

# NABA...05 (S1) SERIES

VALVE AND VALVE ACTUATOR 2/3 POINT CONTROL



**High Neck**  
Ball Valve Actuator



**Low Neck**  
Ball Valve Actuator

## NABA...05 (S1) SERIES

NABA series standard valve actuators are especially designed and produced for applications in the HVAC systems. Our wide range of standard valve actuators has been developed to operate and position ball valves of different sizes.

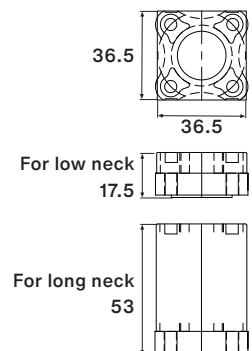
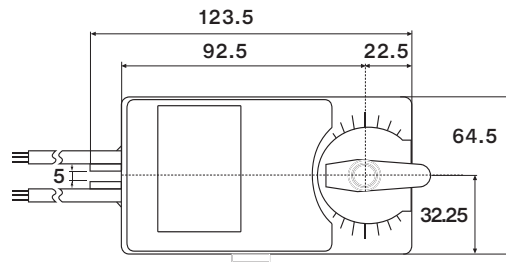
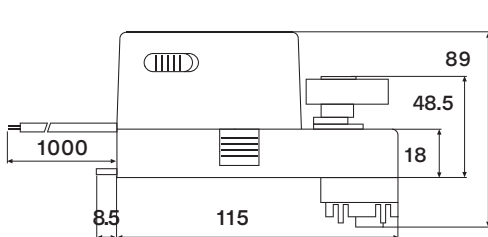
## PRODUCT FEATURE

- Torque 5 Nm
- Valve size DN15(1/2") / DN20(3/4") / DN25(1") / DN32(1 1/4")
- Power supply AC/DC 24V or AC 230V
- Shaft dimensions - □ 9.0 mm (fixed)
- Selectable direction of rotation of reversing actuator
- Optional 1 adjustable SPDT auxiliary switch
- Available in high neck and low neck

## MODEL SELECTION TABLE

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

## DIMENSION (mm)



## TECHNICAL SPECIFICATION

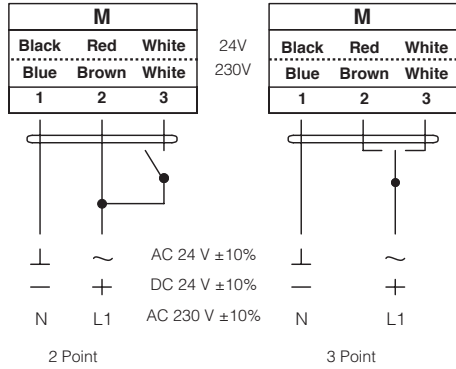
<b>MODEL NUMBER</b>	NABA 1-05 (S1)	NABA 2-05 (S1)
<b>TORQUE</b>	5 Nm	5 Nm
<b>DAMPER SIZE</b>	DN15(1/2") / DN20(3/4") / DN25(1") / DN32(1 1/4")	DN15(1/2") / DN20(3/4") / DN25(1") / DN32(1 1/4")
<b>SHAFT DIMENSION</b>	□ 9.0 mm (fixed)*	□ 9.0 mm (fixed)*
<b>POWER SUPPLY</b>	AC/DC 24 V ± 10%	AC 230 V ± 10%
<b>FREQUENCY</b>	50...60 Hz	50...60 Hz
<b>CONTROL SIGNAL</b>	2/3 point control	2/3 point control
<b>POWER CONSUMPTION</b>		
• <b>OPERATING</b>	2.0 W	1.0 W
• <b>END POSITION</b>	2.0 W	1.0 W
<b>FOR WIRE SIZING</b>	4.0 VA	4.0 VA
<b>ELECTRICAL CONNECTION</b>	1 m Cable	1 m Cable
<b>AUXILIARY SWITCH RATING</b>	2 (1.5) A, AC 250 V	2 (1.5) A, AC 250 V
<b>PROTECTION CLASS</b>	Class III ⚡	Class II ⚡
<b>ANGLE OF ROTATION</b>	90° (95° mechanical)	90° (95° mechanical)
<b>WEIGHT</b>	0.55 Kg	0.55 Kg
<b>LIFE CYCLE</b>	60,000 Rotation	60,000 Rotation
<b>SOUND LEVEL</b>	40 dB	40 dB
<b>IP PROTECTION</b>	IP54	IP54
<b>OPERATING TEMPERATURE</b>	-20°...50° as per IEC 721-3-3	-20°...50° as per IEC 721-3-3
<b>NON-OPERATING TEMPERATURE</b>	-30°...+60° C / IEC 721-3-2	-30°...+60° C / IEC 721-3-2
<b>AMBIENT HUMIDITY</b>	5%...95% rH non condensing / EN	5%...95% rH non condensing / EN
<b>MAINTENANCE</b>	Maintenance Free	Maintenance Free
<b>MODE OF OPERATION</b>	Type I / EN 60730-1	Type I / EN 60730-1
<b>EMC</b>	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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## VALVE AND VALVE ACTUATOR 2/3 POINT CONTROL

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

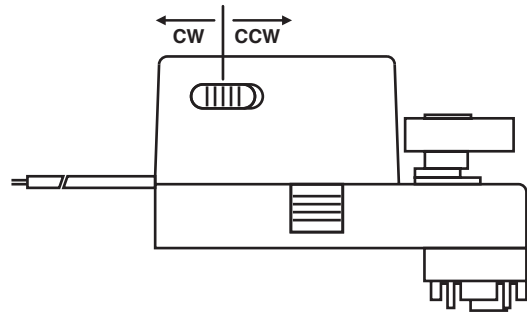


⚠ Connect via safety isolating transformer

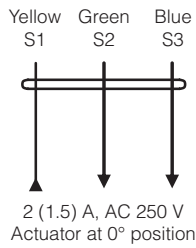
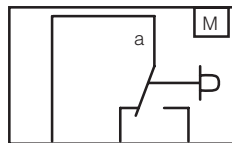
### DIRECTION OF ROTATION NABA...05 (S1)

Default factory setting: CCW.

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



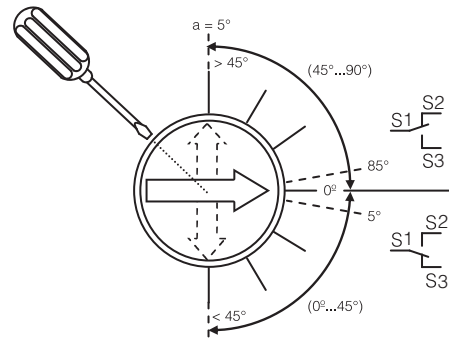
### WIRING DIAGRAM NABA...05 (S1) AUXILIARY SWITCH



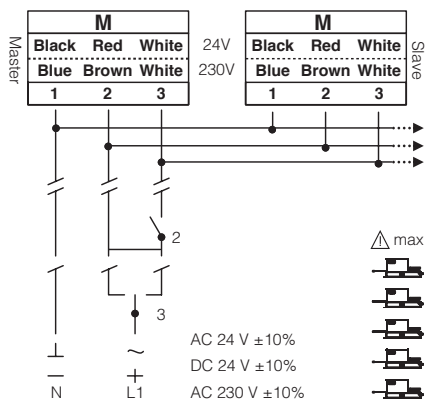
### AUXILIARY SWITCH NABA...05 (S1)

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

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



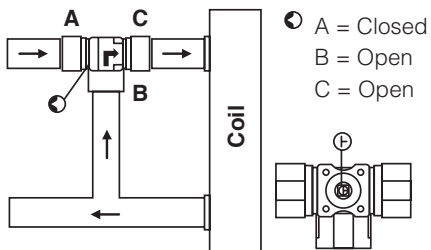
### WIRING DIAGRAM NABA...05 (S1) PARALLEL CONNECTION



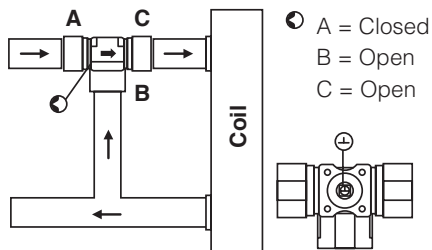
### REMARK

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

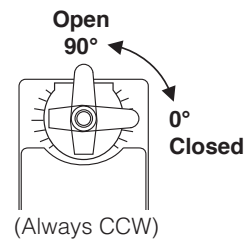
### MIXING CLOSED



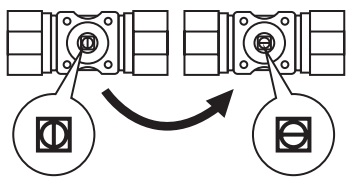
### MIXING OPEN



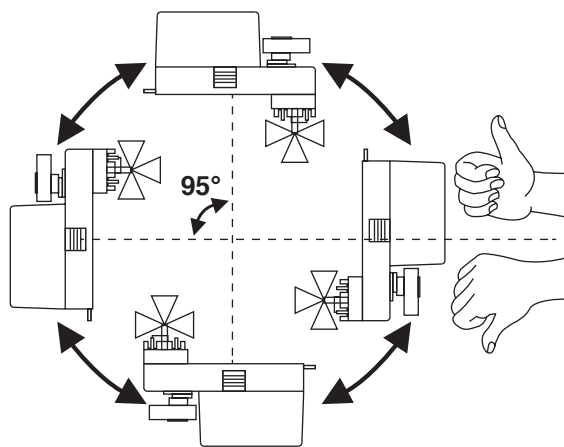
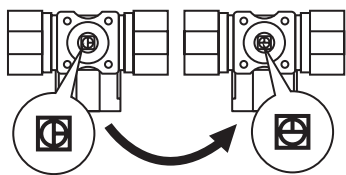
### ACTUATOR POSITION



### 2-way Closed 2-way Open



### 3-way Closed 3-way Open



### 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.