



The technical specifications might not be congruent.

- NASA...08/16 (S) series
- NENUTEC fast running damper actuators are especially designed and produced for applications in the HVAC systems.
- Our wide range of NENUTEC spring return actuators has been developed to operate air dampers of different sizes that perform safety functions.

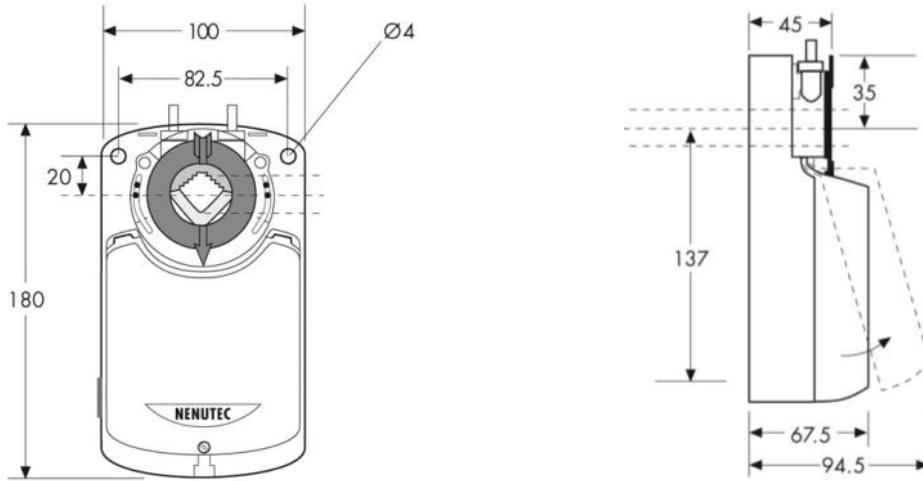
### Product Features

- Torque 8 Nm / 16 Nm
- Damper size 1.5 m<sup>2</sup> / 3.0 m<sup>2</sup>
- Power Supply AC/DC 24 V and AC 230 V
- Control 2 Point and 3 Point
- 2 adjustable auxiliary switches (SPDT)
- Shaft dimensions
  - 10 to 20 mm round / □ 10 to 16 mm square
- Minimum shaft length 50 mm
- Selectable direction of rotation
- Adjustable angle of rotation
- Actuator with cable connection on request
- Customer version on request

### Model Selection Table

Torque	Running Time	Power Supply	Auxiliary Switches	Model / Type
8 Nm	8 sec	AC/DC 24 V ± 10%	No	NASA 1-08
8 Nm	8 sec	AC/DC 24 V ± 10%	2 x SPDT	NASA 1-08 S
8 Nm	8 sec	AC 230 V ± 10%	No	NASA 2-08
8 Nm	8 sec	AC 230 V ± 10%	2 x SPDT	NASA 2-08 S
16 Nm	16 sec	AC/DC 24 V ± 10%	No	NASA 1-16
16 Nm	16 sec	AC/DC 24 V ± 10%	2 x SPDT	NASA 1-16 S
16 Nm	16 sec	AC 230 V ± 10%	No	NASA 2-16
16 Nm	16 sec	AC 230 V ± 10%	2 x SPDT	NASA 2-16 S

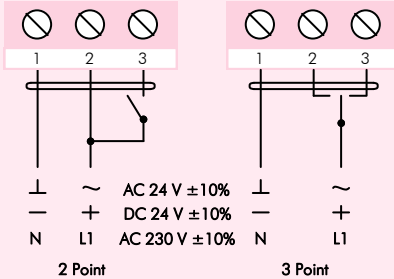
### Actuator Dimensions (mm)



### Technical Specifications

	NASA 1...(S)	NASA 2...(S)
Torque	8 Nm / 16 Nm	8 Nm / 16 Nm
Damper Size	1.5 m <sup>2</sup> / 3.0 m <sup>2</sup>	1.5 m <sup>2</sup> / 3.0 m <sup>2</sup>
Shaft dimensions	Ø 10 to 20 mm round / □ 10 to 16 mm square	Ø 10 to 20 mm round / □ 10 to 16 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	7.5 W	11.2 W
- End Position	0.5 W	2.5 W
For Wire Sizing	13.0 VA	13.0 VA
Auxiliary Switch Rating	3 (1.5) A, AC 230 V	3 (1.5) A, AC 230 V
Protection Class	III	II
Angle of Rotation	0°...90° (93° mechanical)	0°...90° (93° mechanical)
Angle of Limiting	5°...85° in 5° step	5°...85° in 5° step
Weight	1.2 Kg	1.3 Kg
Life Cycle	60'000 rotation	60'000 rotation
Sound Level	50 dB (A)	50 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

### Wiring Diagram NASA 1/2...(S) Power Supply AC/DC 24 V - AC 230 V

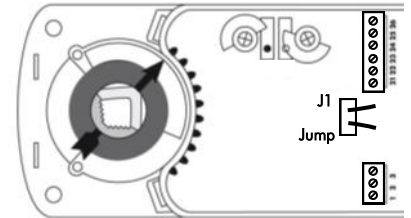
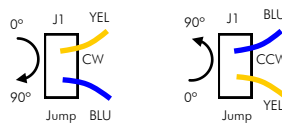


⚠ Connect via safety isolating transformer

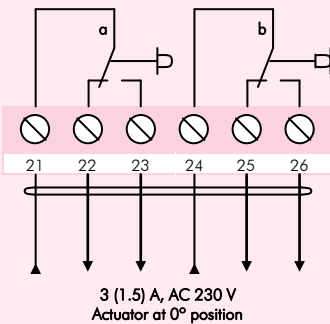
### Changing Direction of Rotation NASA 1/2...(S)

Factory-set CW!

The direction of rotation can be changed by reversing Jumper J1.



### Wiring Diagram NASA 1/2...(S) Auxiliary Switches

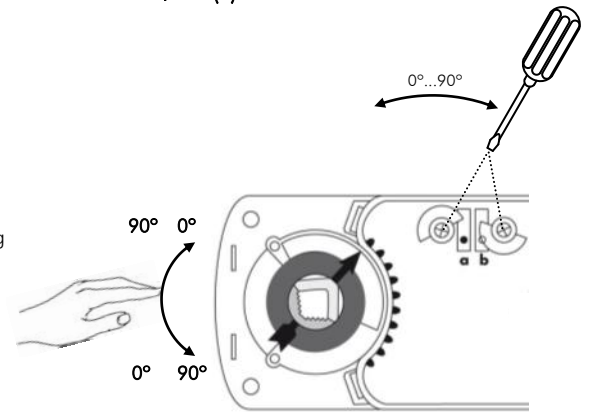


### Adjustment of Auxiliary Switches NASA 1/2...(S)

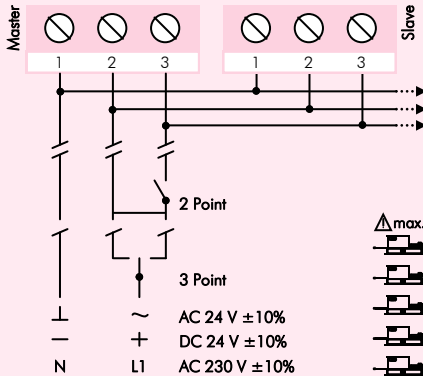
Switch **a** factory-set at 10°

Switch **b** factory-set at 80°

Position of switches can be manually changed to any required position by turning the ratchet.



### Wiring Diagram NASA 1/2...(S) Parallel Connection

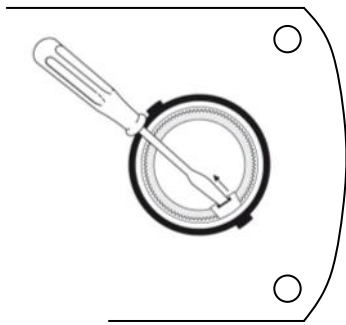


### Remark

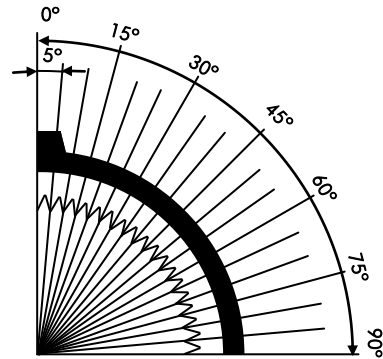
NASA...(S) actuators are capable of operating in parallel.

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

Releasing the Adapter NASA 1/2...(S)



Limiting Angle of Rotation NASA 1/2...(S)



## 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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