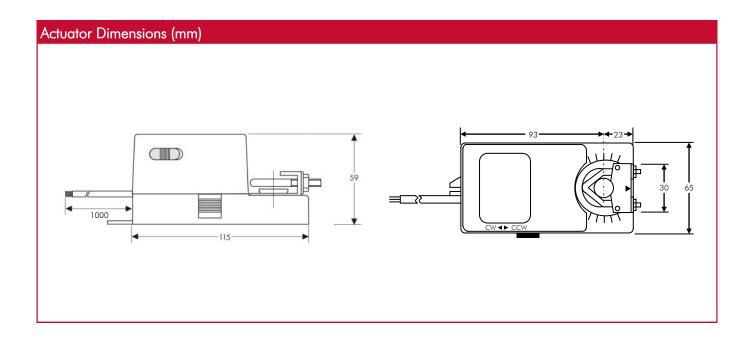


- NACA...02/05 (S1) series
- NENUTEC standard damper actuators are especially designed and produced for applications in the HVAC systems.
- Our wide range of NENUTEC damper actuators has been developed to operate air dampers of different sizes.

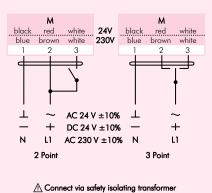
## **Product Features**

- Torque 2 Nm / 5 Nm
- $\blacksquare$  Damper size 0.4 m<sup>2</sup> / 1.0 m<sup>2</sup>
- Power Supply AC/DC 24 V and AC 230 V
- Control 2 Point and 3 Point
- 1 adjustable auxiliary switch (SPDT)
- Shaft dimensions
  Ø 6 to 16 mm round / □ 5 to 12 mm square
- Minimum shaft length 40 mm
- Selectable direction of rotation
- Adjustable angle of rotation
- Actuator with 1000 mm cable connection
- Customer version on request

Model Selection Table				
Torque	Running Time	Power Supply	Auxiliary Switch	Model / Type
2 Nm	6090 sec	AC/DC 24 V $\pm$ 10%	No	NACA 1-02
2 Nm	6090 sec	AC/DC 24 V $\pm$ 10%	1 x SPDT	NACA 1-02 \$1
2 Nm	6090 sec	AC 230 V $\pm$ 10%	No	NACA 2-02
2 Nm	6090 sec	AC 230 V $\pm$ 10%	1 x SPDT	NACA 2-02 \$1
5 Nm	70100 sec	AC/DC 24 V $\pm$ 10%	No	NACA 1-05
5 Nm	70100 sec	AC/DC 24 V $\pm$ 10%	1 x SPDT	NACA 1-05 \$1
5 Nm	70100 sec	AC 230 V $\pm$ 10%	No	NACA 2-05
5 Nm	70100 sec	AC 230 V $\pm$ 10%	1 x SPDT	NACA 2-05 \$1



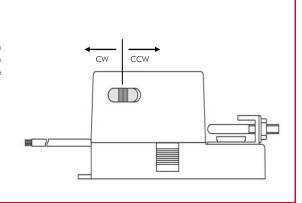
Technical Specifications				
	NACA 1(S1)	NACA 2(S1)		
Torque	2 Nm / 5 Nm	2 Nm / 5 Nm		
Damper Size	$0.4 \text{ m}^2 / 1.0 \text{ m}^2$	$0.4 \text{ m}^2 / 1.0 \text{ m}^2$		
Shaft dimensions	$\varnothing$ 6 to 16 mm round / $\square$ 5 to 12 mm square	$arnothing$ 6 to 16 mm round / $\square$ 5 to 12 mm square		
Power Supply	AC/DC 24 V ± 10%	AC 230 V ± 10%		
Frequency	50 - 60 Hz	50 - 60 Hz		
Control Signal	2 point and 3 point	2 point and 3 point		
Power Consumption				
- Operating	2.0 W	2.0 W		
- End Position	2.0 W	2.0 W		
For Wire Sizing	4.0 VA	12.0 VA		
Auxiliary Switch Rating	3 (1.5) A, AC 250 V	3 (1.5) A, AC 250 V		
Protection Class	Ⅲ 🕸			
Angle of Rotation	0°90° (95° mechanical)	0°90° (95° mechanical)		
Angle of Limiting	mechanical end stops	mechanical end stops		
Weight	0.7 Kg	0.7 Kg		
Life Cycle	60'000 rotation	60'000 rotation		
Sound Level	40 dB (A)	40 dB (A)		
IP Protection	IP 54 (dust protected & protected against splash water)	IP 54 (dust protected & protected against splash water)		
Operating Temperature	-20°+50° C / IEC 721-3-3	-20°+50° C / 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 60730-1	5%95% rH non condensing / EN 60730-1		
Maintenance	Maintenance free	Maintenance free		
Mode of Operation	Type I / EN 60730-1	Type I / EN 60730-1		
EMC	CE according to 89 / 336 / EWG	CE according to 89 / 336 / EWG		



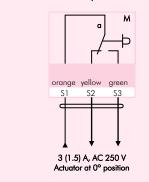
Changing Direction of Rotation NACA 1/2...(S1)

Factory-set CW!

The direction of rotation can be changed by pushing the CW/CCW switch on the actuator's housing.



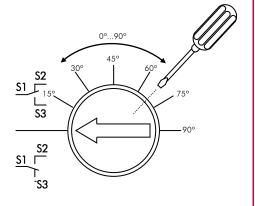
Wiring Diagram NACA 1/2...(S1) Auxiliary Switch



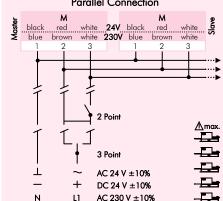
Adjustment of Auxiliary Switch NACA 1/2...(S1)

Switch factory-set at 5°

The Position of switches can be manually changed to any required position by moving the micro switch on the actuator's housing.



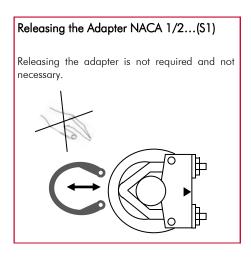
Wiring Diagram NACA 1/2...(\$1)
Parallel Connection

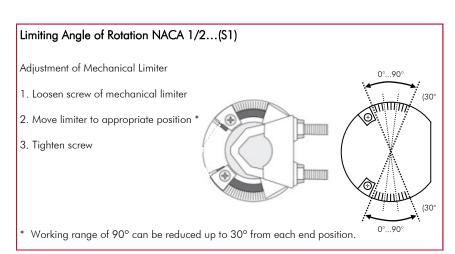


Remark

NACA...(\$1) actuators are capable of operating in parallel.

Parallel connection of several actuators is possible. The Power consumption must be observed.





## **OEM Customised Version on Request**

TELIMA offers you NENUTEC actuators in customised versions, e.g. with your own brand name, with colour-coordinated applications and with your particular demand. Please contact us for further information.

## Important Remark

Consult NENUTEC representatives for specific requirements and material selections for your intended application.



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



AC / DC 24 V: Connect via safety isolating transformer.

AC 230 V: To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductor (with at least a 3 mm contact gap).



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