

## NACA – STANDARD DAMPER ACTUATOR

5 Nm | 2-POINT & 3-POINT CONTROL



The appearance of the product may differ from the illustration. Technical specifications are subject to change.

### NACA...05 (S1) SERIES

NACA standard damper actuators are specially designed and produced for applications in the HVAC Systems. Our wide range of Nenutec standard damper actuators has been developed to operate and position air dampers of different sizes.

- Torque: 5 Nm
- Damper size 1.0 m<sup>2</sup>
- Power supply 24 V<sub>AC/DC</sub> and 230 V<sub>AC</sub>
- Shaft dimensions – Ø 6...15 mm / square 5...10.5 mm
- Adapter supplied for From Fit 8 or 10 mm square
- Minimum shaft length 45 mm
- Adjustable angle of rotation
- Direction of rotation selectable by switch
- Actuator with 1 m connection cable
- Optional 1 adjustable SPDT auxiliary switch
- Manual over ride by push button when required

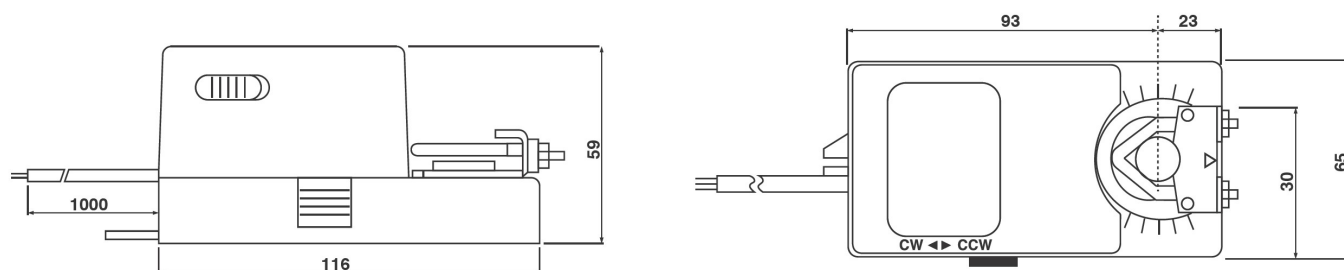
#### MODEL SELECTION TABLE

Model/type	Torque	Power supply	Running time	Auxiliary switch
NACA 1-05	5 Nm	24 V <sub>AC/DC</sub> ± 10%	60...90 s	-
NACA 1-05S1	5 Nm	24 V <sub>AC/DC</sub> ± 10%	60...90 s	1 x SPDT (adjustable)
NACA 2-05	5 Nm	230 V <sub>AC</sub> ± 10%	60...90 s	-
NACA 2-05S1	5 Nm	230 V <sub>AC</sub> ± 10%	60...90 s	1 x SPDT (adjustable)

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### ACTUATOR DIMENSIONS [mm]



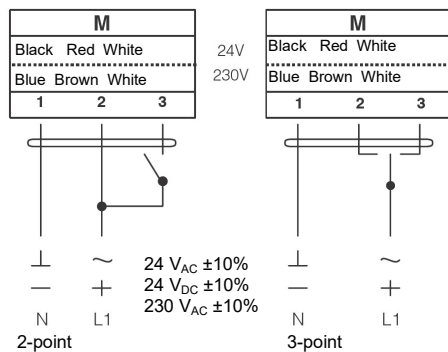
### TECHNICAL SPECIFICATION

	NACA 1-05 (S1)	NACA 2-05 (S1)
Torque	5 Nm	5 Nm
Damper size	1.0 m <sup>2</sup>	1.0 m <sup>2</sup>
Shaft dimensions	Ø 6...15 mm / □ 5...10.5 mm	Ø 6...15 mm / □ 5...10.5 mm
Power supply	24 V <sub>AC/DC</sub> ± 10%	230 V <sub>AC</sub> ± 10%
Frequency	50...60Hz	50...60Hz
Control signal	2- & 3-point control	2- & 3-point control
Power consumption		
• In operation	4.0 W	4.0 W
• End position	2.0 W	2.0 W
Rated power	4.0 VA	4.0 VA
Electrical Connection	1 m Cable	1 m Cable
Auxiliary switch rating	3 (1.5) A / 250 V <sub>AC</sub>	3 (1.5) A / 250 V <sub>AC</sub>
Protection class	Class III ⚡	Class II ⚡
Angle of rotation	90° (95° mechanical limitation)	90° (95° mechanical limitation)
Weight	<0.7 kg	<0.7 kg
Durability	60,000 rotations	60,000 rotations
Sound level	40 dB	40 dB
IP protection class	IP54	IP54
Working temperature range	-20°C...50°C as per IEC 721-3-3	-20°C...50°C as per IEC 721-3-3
Storage temperature	-30°C...+60°C / IEC 721-3-2	-30°C...+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
Principle of operation	Type 1 (acc. to EN 60730-1)	Type 1 (acc. to EN 60730-1)
Electromagnetic compatibility	CE, UL 873 & ISO 9000 EN / EEC	CE, UL 873 & ISO 9000 EN / EEC

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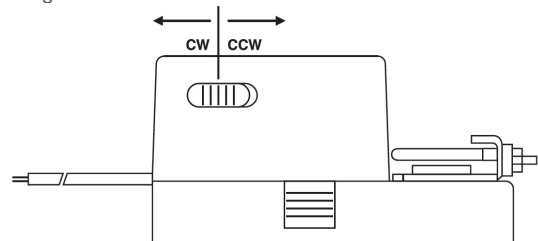
### WIRING DIAGRAM NACA...05 (S1) POWER SUPPLY 24 V<sub>AC/DC</sub> / 230V<sub>AC</sub>



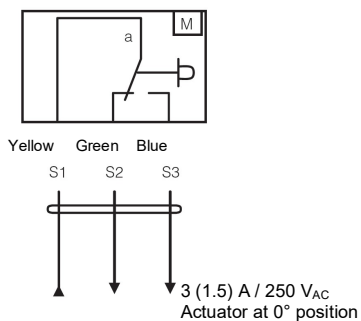
⚠ Connect via safety isolating transformer!

### DIRECTION OF ROTATION NACA...05 (S1)

Factory setting: clockwise (CW). Direction of rotation can be changed by toggling between CW/CCW switch on the actuator housing.

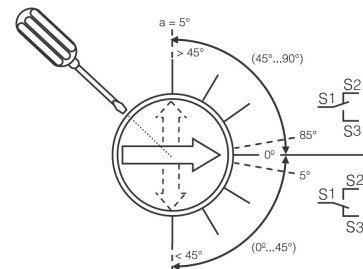


### WIRING DIAGRAM NACA...05 (S1) AUXILIARY SWITCH

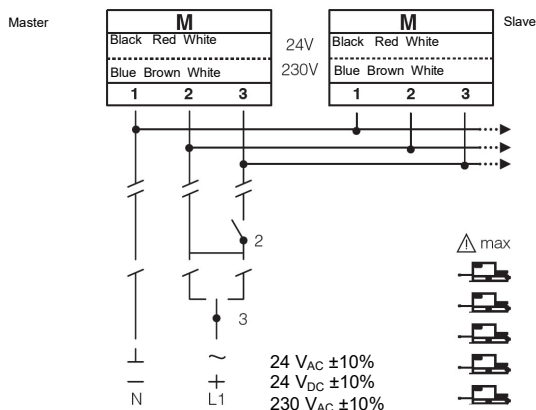


### AUXILIARY SWITCH NACA...05 (S1)

Switch a factory-set at 5°. The auxiliary switch can be adjusted in the range 0° ...90°.



### WIRING DIAGRAM NACA...05 (S1) PARALLEL CONNECTION



### REMARK

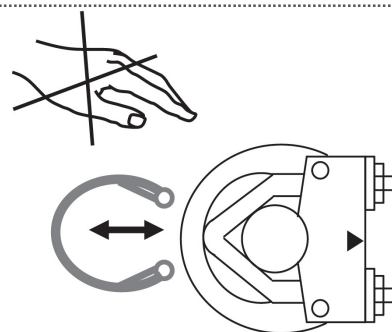
Parallel connection of maximum 5 NACA...05 (S1) actuators is possible. Power consumption must be observed!

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### ■ Releasing the adapter NACA...05 (S1)

Releasing the adapter is not required.

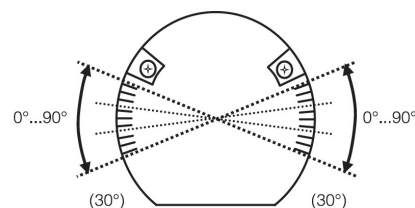
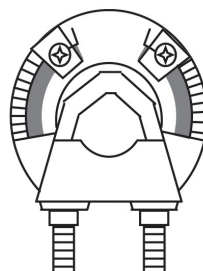


### ■ LIMITING ANGLE OF ROTATION NACA...05 (S1)

Adjustment of mechanical limiter.

1. Loosen the screw of mechanical limiter.
2. Move limiter to appropriate position
3. Tighten the screw.

\*Working range of 90° can be reduced up to 30° from end position.



### ⚠ IMPORTANT REMARKS

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



24 V<sub>ADC</sub>: Connect via safety isolating transformer.

230 V<sub>AC</sub>: 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.)

Consult NENUTEC representatives for specific requirements and material selections for your intended application. The entire content of this technical datasheet is protected by copyright. All rights are reserved ©.

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

### CUSTOMISED VERSION

NENUTEC offers you actuators in customised versions, e.g. with your own brand name, with colour-coordinated applications and with your particular demand on request.

For further information please contact us or our local representative.

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