

#### **GENERAL CHARACTERISTICS**

The SA03 electric actuator is dedicated to the actuation of ¼ turn valve. The maximum torque value is 30 Nm. With a compact design, a cast aluminium enclosure with an epoxy protection, it is especially adapted to the actuation of small diameter valves. It is equipped with a backlit position indicator. Protection IP67: can be used indoor or outdoor. The SA03 complies with the EN 15714-2 standard.

#### **AVAILABLE ITEMS**

Voltage: 230 V AC, 24 V AC, 24 V DC

# IP 67

#### **LIMITS OF USE**

Protection rating	IP 67
Temperature range	-20 °C / +70 °C
Service	S2 - 15 minutes / S4 - 70%

#### **MECHANICAL CHARACTERISTICS**

Gears	Treated steel pinions		
Torque	30 Nm		
Rotation angle	90° +/- 5°		
Operating time	24 V DC	24 V AC	230 V AC
	7 s	9 s	12 s
ISO 5211 pad	F03/F05 star 11		
Declutching	Declutching key		
Manual override	6mm Allen key		
Weight	1.5 kg		

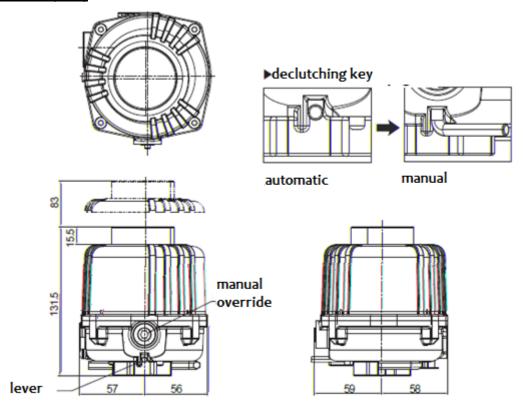
#### **ELECTRICAL CHARACTERISTICS**

Power	3 W		
Intensity	24 V DC	24 V AC	230 V AC
	0.8 A	1 A	0.1 A
Motor Protection	Thermal cut-out		
Limit switches	2 adjustable switches		
Auxiliary switches	2 dry adjustable switches 250 V AC 5 A		
Anti-condensation	Heater 2x1.5 W		
Electrical connection	2 x M20 x 1.5 (supplied with 1 cap and 1 gland pack)		





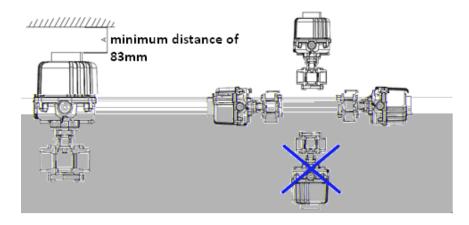
### **DIMENSIONS (mm)**



#### **CONSTRUCTION**

#	Item	Material
1	Enclosure	Epoxy coated aluminium alloy
2	Cover	Epoxy coated aluminium alloy
3	Cover screws	Stainless steel
4	Dome	Polycarbonate

# **ASSEMBLY POSITIONS**







#### **WARRANTY**

Before contacting us, please make sure to identify the type of actuator.

The actuators are guaranteed 12 months after the delivery date. The defective pieces, after our expertise, will be replaced at our own expense. We will not accept any claim of damage caused by a wrong use or modification of the actuator.

#### **CHECK UPON DELIVERY**

When delivered, please check:

- The quality of the package
- The conformity of the actuator to the ordered one
- The possible damages

It is recommended to install the electric actuator right after the delivery and not to leave it without using it. If the device is stored, it has to be in a dry and sheltered place.

#### **PRECAUTIONS FOR USE**

Before installation, please check that the device is depressurized and at room temperature.

Do not install in an explosive area.

For an indoor and an outdoor installation, the actuator protection class is IP 67. Do not immerse the actuator nor install it in a marine environment.

Do not connect the actuator to the electricity supply during the installation or during the maintenance of the valve on the pipe or of the actuator on the valve.

Check the input voltage of the actuator before connecting.

Do not connect the actuator in parallel or in series with others. If necessary, use relays.

Do not install the actuator on valves with a higher rating than the nominal torque of the actuator.

#### **INSTALLATION AND USE**

Mount the actuator on the valve (already done for actuated valve provided by ourselves).

Connect as indicated on the below electrical wiring scheme.

Adjust the limit switches (already done for actuated valve provided by ourselves).

Check the valve movement using the dome located on top of the cover.

#### **Emergency manual override:**

Please, before using the emergency manual override, disconnect the power supply and declutch the motor with the declutching key. Then, rotate the hexagonal drive thanks to the corresponding Allen key. Reposition the declutching key after use.

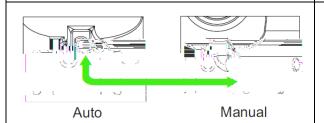




#### **LIMIT SWITCHES ADJUSTMENT**

1. Switch the electric actuator to manual mode (using the declutching key)

2. Use the Allen key to open and close the valve and to adjust the limit switches as indicated below

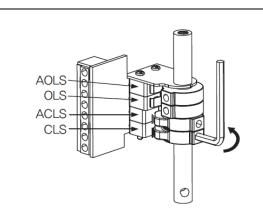


The cams are attached on the drive shaft

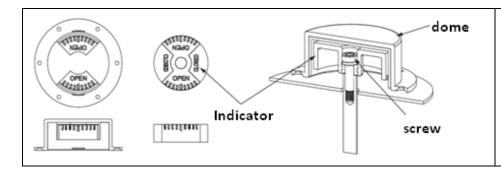
Clockwise rotation = closing of the valve. The microswitch stops the electric actuator.

Anti-clockwise rotation = opening of the valve. The micro-switch stops the electric actuator.

CLS	Closing contact
OLS	Opening contact
ACSL	Auxiliary closing contact
OCSL	Auxiliary opening contact



#### **POSITION INDICATOR ADJUSTMENT**

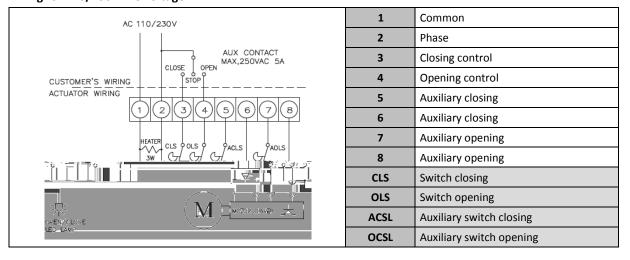


The valve position is shown by the indicator. If it is not aligned correctly, remove the cover and adjust it by unscrewing the fixing screw.

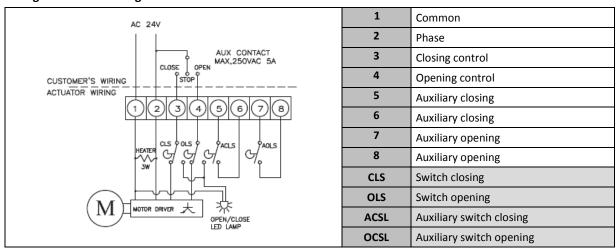


#### **ELECTRICAL WIRING**

#### Wiring for 110/230 V AC voltage



#### Wiring for 24 V AC voltage



#### Wiring for 24 V DC voltage

