

## Operation manual - Rack actuator E 2-xxx-230

### Intended Use

Electric rack actuator for smoke and heat exhaust or automated natural ventilation. Installation is in devices such as domelights, louvred ventilators or roof flaps. Only one actuator per device is permitted. For pure ventilation purposes, the actuator can be mounted directly on the curb and ventilation frame. The actuator must not be operated in the hand area below an installation height of 2.5 m. Use only in dry interiors.

### Scope of delivery

Actuator with connection cable, eyebolt, two bearing pins with screws and two sliding blocks. Further fixing material (mounting bracket, coupling bracket etc.) is available separately.

### Safety Instructions



#### WARNING!

##### Danger in the case of misuse!

Be sure to follow these instructions and keep them in a safe place.



#### DANGER!

230 V~ actuator. Do not connect to multi-phase alternating voltage! Before any operations, switch off the line voltage and secure against accidental restart.

⚠ Only authorised technical staff may carry out installation and connection.

⚠ The mounting material must be designed to suit the power specified on the actuator.



The actuator is not intended for operation in the hand area. There is a danger of crushing when reaching in due to automatic movement of the domelight / roof flap!

⚠ Observe the local workplace safety and accident prevention regulations, as well as the relevant rules of engineering, such as EN standards.

⚠ Keep children away from actuator and controls.

### Installation and connection

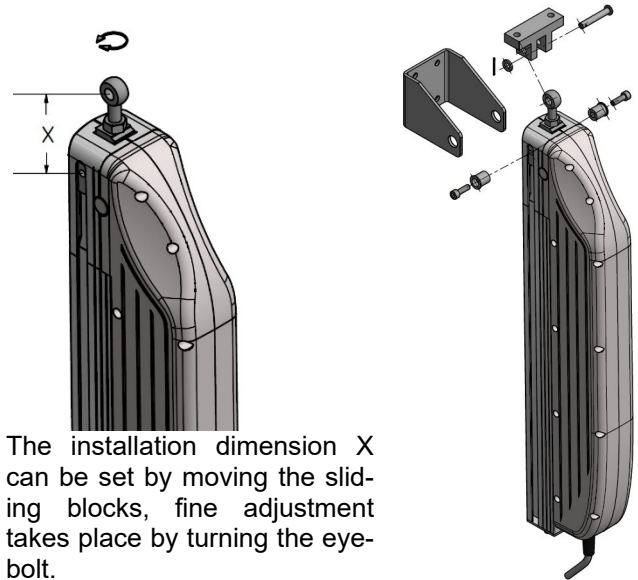
⚠ The actuator must swing freely throughout the complete stroke and should not touch any part of the building.

⚠ Note the swinging movement of the actuator while positioning the connection box and the length of the connection cable. Provide the connection cable with a strain relief.

⚠ Flush-align the eyebolt, mounting bracket and coupling bracket. Ensure that adequately dimensioned bearing surfaces are in place for the mounting bracket and coupling bracket.

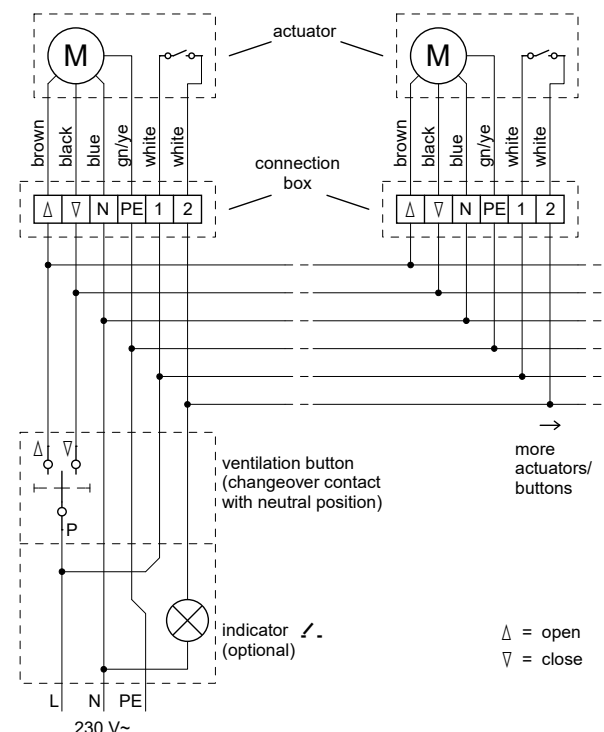
⚠ The tightening torque of the bearing pins must be  $\geq 10$  Nm.

Fix the actuator with the bearing pins and screws into the mounting bracket. Fix the eyebolt with the bolt into the coupling bracket and secure with washer and splint pin. Observe the relevant installation instructions while mounting in the fitting.



The installation dimension X can be set by moving the sliding blocks, fine adjustment takes place by turning the eyebolt.

### Connection:



## Functions

The actuator has an emergency power-off, which will react in the event of overload. In this case, it continues only when moving in the other direction briefly.

The actuator retracts towards CLOSED with reduced speed. Before reaching the end position, the actuator is gently braked (soft close).

Contact for position indicator  $\nearrow \_$ : When moving towards OPEN, the contact is closed. The contact opens when the actuator has switched off while moving towards CLOSED.

The travel direction of the actuator may be switched immediately.

## Maintenance

The actuator is maintenance-free. Check installation components and connection cable at least once a year, unless specified otherwise by any other local regulations.

Clean with a dry cloth. Do not use any solvent cleaner.

## Technical data

Type	<b>E 2-xxx-230</b>
Stroke (xxx)	see name plate
Push / pull force	1000 N / 1000 N
Installation dimension: $\leq 300$ mm stroke	35 - 425 mm
301 - 500 mm stroke	35 - 625 mm
501 - 800 mm stroke	35 - 915 mm
801 - 1000 mm stroke	35 - 1110 mm
Dimensions (width x depth)	55 x 108 mm
Total length: $\leq 300$ mm stroke	560 mm
301 mm - 1000 mm stroke	max. installation dimension + 45 mm
Nominal voltage	230 V~, 50 - 60 Hz
Current input	1.2 A
Inrush current	max. 3.6 A / 5 ms
Mode of operation / duty cycle (control voltage may be connected permanently)	S3 30 %
Travel speed	ca. 18 mm/s
Start-up delay	ca. 0.5 s
Ambient temperature	-25 °C ... +60 °C
Relative humidity	20 % ... 80 %, non-condensing
Enclosure protection rating	IP54
Enclosure	plastic (grey) / aluminium
Weight (300 / 500 / 800 / 1000 mm stroke)	ca. 3.5 / 4 / 5 / 6 kg
Connection cable (silicone, ca. 2.5 m)	6 x 0.5 mm <sup>2</sup> (with contact $\nearrow \_$ )
Service life (stroke cycles)	> 10 000
Stability	3500 N
Load rating of internal contact $\nearrow \_$ (bistable). Provide fuse F 1 A on site	230 V~ / 1 A
Emission sound pressure level	L <sub>pA</sub> $\leq$ 70 dB(A)

The requirements of Directives 2014/35/EU and 2014/30/EU are met. **CE**

## Malfunctions

Fault	Cause	Remedy
Actuator without function	No supply voltage	Check Control Centre / Control
	Supply line interrupted	Check supply line
	Emergency power-off activated	Switch travel direction briefly
	Wind and rain control active	(no error)
Wong travel direction	Control cables are swapped	Swap control cables $\Delta$ / $\nabla$

## Disposal

Dispose of the product using an environment-friendly method and not as domestic waste.