SPRING RETURN ACTUATORS FOR FIRE DAMPERS (5 Nm)
AF..SE

## FUNCTION

On / Off spring return for fire and smoke damper control. The actuator opens the damper loading the return spring: when current is cut-off the spring moves the damper in a safe position. The actuator can be controlled manually by a suitable crank. The actuator have a thermic device calibrated at $72^{\circ} \mathrm{C}$. When temparature reaches $72^{\circ} \mathrm{C}$ the damper is closed.

## APPLICATIONS

Well-suited for applications with security dampers used as antifreeze, antismoke or for sealing in the hygienic-sanitary field.

| TYPE | POWER SUPPLY | THERMAL PROTECTION |
| :--- | :---: | :---: |
| AF24SE | $24 \mathrm{Vac} / \mathrm{dc}$ | duct $72^{\circ} \mathrm{C}$ |
| AF230SE | 230 Vac | duct $72^{\circ} \mathrm{C}$ |


| Actuator |  | AF24SE | AF230SE |
| :---: | :---: | :---: | :---: |
| Damper area (*) | $\mathrm{m}^{2}$ | 1 | 1 |
| Torque | Nm | 5 | 5 |
| Power supply | V | $24 \mathrm{Vac} / \mathrm{dc}$ | $230 \mathrm{Vac} \pm 10 \%$ |
| Frequency | Hz | 50...60 | 50...60 |
| Power comsumption |  |  |  |
| - operating | W | 7.2 | 4.2 |
| - at the end stops | w | 2.5 | 2.5 |
| For wire sizing | VA | 10 | 10 |
| Running time |  |  |  |
| - motor | s | 50...70 | 50...70 |
| - spring | s | <20 | <20 |
| Weight | g | 1800 | 1900 |
| Control signal |  | 2- point | 2-point |
| Rotation angle: |  |  |  |
| - working range |  | $90^{\circ}$ (95 ${ }^{\circ}$ mechanical) | $90^{\circ}$ (95 ${ }^{\circ}$ mechanical) |
| Auxiliary switches (2 SPDT fixed) |  | 3(1.5) A / 24-230 VCA | 3(1.5) A / 24-230 VCA |
| Direction of rotation |  | bidirectional | bidirectional |
| Protection class |  | II | II |
| Degree of protection |  | IP54 | IP54 |
| Room temperature |  | $-20 \ldots+50^{\circ} \mathrm{C}$ | $-20 . . .+50^{\circ} \mathrm{C}$ |
| Room humidity |  | 5...95\% r.h. | 5... $95 \%$ r.h. |
| Sensor action |  | $72^{\circ} \mathrm{C}$ | $72^{\circ} \mathrm{C}$ |
| Noise level |  | $\max 45 \mathrm{~dB}$ | $\max 45 \mathrm{~dB}$ |
| Standards |  | CE | CE |

[^0]
## Wiring diagram



## Thermal sensor



The thermal sensor consists of both ambient (TS1) and duct sensor (TS2). TS1 will trip open when the ambient temperature rises above $72^{\circ} \mathrm{C}$.
TS 2 will trip open when the duct temperature rises above $72^{\circ} \mathrm{C}$.

## Direction of rotation setting



## Auxiliary switches setting

Factory setting:
switch a fixed at $5^{\circ}$.
switch b fixed at $80^{\circ}$.
The switches are not adjustable


## DIMENSIONS (mm)



SPRING RETURN ACTUATORS FOR FIRE DAMPERS (8 Nm)

## FUNCTION

On / Off spring return for fire and smoke damper control. The actuator opens the damper loading the return spring: when current is cut-off the spring moves the damper in a safe position. The actuator can be controlled manually by a suitable handle. The actuator have a thermic device calibrated at $72^{\circ} \mathrm{C}$. When temparature reaches $72^{\circ} \mathrm{C}$ the damper is closed.

## APPLICATIONS

Well-suited for applications with security dampers used as antifreeze, antismoke or for sealing in the hygienic-sanitary field.

| TYPE | POWER SUPPLY | THERMAL PROTECTION |
| :--- | :---: | :---: |
| NF24SE | $24 \mathrm{Vac} / \mathrm{dc}$ | duct $72^{\circ} \mathrm{C}$ |
| NF230SE | 230 Vac | duct $72^{\circ} \mathrm{C}$ |


| Actuator |  | NF24SE | NF230SE |
| :---: | :---: | :---: | :---: |
| Damper area (*) | $\mathrm{m}^{2}$ | 1.5 | 1.5 |
| Torque | Nm | 8 | 8 |
| Power supply | V | $24 \mathrm{Vac} / \mathrm{dc}$ | $230 \mathrm{Vac} \pm 10 \%$ |
| Frequency | Hz | 50... 60 | 50... 60 |
| Power comsumption |  |  |  |
| - operating | W | 7.0 | 8.0 |
| - at the end stops |  | 2.0 | 5.5 |
| For wire sizing | VA | 10 | 10 |
| Running time |  |  |  |
| - motor | s | 75... 95 | 75... 95 |
| - spring | S | <25 | <25 |
| Weight | g | 2200 | 2300 |
| Control signal |  | 2-point | 2-point |
| Rotation angle: |  |  |  |
| - working range |  | $90^{\circ}\left(95^{\circ}\right.$ mechanical) | $90^{\circ}$ (95 ${ }^{\circ}$ mechanical) |
| Auxiliary switches (2 SPDT fixed) |  | 3 (1.5) A / AC 230 V | 3 (1.5) A / AC 230 V |
| Direction of rotation |  | bidirectional | bidirectional |
| Protection class |  | II | II |
| Degree of protection |  | IP54 | IP54 |
| Room temperature |  | $-20 \ldots+50^{\circ} \mathrm{C}$ | $-20 \ldots+50^{\circ} \mathrm{C}$ |
| Room humidity |  | 5...95\% r.h. | 5...95\% r.h. |
| Sensor action |  | $72^{\circ} \mathrm{C}$ | $72^{\circ} \mathrm{C}$ |
| Noise level |  | $\max 45 \mathrm{~dB}$ | $\max 45 \mathrm{~dB}$ |
| Standards |  | CE | CE |

[^1]
## Wiring diagram



## Thermal sensor



Direction of rotation setting


## Auxiliary switches setting

Factory setting:
switch a fixed at $5^{\circ}$.
switch b fixed at $85^{\circ}$.
The switches are not adjustable


DIMENSIONS (mm)



[^0]:    $\left(^{*}\right)$ the indication of the damper area is not significant, the data that must be taken into account is the value of the torque in Nm .

[^1]:    (*) the indication of the damper area is not significant, the data that must be taken into account is the value of the torque in Nm .

