

NACA SERIES STANDARD DAMPER ACTUATOR

2 Point & 3 Point Control
5 Nm

NENUTEC[®]

INNOVATIVE MEMBER OF SWISSTECH

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DAMPER ACTUATOR MODEL CHART

MODEL								
VOLTAGE 230VAC ~ 24VAC/DC	●	●	●	●	●	●	●	●
TORQUE (NM)	2 ; 5 ; 10 ; 20 ; 40	2 ; 5 ; 10 ; 20 ; 40	5 ; 10 ; 20	5 ; 10 ; 20	3 ; 5 ; 8	3 ; 5 ; 8	10 ; 15	5
CONTROL	2/3 pts	Modulating	2 pts	Modulating	2 pts SR	2 pts SR	3 pts	Modulating

SPECIAL TYPE

ELECTRONIC RETURN			●	●				
SPRING RETURN					●			
FIRE & SMOKE SPRING RETURN						●		
SMOKE SAFETY							●	
NETWORKING								●

TYPE DESIGNATION

TYPE	ACTUATOR	DESIGNATION	CONTROL	VOLTAGE	DOT	INPUT SIGNAL	HYPHENATED	TOQUE		AUXILIARY SWITCH
N	A	C	M	1	.	1	-	0	5	S1

TYPE	N = Standard Actuator
	S = Fire & Smoke
ACTUATOR	A = Standard Actuator
	E = Electronic Return
DESIGNATION	C = Standard Actuator
	S = Fast Running Actuator
	F = Spring Back Actuator
CONTROL	A = 2/3 Points
	M = Modulating
VOLTAGE	1 = 24 VAC/VDC
	2 = 230 VAC
	3 = 110/120 VAC
	4 = 48 VAC

INPUT SIGNAL (NOT APPLICABLE FOR 2/3 POINTS)	1 = 0(2)...10 VDC and 0(4)...20 mA	
	2 = 0...10 VDC only	
	3 = 0...135 Ω only	
	4 = 4...20 mA only	
TORQUE	02 = 2 Nm	03 = 3 Nm
	05 = 5 Nm	08 = 8 Nm
	10 = 10 Nm	15 = 15 Nm
	20 = 20 Nm	40 = 40 Nm
AUXILIARY SWITCH / FEEDBACK POTENTIOMETER	None = No Auxiliary or Feedback Potentiometers	
	S1 = 1 x Auxiliary Switch	
	S = 2 x Auxiliary Switches	
	P1 = 1000Ω	
	P2 = 10000Ω	
	P3 = 140Ω	

NACA SERIES

STANDARD DAMPER ACTUATOR

2 Point & 3 Point Control
5 Nm

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.



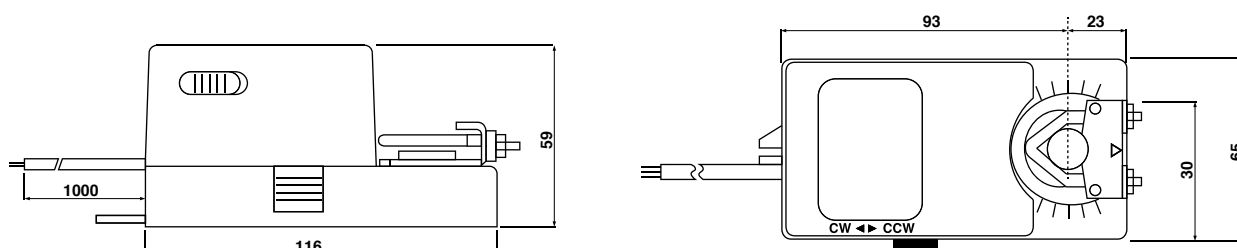
PRODUCT FEATURE

- Torque 5 Nm
- Damper size 1.0 m²
- Power supply AC/DC 24V and AC 230V
- Shaft dimensions - Ø 6...15 mm / □ 5...10.5 mm
- Minimum Shaft Length 40 mm
- Adjustable angle of rotation
- Selectable direction of rotation of reversing actuator
- Actuator with 1 m cable connection
- Optional 1 Adjustable SPDT auxiliary switch
- Manual over-ride push button

MODEL SELECTION TABLE

MODEL / TYPE	TORQUE	POWER SUPPLY	RUNNING TIME	AUXILIARY SWITCH
NACA 1-05	5 Nm	AC/DC 24 V ± 10%	70...100 sec	-
NACA 1-05S1	5 Nm	AC/DC 24 V ± 10%	70...100 sec	1 x SPDT (Adjustable)
NACA 2-05	5 Nm	AC 230 V ± 10%	70...100 sec	-
NACA 2-05S1	5 Nm	AC 230 V ± 10%	70...100 sec	1 x SPDT (Adjustable)

DIMENSION (mm)



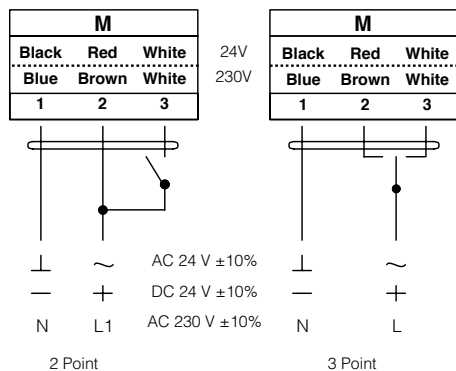
TECHNICAL SPECIFICATION

MODEL NUMBER	NACA 1-05 (S1)	NACA 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 & 3 point control	2 & 3 point control
POWER CONSUMPTION		
● OPERATING	2.0 W	2.0 W
● END POSITION	2.0 W	2.0 W
FOR WIRE SIZING	4.0 VA	4.0 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	< 0.7 Kg	< 0.7 Kg
LIFE CYCLE	60,000 Rotation	60,000 Rotation
SOUND LEVEL	40 dB	40 dB
IP PROTECTION	IP54	IP54
OPERATING TEMPERATURE	-20°...50° as per IEC 721-3-3	-20°...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

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WIRING DIAGRAM NACA...05 (S1) POWER SUPPLY AC/DC 24V - AC 230V

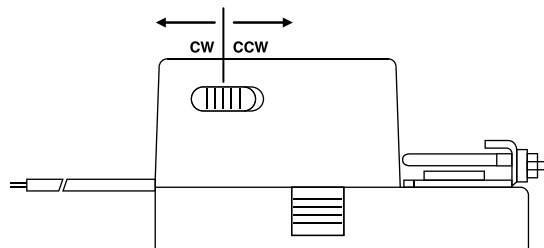


⚠ Connect via safety isolating transformer

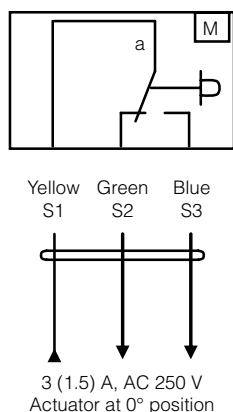
DIRECTION OF ROTATION NACA...05 (S1)

Default factory setting: CW.

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



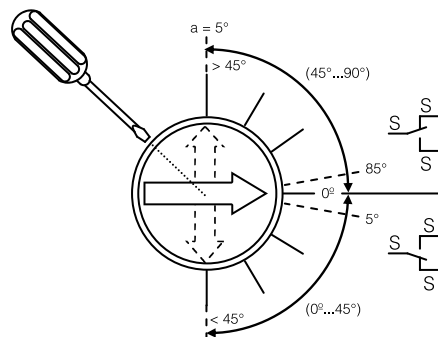
WIRING DIAGRAM NACA...05 (S1) AUXILIARY SWITCH



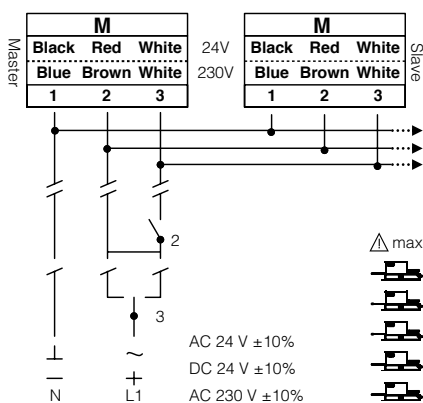
AUXILIARY SWITCH NACA...05 (S1)

Switch **a** factory-set at 5°.

The auxiliary switch can be optimally adjusted between 0°...90°.



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

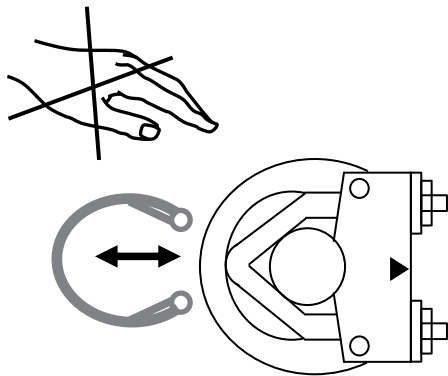


REMARK

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

RELEASING THE ADAPTER NACA...05 (S1)

Releasing the adapter is not required.

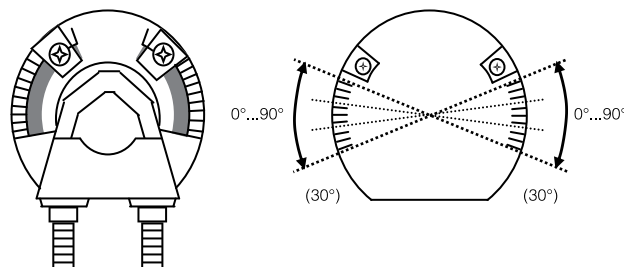


LIMITING ANGLE OF ROTATION NACA...05 (S1)

Adjustment of Mechanical Limiter

1. Loosen 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.



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.