

NUCA...05 (S) SERIES

ULTRA-FAST RUNNING DAMPER ACTUATOR 2/3 POINT CONTROL



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The NUCA Series Ultra-Fast Running Actuators feature Open/Close and 3-point control, delivering rapid and precise damper operation.

With its compact size, fast rotation, and precision control capabilities, it provides efficient and reliable damper operation in critical airflow applications like Pharma, Clean Room, Labs, Fume extraction and VAV systems.

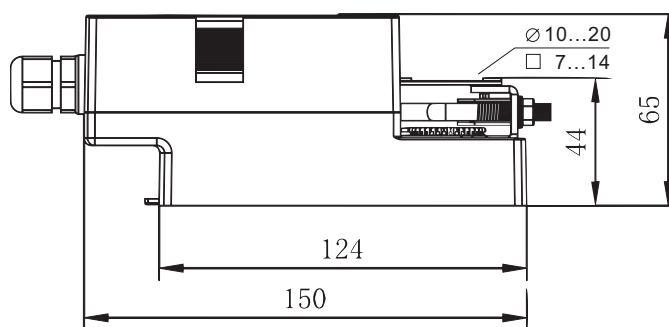
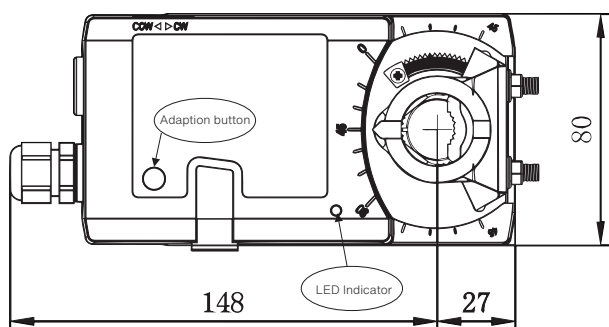
PRODUCT FEATURE

- Torque 5 Nm
- Running time: <2.5 sec
- Damper size 1.0 m²
- Power supply AC/DC 24V or AC 230V
- Shaft dimensions - Ø 10...20 mm / □ 7...14 mm
- Minimum shaft length 50 mm
- Adjustable angle of rotation
- Selectable direction of rotation
- Optional 2 fixed SPDT auxiliary switch
- Built-in manual override button
- Auto Adaption when connected to power

MODEL SELECTION TABLE

MODEL / TYPE	TORQUE	POWER SUPPLY	RUNNING TIME	AUXILIARY SWITCH
NUCA 1-05	5 Nm	AC/DC 24 V ± 10%	<2.5 sec	-
NUCA 1-05S	5 Nm	AC/DC 24 V ± 10%	<2.5 sec	2 x SPDT
NUCA 2-05	5 Nm	AC 230 V ± 10%	<2.5 sec	-
NUCA 2-05S	5 Nm	AC 230 V ± 10%	<2.5 sec	2 x SPDT

DIMENSION (mm)



TECHNICAL SPECIFICATION

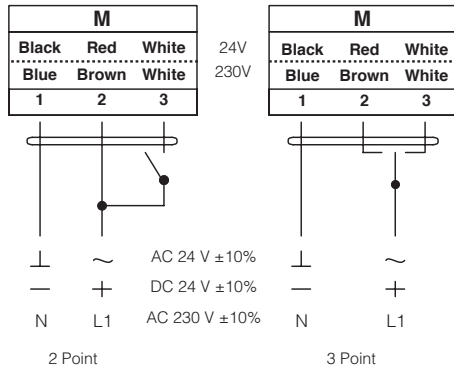
MODEL NUMBER	NUCA 1-05 (S)	NUCA 2-05 (S)
TORQUE	5 Nm	5 Nm
DAMPER SIZE	1.0 m ²	1.0 m ²
SHAFT DIMENSION	Ø 10...20 mm / □ 7...14 mm*	Ø 10...20 mm / □ 7...14 mm*
POWER SUPPLY	AC/DC 24 V ± 10%	AC 230 V ± 10%
FREQUENCY	50...60 Hz	50...60 Hz
CONTROL SIGNAL	2/3 point control	2/3 point control
POWER CONSUMPTION		
• OPERATING	15 W	15 W
• END POSITION	3.0 W	3.0 W
FOR WIRE SIZING	20 VA	20 VA
ELECTRICAL CONNECTION	1 m Cable	1 m Cable
AUXILIARY SWITCH RATING	3 (1.5) A, AC 250 V	3 (1.5) A, AC 250 V
PROTECTION CLASS	Class III ⚡	Class II ⚡
ANGLE OF ROTATION	90° (95° mechanical)	90° (95° mechanical)
WEIGHT	1.0 Kg	1.0 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 ± 0.2mm.

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WIRING DIAGRAM NUCA...05 (S) POWER SUPPLY AC/DC 24V OR AC 230V

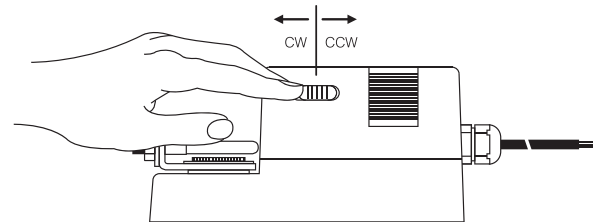


⚠ Connect via safety isolating transformer

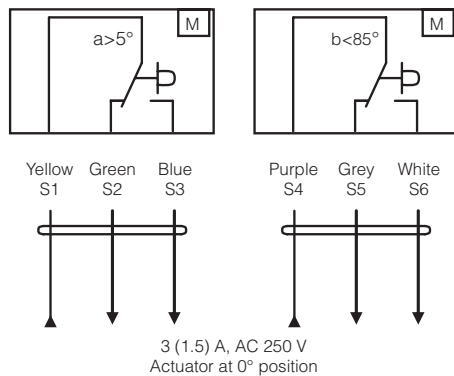
DIRECTION OF ROTATION NUCA...05 (S)

Default factory setting: CW.

Direction of rotation can be change by toggling between CW/CCW switch on the actuator's housing.



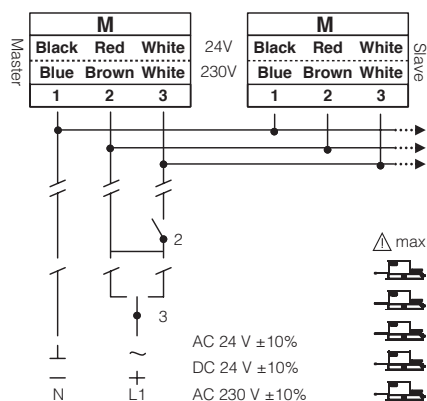
WIRING DIAGRAM NUCA...05 (S) AUXILIARY SWITCH



AUXILIARY SWITCH NUCA...05 (S)

Auxiliary switch (a) factory-set at 5° and (b) at 85°.

WIRING DIAGRAM NUCA...05 (S) PARALLEL CONNECTION



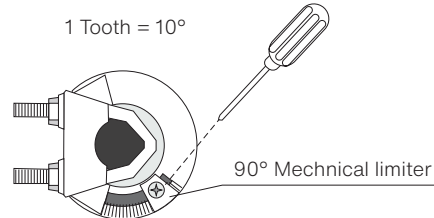
REMARK

Parallel connection of NUCA...05 actuators are limited to 5. Power consumption must be observe.

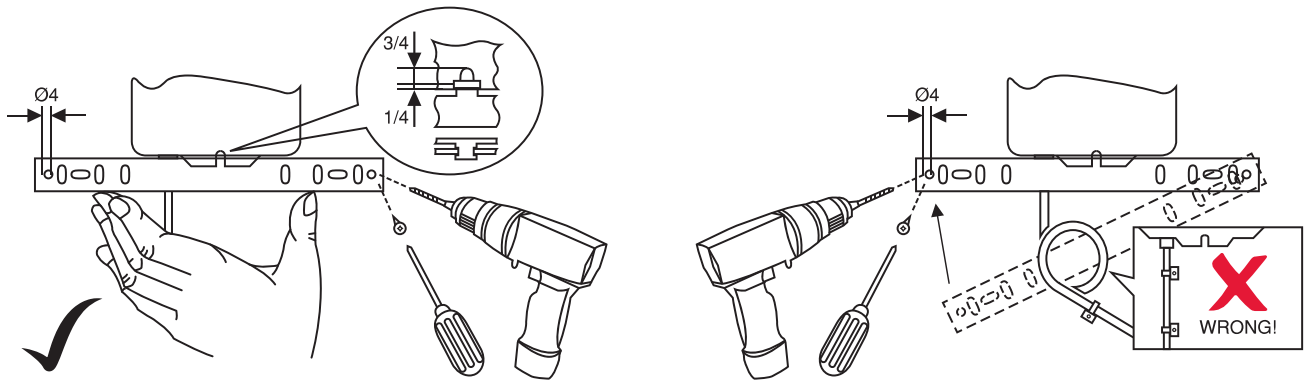
LIMITING ANGLE OF ROTATION NUCA...05 (S)

Adjustment of Mechanical Limiter

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



AC / DC 24 V:
AC 230 V:

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.

Disclaimer:

While we strive for accuracy, product specifications may change without notice. Images are for illustration only. Contact our sales team for the latest information.