# NAFA...08 (S) SERIES

SPRING RETURN DAMPER ACTUATOR 2 POINT SPRING RETURN CONTROL



# NAFA...08 (S) SERIES

NAFA series Spring Return actuators are developed for general air damper application, rotary valve and other devices which require a fail-safe function. During normal operation, the actuator motorized the device. In the event of power outage, the actuator springs back to its original position.

# **PRODUCT FEATURE**

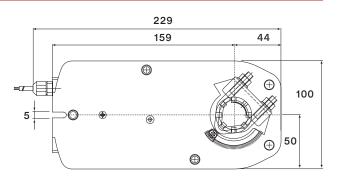
- Torque 8 Nm
- Damper size 1.5 m<sup>2</sup>
- Power supply AC/DC 24V or AC 230 V
- Shaft dimensions Ø 12...20 mm / □ 9...14 mm
- Minimum shaft length 85 mm
- Adjustable angle of rotation
- Selectable direction of rotation of reversing actuator
- Optional 1 fixed and 1 adjustable SPDT auxiliary switches

# MODEL SELECTION TABLE

MODEL / TYPE	TORQUE	POWER SUPPLY	RUNNING TIME	AUXILIARY SWITCH
NAFA 1-08	8 Nm	AC/DC 24 V ± 10%	100120 sec (Spring Back <25 sec)	-
NAFA 1-08S	8 Nm	AC/DC 24 V ± 10%	100120 sec (Spring Back <25 sec)	2 x SPDT (1 Fixed & 1 Adjustable)
NAFA 2-08	8 Nm	AC 230 V ± 10%	100120 sec (Spring Back <25 sec)	-
NAFA 2-08S	8 Nm	AC 230 V ± 10%	100120 sec (Spring Back <25 sec)	2 x SPDT (1 Fixed & 1 Adjustable)

## **DIMENSION (mm)**





# **TECHNICAL SPECIFICATION**

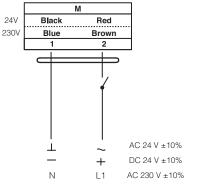
MODEL NUMBER	NAFA 1-08 (S)	NAFA 2-08 (S)
TORQUE	8 Nm	8 Nm
DAMPER SIZE	1.5 m <sup>2</sup>	1.5 m <sup>2</sup>
SHAFT DIMENSION	Ø 1220 mm / □ 914 mm*	Ø 1220 mm / □ 914 mm*
POWER SUPPLY	AC/DC 24 V ± 10%	AC 230 V ± 10%
FREQUENCY	5060 Hz	5060 Hz
CONTROL SIGNAL	2 point control	2 point control
POWER CONSUMPTION		
• OPERATING	5.0 W	5.0 W
END POSITION	3.5 W	3.5 W
FOR WIRE SIZING	7.0 VA	7.0 VA
ELECTRICAL CONNECTION	1 m Cable	1 m Cable
AUXILIARY SWITCH RATING	2 (1.5) A, AC 250 V	2 (1.5) A, AC 250 V
PROTECTION CLASS	Class III	Class II 🛛
ANGLE OF ROTATION	-5+90° (mechanical)	-5+90° (mechanical)
WEIGHT	2.4 Kg	2.4 Kg
LIFE CYCLE	60,000 Rotation	60,000 Rotation
SOUND LEVEL	45 dB	45 dB
IP PROTECTION	IP54	IP54
OPERATING TEMPERATURE	-30°50° as per IEC 721-3-3	-30°50° as per IEC 721-3-3
NON-OPERATING TEMPERATURE	-30°+60° C / IEC 721-3-2	-30°+60° C / IEC 721-3-2
AMBIENT HUMIDITY	5%95% rH non condensing / EN	5%95% rH non condensing / EN
MAINTENANCE	Maintenance Free	Maintenance Free
MODE OF OPERATION	Type I / EN 60730-1	Type I / EN 60730-1
EMC	CE & ISO 9000 EN / EEC	CE & ISO 9000 EN / EEC

\*Note that shaft dimension has a tolerance offset of  $\pm$  0.2mm.

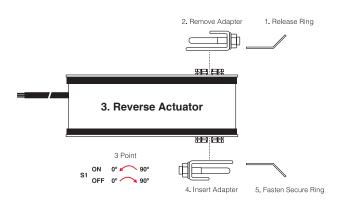
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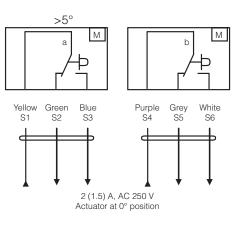
# WIRING DIAGRAM NAFA...08 (S) POWER SUPPLY AC/DC 24V OR AC 230V



# DIRECTION OF ROTATION NAFA...08 (S)



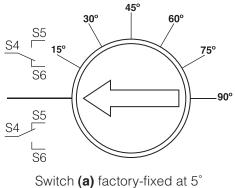
#### WIRING DIAGRAM NAFA...08 (S) AUXILIARY SWITCHES



# AUXILIARY SWITCH NAFA...08(S)

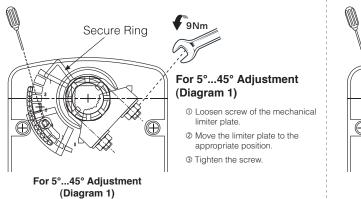
Auxiliary switch (a) factory-fixed at 5°.

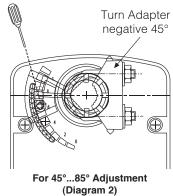
Auxiliary switch (b) can be optimally adjusted between 0°...90°.



Switch (b) adjustable 0°...90°

# ANGLE OF ROTATING LIMITATING 5°...85° ADJUSTMENT



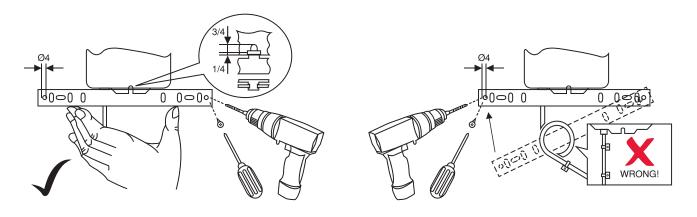


0 **F**an **4**5

#### For 45°...85° Adjustment (Diagram 2)

- ① Release the secure ring of the adapter.
- ② Remove the adapter and turn negative 45° as shown.
- ③ Insert adapter and secure the adapter.
- Loosen screw of the mechanical limiter plate.
- S Move the limiter plater to the appropriate position.
- © Tighten the screw.

## **INSTALLATION / MOUNTING INSTRUCTION**



## **IMPORTANT REMARK**

For special requirement, consult your local Nenutec's representative.

This actuator includes electrical and electronic components and may not be disposed as household garbage. Please consider the local valid legislation.



I: Connect via safety isolating transformer. To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductor (with at least a 3mm contact gap.)

The performance specifications are nominal and conform to acceptable industry standards. NENUTEC shall not be liable for damages resulting from misapplication or misuse of its products.