

NECA...05 (S1) SERIES

ELECTRONIC RETURN DAMPER ACTUATOR 2 POINT CONTROL



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NECA series damper actuators with Electronic Return® (ER) function are designed and produced for extended functionalities in HVAC Systems: air handling equipment, fan coils, and laboratory applications. Electronic Return® (ER) is able to manage short voltage interruptions for max. 10 seconds.

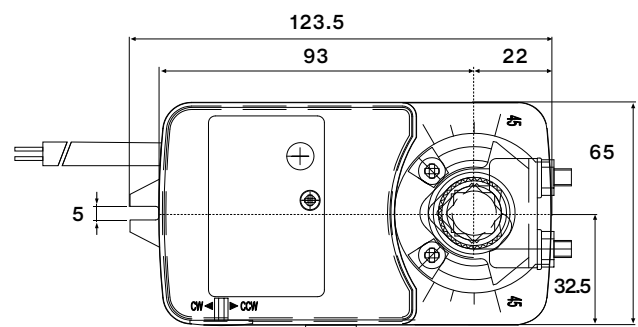
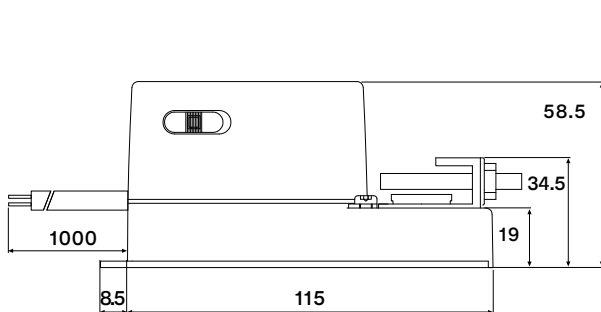
PRODUCT FEATURE

- Torque 5 Nm
- Damper size 1.0 m²
- Power supply AC/DC 24V or AC 230V
- Shaft dimensions - Ø 10...17 mm / □ 5...12 mm
- Minimum shaft length 40 mm
- Adjustable angle of rotation
- Selectable direction of rotation of reversing actuator
- Optional 1 adjustable SPDT auxiliary switch
- Manual over-ride push button when required

MODEL SELECTION TABLE

MODEL /TYPE	TORQUE	POWER SUPPLY	RUNNING	RETURN	AUXILIARY SWITCH
NECA 1-05	5 Nm	AC/DC 24V ± 10%	50...55 sec	35 sec	-
NECA 1-05S1	5 Nm	AC/DC 24V ± 10%	50...55 sec	35 sec	1 x SPDT (Adjustable)
NECA 2-05	5 Nm	AC 230V ± 10%	50...55 sec	35 sec	-
NECA 2-05S1	5 Nm	AC 230V ± 10%	50...55 sec	35 sec	1 x SPDT (Adjustable)

DIMENSION (mm)



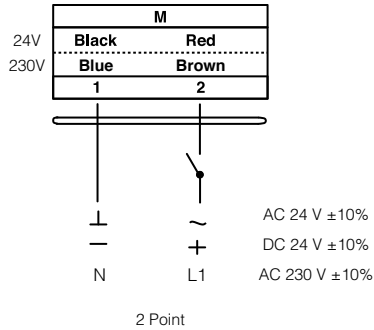
TECHNICAL SPECIFICATION

MODEL NUMBER	NECA 1-05 (S1)	NECA 2-05 (S1)
TORQUE	5 Nm	5 Nm
DAMPER SIZE	1.0 m ²	1.0 m ²
SHAFT DIMENSION	Ø 6...15 mm / □ 5...10.5 mm	Ø 6...15 mm / □ 5...10.5 mm
POWER SUPPLY	AC/DC 24 V ± 10%	AC 230 V ± 10%
FREQUENCY	50...60 Hz	50...60 Hz
CONTROL SIGNAL	2 point control	2 point control
POWER CONSUMPTION		
• OPERATING	8.7 W	8.7 W
• END POSITION	1.2 W	1.2 W
FOR WIRE SIZING	14.0 VA	14.0 VA
ELECTRICAL CONNECTION	1 m Cable	1 m Cable
PROTECTION CLASS	Class III ⚡	Class II ⚡
ANGLE OF ROTATION	90° (95° mechanical)	90° (95° mechanical)
WEIGHT	< 0.55Kg	< 0.55Kg
LIFE CYCLE	60,000 Rotation	60,000 Rotation
SOUND LEVEL	< 42 dB (A)	< 42 dB (A)
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	-40°...+80° C / IEC 721-3-2	-40°...+80° 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

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WIRING DIAGRAM NECA...05 (S1) POWER SUPPLY AC/DC 24V OR AC 230V

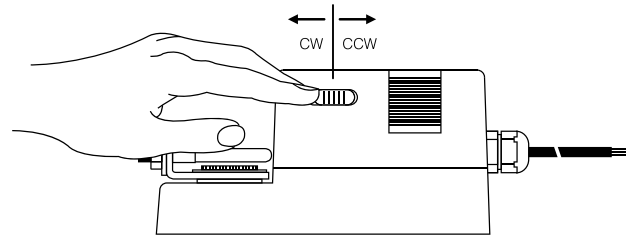


⚠ Connect via safety isolating transformer

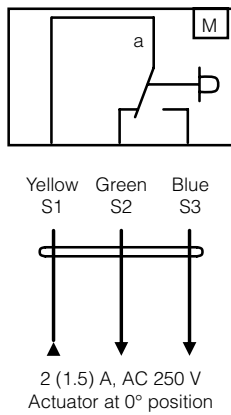
DIRECTION OF ROTATION NECA...05 (S1)

Default factory setting: CW.

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



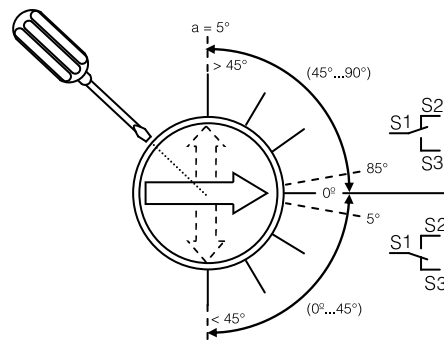
WIRING DIAGRAM NECA...05 (S1) AUXILIARY SWITCH



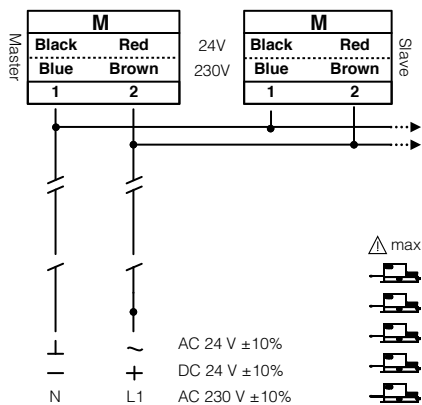
AUXILIARY SWITCH NECA...05 (S1)

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

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



WIRING DIAGRAM NECA...05 (S1) PARALLEL CONNECTION



REMARK

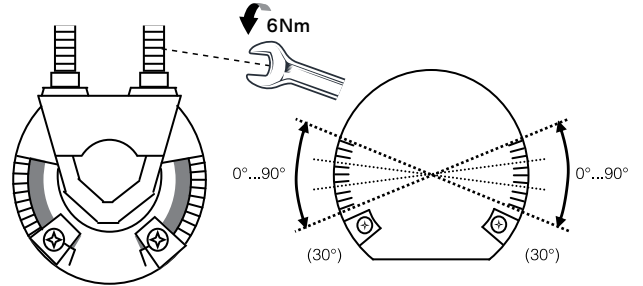
Parallel connection of NECA...05 (S1) actuators are limited to 5. Power consumption must be observe.

LIMITING ANGLE OF ROTATION NECA...05 (S1)

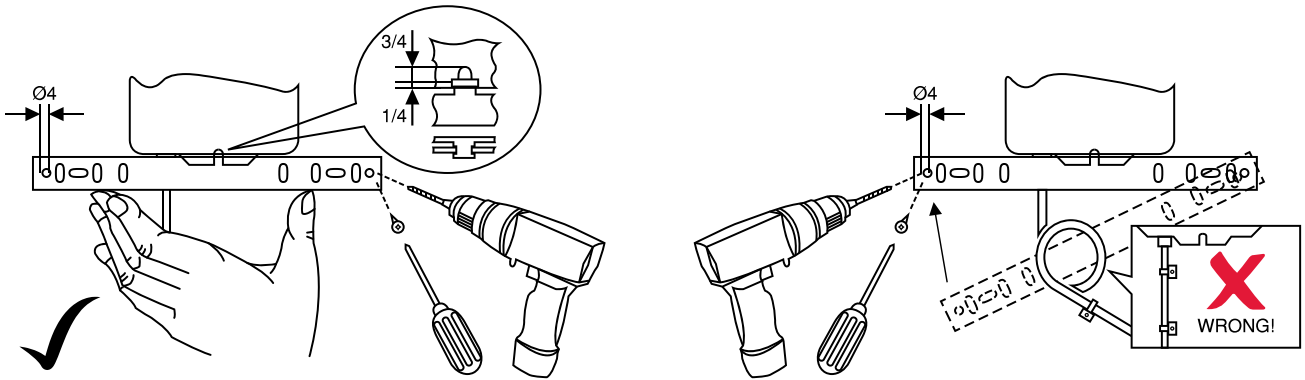
Adjustment of Mechanical Limiter

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

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



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: 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 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.