

# NEBA...10 (S1) SERIES

VALVE AND VALVE ACTUATOR 2 POINT CONTROL



## NEBA...10 (S1) SERIES

NEBA electronic return ball 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.

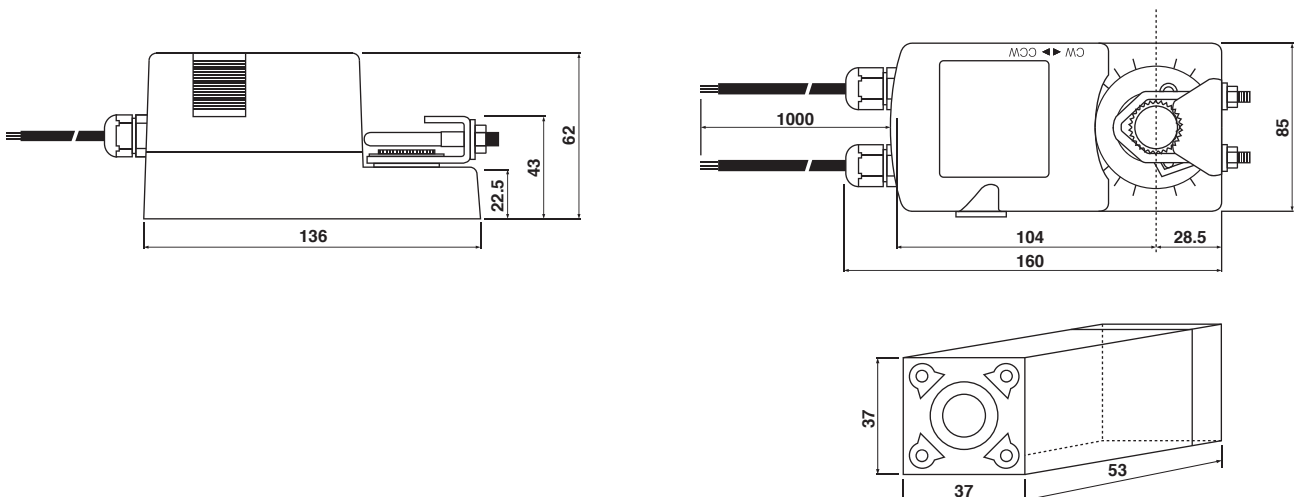
## PRODUCT FEATURE

- Torque 10 Nm
- Valve size DN40(1½“) / DN50(2“)
- Power supply AC/DC 24V or AC 230V
- Shaft dimensions - □ 9.0 mm (fixed)
- Selectable direction of rotation of reversing actuator

## MODEL SELECTION TABLE

| MODEL / TYPE    | TORQUE | POWER SUPPLY     | RUNNING TIME | RETURN | AUXILIARY SWITCH      |
|-----------------|--------|------------------|--------------|--------|-----------------------|
| NEBA 1-10 HN    | 10 Nm  | AC/DC 24 V ± 10% | 65...70 sec  | 40 sec | -                     |
| NEBA 1-10 S1 HN | 10 Nm  | AC/DC 24 V ± 10% | 65...70 sec  | 40 sec | 1 x SPDT (Adjustable) |
| NEBA 2-10 HN    | 10 Nm  | AC 230 V ± 10%   | 65...70 sec  | 40 sec | -                     |
| NEBA 2-10 S1 HN | 10 Nm  | AC 230 V ± 10%   | 65...70 sec  | 40 sec | 1 x SPDT (Adjustable) |

## DIMENSION (mm)



## TECHNICAL SPECIFICATION

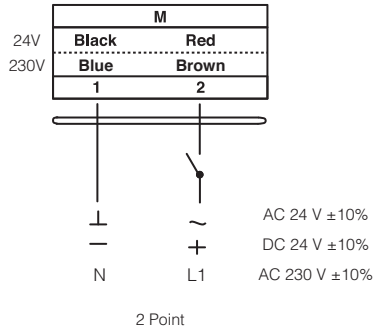
|                                  |                                 |                                 |
|----------------------------------|---------------------------------|---------------------------------|
| <b>MODEL NUMBER</b>              | NEBA 1-10 (S1)                  | NEBA 2-05 (S1)                  |
| <b>TORQUE</b>                    | 10 Nm                           | 10 Nm                           |
| <b>DAMPER SIZE</b>               | DN40(1½") / DN50(2")            | DN40(1½") / DN50(2")            |
| <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 point control                 | 2 point control                 |
| <b>POWER CONSUMPTION</b>         |                                 |                                 |
| • <b>OPERATING</b>               | 2.0 W                           | 1.0 W                           |
| • <b>END POSITION</b>            | 3.0 W                           | 1.0 W                           |
| <b>FOR WIRE SIZING</b>           | 6.0 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>                    | 1.1 Kg                          | 1.1 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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### WIRING DIAGRAM NEBA...10 (S1) POWER SUPPLY AC/DC 24V OR AC 230V

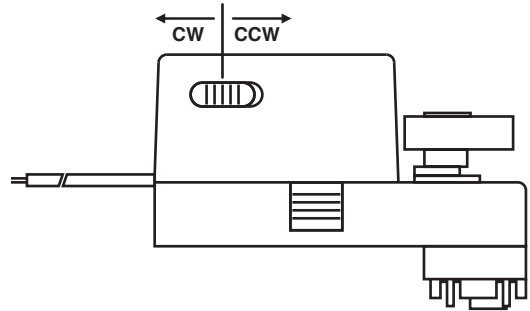


⚠ Connect via safety isolating transformer

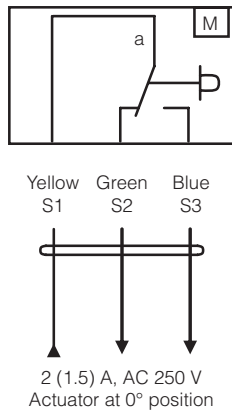
### DIRECTION OF ROTATION NEBA...10 (S1)

Default factory setting: CCW.

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



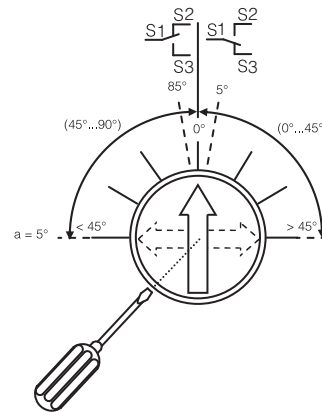
### WIRING DIAGRAM NEBA...10 (S1) AUXILIARY SWITCH



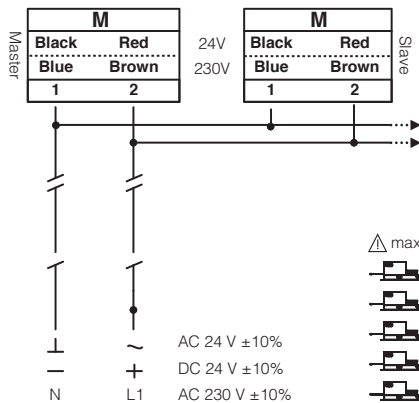
### AUXILIARY SWITCH NEBA...10 (S1)

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

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



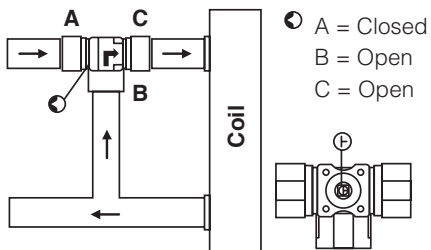
### WIRING DIAGRAM NEBA...10 (S1) PARALLEL CONNECTION



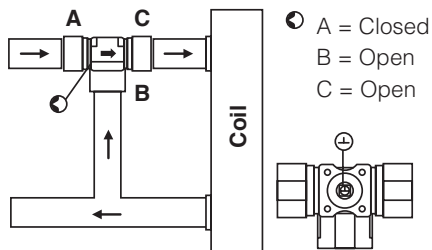
### REMARK

Parallel connection of NEBA...10 (S1) actuators are limited to 5. Power consumption must be observe.

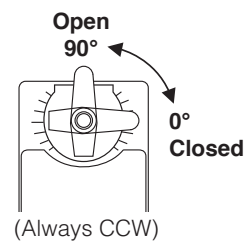
### MIXING CLOSED



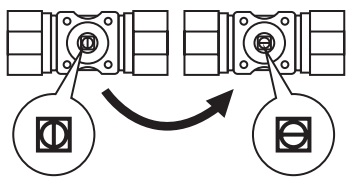
### MIXING OPEN



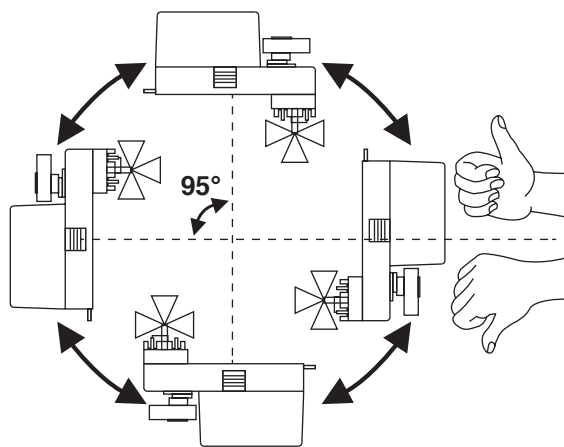
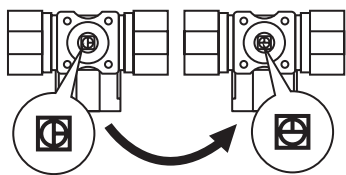
### ACTUATOR POSITION



### 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.