARANTEE

Before any contact with our services, identify the type of actuator.

SECTORIEL actuators have a 12-month guarantee from the delivery date. The parts admitted as faulty 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.

## VERIFICATIONS AND ACCEPTANCE

At acceptance, check that:

- the packaging is in good condition,
- the actuator is as ordered,
- the equipment is not damaged.

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 must be in a dry place protected from weather.

## PRECAUTIONS FOR OPERATION

Before installing, make sure that the installation is completely depressurized and brought to ambient temperature.

Do not install this actuator in a zone classified as explosive (ATEX).

The IP Code of the actuator is IP67 for interior or exterior mounting. Do not install this actuator in a marine environment and do not immerse it.

The actuator must not be powered during installation and maintenance of the valve on the pipework, and of the actuator on the valve.

Before proceeding to the electrical connection, check the supply voltage of the actuator.

Do not mount the actuator in series or in parallel with other electrical motors. If need be, use relays.

Do not mount the actuator on valves with higher torque than the nominal torque of the actuator.

## INSTALLATION AND OPERATION

Install the actuator on the valve (already done for the units assembled in our workshops)

Perform the electrical wiring as shown on the diagram below

Adjust the switch stops (already done for the units assembled in our workshops).

View the movement of the valve using the indicator light on the cover.

SA03 actuator: to use the manual override, first disconnect the electrical power, then turn the hollow hex-head screw with a hex key.

**Reposition the manual override after use.**

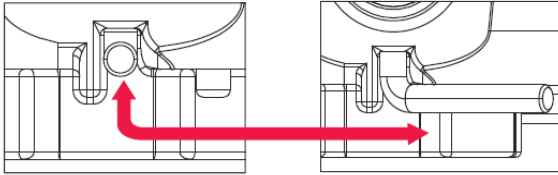
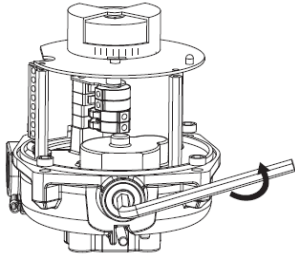
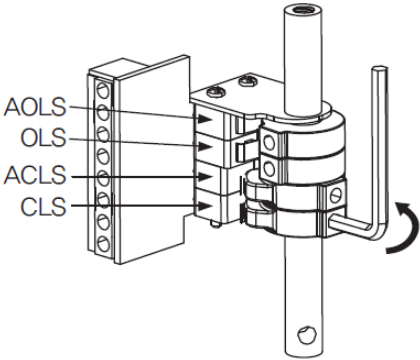
Information given as an indication only, and subject to possible modifications



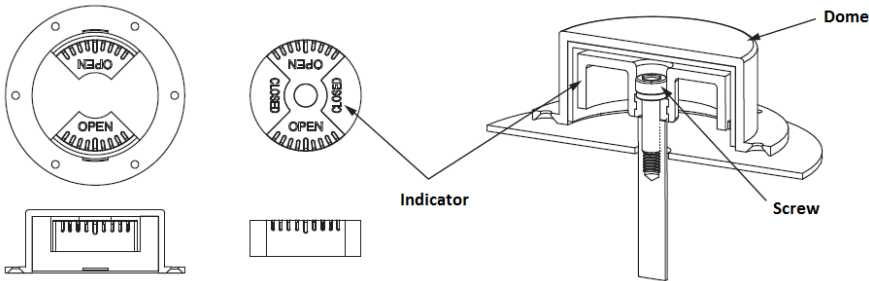


# SA 03 ELECTRIC ACTUATOR

## SWITCH SETTING

<p>1. Switch the actuator to manual mode</p>	<p>2. Turn the key to bring the valve, successively, in the open and closed positions, and to set the switches as shown below.</p>								
 <p style="text-align: center;">Auto                      Manual</p>									
	<p>The cams are attached to the drive stem</p> <p>Clockwise rotation = valve closing. The micro-switch stops the actuator.</p> <p>Anti-clockwise rotation = valve opening. The micro-switch stops the actuator.</p> <table border="1" data-bbox="858 947 1471 1113"> <tr> <td>CLS</td> <td>Closing switch</td> </tr> <tr> <td>OLS</td> <td>Opening switch</td> </tr> <tr> <td>ACSL</td> <td>Auxiliary closing switch</td> </tr> <tr> <td>OCSL</td> <td>Auxiliary opening switch</td> </tr> </table>	CLS	Closing switch	OLS	Opening switch	ACSL	Auxiliary closing switch	OCSL	Auxiliary opening switch
CLS	Closing switch								
OLS	Opening switch								
ACSL	Auxiliary closing switch								
OCSL	Auxiliary opening switch								

## SETTING THE POSITION INDICATOR

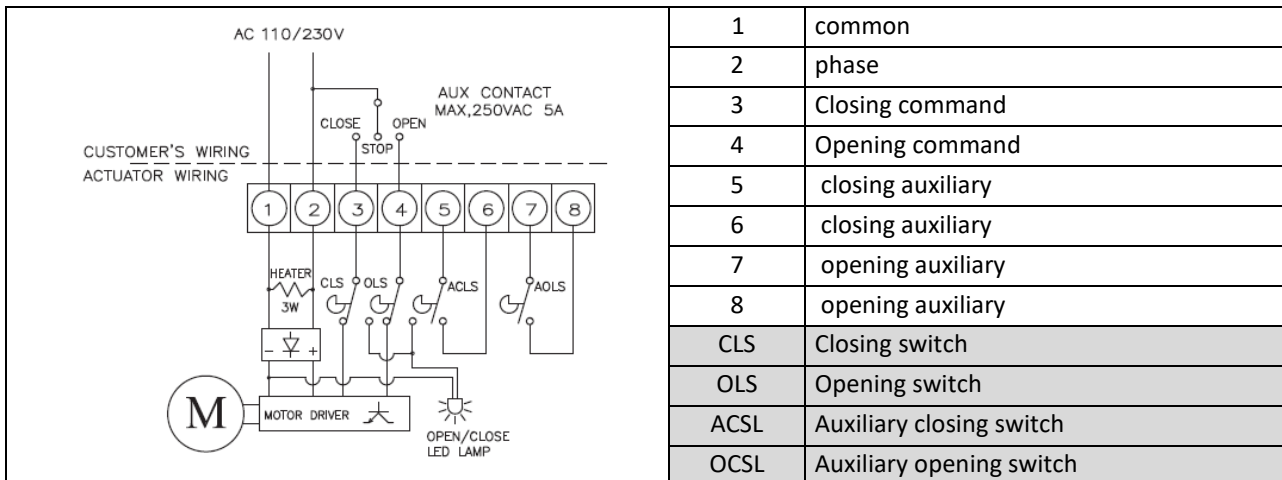
	<p>The position of the valve is indicated by the indicator. If its alignment is incorrect, remove the cover and proceed to its setting by unscrewing the attachment screw.</p>
--	--

Information given as an indication only, and subject to possible modifications

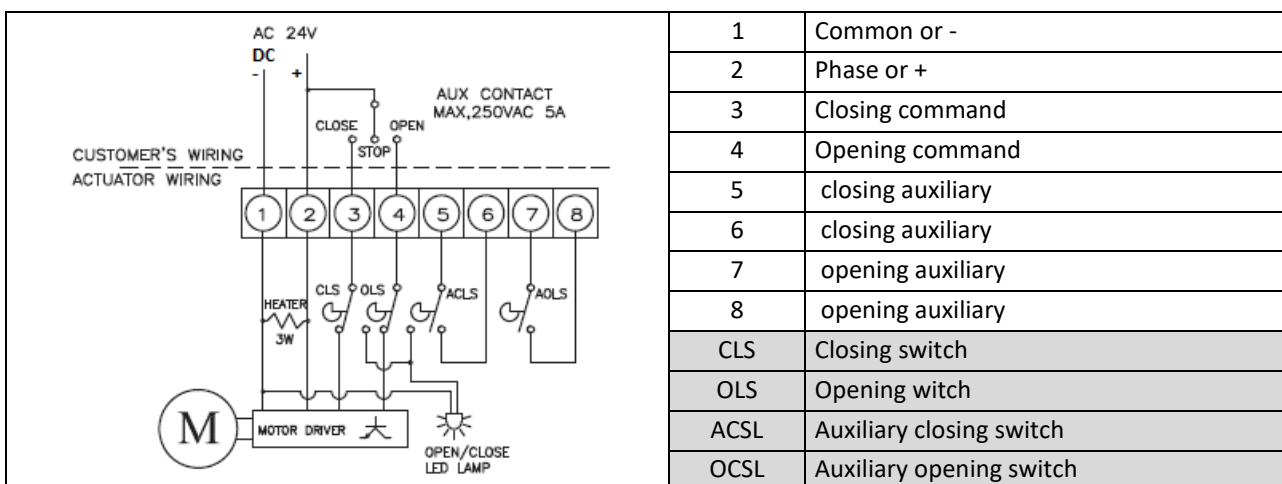
# SA 03 ELECTRIC ACTUATOR

## ELECTRICAL WIRING

### Wiring for 110/230V AC voltages



### Wiring for 24V AC/DC voltages



Information given as an indication only, and subject to possible modifications