ASF111F310: Damper actuator with spring return, 230 V

ASF111F310

How energy efficiency is improved

Torque-dependent cut-off facility for efficient usage of energy

Features

- For operating air dampers of different sizes in HVAC systems
- For controllers with switching (2-point) output
- Suitable for all fitting positions
- Adjustable angle of rotation
- Direction of rotation set by mounting with front or rear side
- One fixed and one adjustable SPDT auxiliary switches
- Maintenance-free gear unit

Technical data

Power supply		
	Power supply	230 V~, ±10%, 50…60 Hz
	Power consumption	8.0 W, 8.0 VA
Parameters		
	Torque and holding torque	8 Nm
	Control	2-point
	Admissible damper surface area	1.5 m²
	Admissible damper shaft	Ø 10…20 mm, □ 7…14 mm
	Damper shaft length	Min. 40 mm
	Angle of rotation	−5°…+90° (mechanical)
	Running time for 90°	70…90 s
	Operating noise	≤ 45 dB (A)
	Mechanical serviceable life	Approx. 60,000 rotations
Ambient conditions		
	Operating temperature	−20…50 °C
	Storage and transport temperature	−30…60 °C
	Ambient humidity	5…85% rh, no condensation
Construction		
	Housing	Lower section black, upper section yellow
	Housing material	Fire-retardant plastic
	Power cable	1.0 m long, 3 × 0.75 mm²
	Weight	2.2 kg
	Auxiliary switch[1)]	1 fixed and 1 adjustable SPDT
Standards and directives		
	Type of protection	IP54 (EN 60529), horizontal position (cover on top)
	Protection class 230 V	II (EN 60730)
	Environment class	3K3 (IEC 60721-3)
	Mode of operation	Type 1 AA, C (EN 60730-1)
Conformity	EMC Directive 2014/30/EU	EN 55014-1:2017, EN 55014-2:2015 EN 55032:2015 / AC:2016 EN 61000-4-2:2009 EN 61000-4-3:2006 / A2:2010
	Low-Voltage Directive 2014/35/EU	EN 60730-1:2016 / A2:2019 EN 60730-2-14:2019

Overview of types

Type	Description
ASF111F310	Damper actuator with spring return, 230 V

1) *Auxiliary change-over contacts: Admissible load 2(1.5) A, 250 V~*
SPDT: Single Pole Double Throw switch with one input terminal and two output terminals

Description of operation

After the power is connected, the control unit to be activated is moved in the direction of the 90° position until the power-dependent cut-off is performed. In the process, the gear unit with its motor is stopped and blocked. If the power is cut off or switched off, the motor releases the gear unit so that the spring turns the coupling piece back to the 0° position.
The housing (must not be opened) contains the brushed DC motor, the electronic control unit, the maintenance-free gear unit with the anti-blocking function and the return spring.
The manual adjustment is performed by turning the spindle adaptor with a crank handle or hex spanner.

Intended use

This product is only suitable for the purpose intended by the manufacturer, as described in the “Description of operation” section.
All related product regulations must also be adhered to. Changing or converting the product is not admissible.

Improper use

This product is not suitable/permitted:

- for mixing of electrical circuits, e.g. 230 V actuator and 24 V switching elements
- in outdoor areas and higher then 2000 m above sea level
- on means of transport, e.g. ships.
- for safety functions

Engineering and fitting notes

Note
Only qualified electricians are permitted to fit and connect the actuator.
Prevent access by laypersons.

The actuator can be fitted in any position. It can be plugged directly onto the damper spindle and fixed by means of the self-centring clamping lever.
The clockwise or anti-clockwise direction is determined by how the actuator is mounted on the damper spindle.

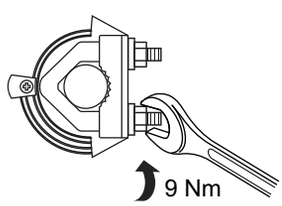
WARNING!
When the housing is opened, there is a risk of injury due to the return spring.
►Do not open the housing.

Note
Do not uncouple the gearbox under load.

The angle of rotation can be continuously adjusted between 0° and 90°. The limitation is defined by means of a mechanical limiter plate (under the coupling piece).

Adapter clamp tightening torque

ASF111F310

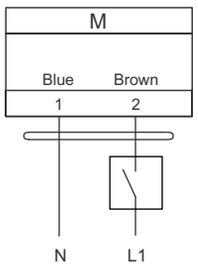


Disposal

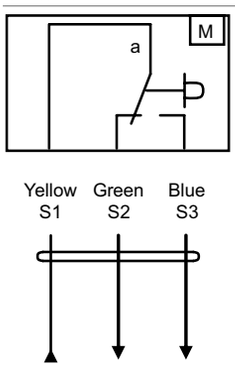
When disposing of the product, observe the currently applicable local laws.
More information on materials can be found in the Declaration on materials and the environment for this product.

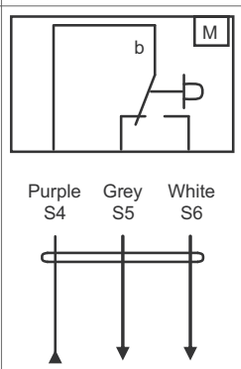
Connection diagram

Power supply 230 V
2 point



Auxiliary switch	
Switch a	Switch b



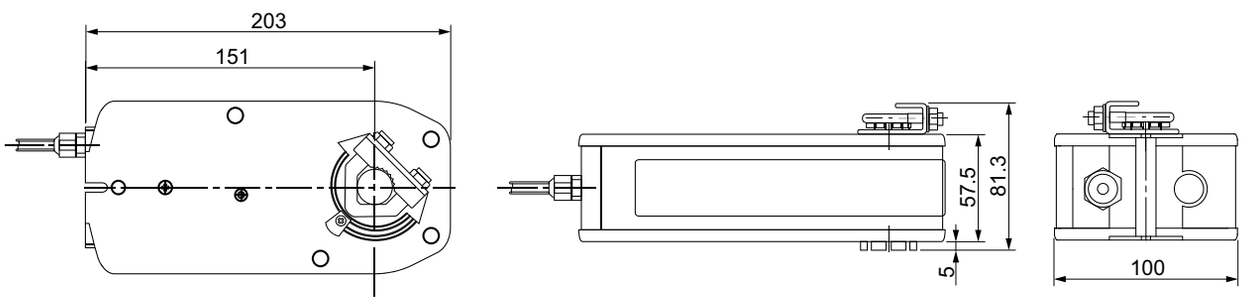


*Switch **a** factory set at 5°. Switch **b** infinitely variable 0…90°, admissible load 2(1.5) A, 250 V~*

Actuator at 0° position

Dimension drawing

All dimensions in millimetres.



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