







1	Position indicator
1	Position indicator
2	Condenser
3	Terminal box
4	Micro-switch
5	Housing
6	Connection plate
7	Drive spindle
8	Window
9	Motor
10	Anti-condensation heater
11	Wheel
12	Coupling
13	Manual lever
14	pinion and worm drive

## 1. DESCRIPTION

- **1.1** Electric actuator for motorising 90° turn valves.
- **1.2** The full features of this device are given in sheet FT23110.
- **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 as of the delivery date. The 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.



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### 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..

### **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 NAX.
- **4.3** The protection class of the actuator is IP67 for an 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 pipe installation, 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.

### **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 through the cover's window.
- **5.5** The NA/NAX actuator can be declutched and re-clutched under tension and to select the manual control, first actuate the lever 13, intended for this purpose, then turn the wheel of the manual control 11.
- **5.6** NA-X actuator: the electrical connection has to be made through the ATEX-approved cable gland (CG) CG M20x1.5

which corresponds to the same operation zones as NA-X.

NA-X has 2 connections M20x1.5. If only one ATEX cable gland is used, the 2nd connection must have an ATEX-approved plug corresponding to the same operation zones as NA-X.

CG and ATEX plug are not provided as standard. Option upon 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 closes the actuator.

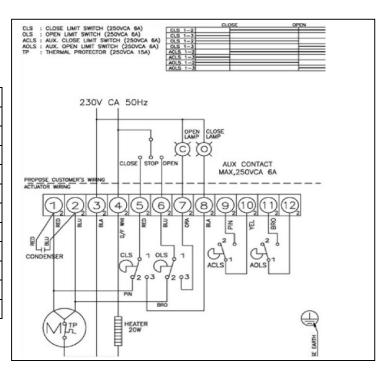


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## 7. WIRING DIAGRAM

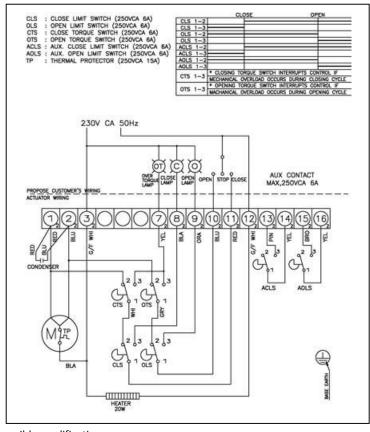
Wiring for 230V 50Hz voltage (NA06-NA09)

1	Do not use
2	Do not use
3	Common
4	phase
5	Closing command
6	Opening command
7	Opening indicator light (suggestion)
8	Closing indicator light (suggestion)
9	Closing auxiliary
10	Closing auxiliary
11	Opening auxiliary
12	Opening auxiliary



## Wiring for 230V 50Hz voltage (other models)

1	Do not use
2	Do not use
3	Common
7	Overheating indicator light (suggestion)
8	Closing indicator light (suggestion)
9	Opening indicator light (suggestion)
10	Opening command
11	Closing command
12	phase
13	Closing auxiliary
14	Closing auxiliary
15	Opening auxiliary
16	Opening auxiliary

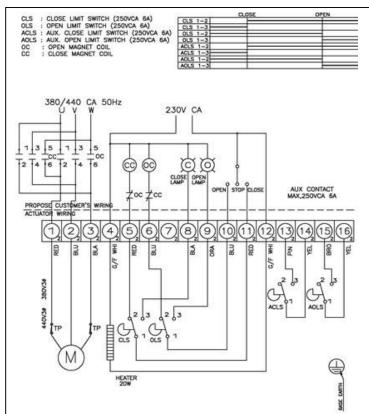




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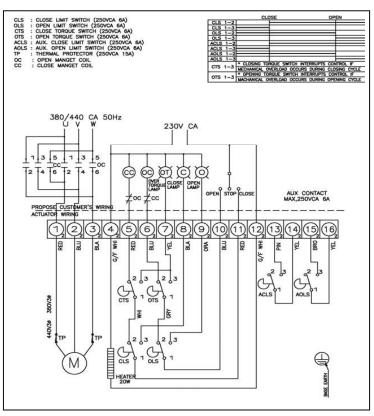
## Wiring for 380V 50Hz voltage (NA06-NA09)

1	U phase
2	V phase
3	W phase
4	Heater power supply
5	Connected to the closing 11
6	Connected to the opening 10
7	Not used
8	Closing indicator light (suggestion)
9	Opening indicator light (suggestion)
10	Opening command
11	Closing command
12	Heater power supply
13	Closing auxiliary
14	Closing auxiliary
15	Opening auxiliary
16	Opening auxiliary



## Wiring for 380V 50Hz voltage (other models)

1	U phase
2	V phase
3	W phase
4	Heater power supply
5	Connected to the closing 11
6	Connected to the opening 10
7	Overheating indicator light (suggestion)
8	Closing indicator light (suggestion)
9	Opening indicator light (suggestion)
10	Opening command
11	Closing command
12	Heater power supply
13	Closing auxiliary
14	Closing auxiliary
15	Opening auxiliary
16	Opening auxiliary

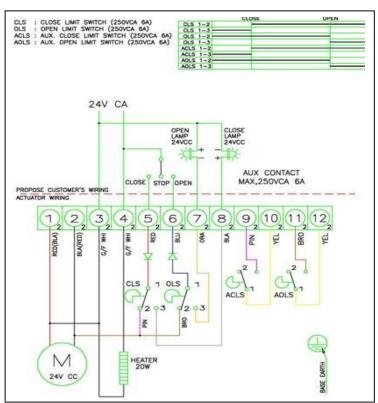




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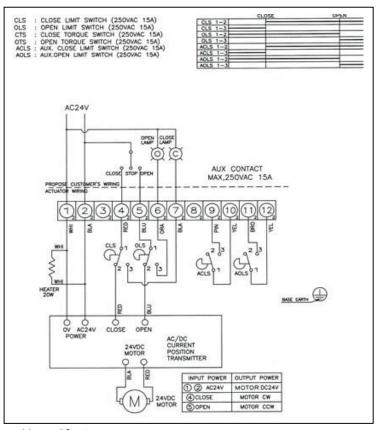
### Wiring for 24V 50Hz voltage (NA06-NA09)

1	Do not use
2	Do not use
3	Common
4	phase
5	Closing command
6	Opening command
7	Opening indicator light (suggestion)
8	Closing indicator light (suggestion)
9	Closing auxiliary
10	Closing auxiliary
11	Opening auxiliary
12	Opening auxiliary



## Wiring for 24V 50Hz voltage (other models)

1	Common
2	phase
3	Not used
4	Closing command
5	Opening command
6	Opening indicator light (suggestion)
7	Closing indicator light (suggestion)
8	Not used
9	Closing auxiliary
10	Closing auxiliary
11	Opening auxiliary
12	Opening auxiliary

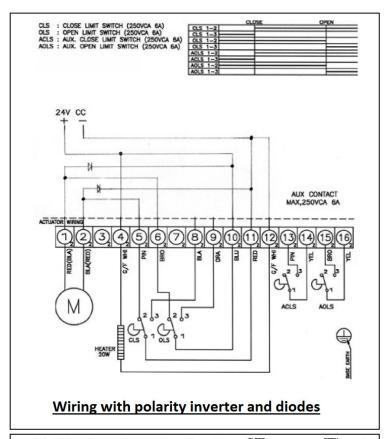


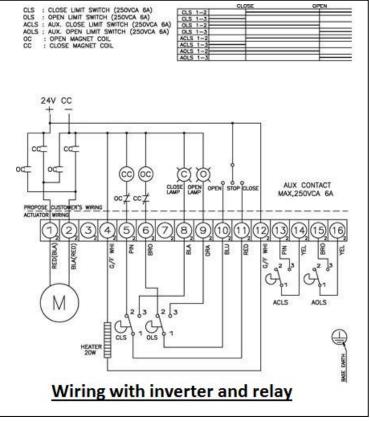


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Proposals for 24Vcc (NA06-NA09) wiring

1	Connected to terminal 10 with diode
2	Connected to terminal 11 with diode
3	Not used
4	Heater power supply
5	Connected to terminal 2
6	Connected to terminal 1
7	Not used
8	Powered closing switch
9	Powered opening switch
10	+ / - Opening command
11	+ / - Closing command
12	Heater power supply
13	Closing auxiliary
14	Closing auxiliary
15	Opening auxiliary
16	Opening auxiliary



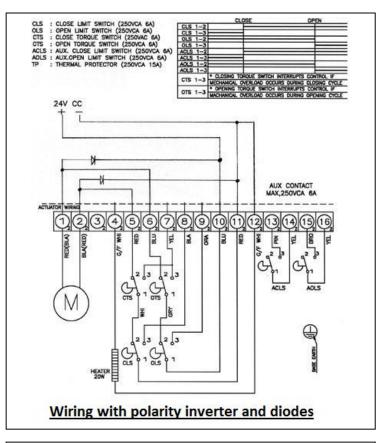


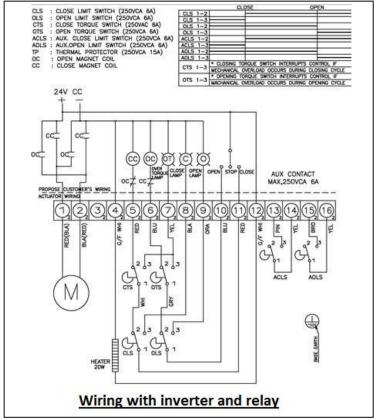


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Proposition for 24V DC wiring (other models)

1	Connected to terminal 10 with diode
2	Connected to terminal 11 with diode
3	Not used
4	Heater power supply
5	Connected to terminal 2
6	Connected to terminal 1
7	Power-supplied over-torque switch
8	Powered closing switch
9	Powered opening switch
10	+ / - Opening command
11	+ / - Closing command
12	Heater power supply
13	Closing auxiliary
14	Closing auxiliary
15	Opening auxiliary
16	Opening auxiliary







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