



Pictures might not correspond with technical data

Spring Return Actuator ASR

ECONEX spring return damper actuators have been developed to operate and position air dampers of different sizes that perform safety functions.

For several application as frost hygiene and smoke control in technical building installations.

TECHNICAL FEATURES

Torque	3 - 5 - 10 - 15 Nm		Protection class	III ⚡ 24V and II ⚡ 230V	
Damper size	0.5 - 1 - 2 - 3 m ²		Angle of rotation	0°...90° (95° mechanical)	
Shaft dimensions	3 Nm	Ø 6 to 12 mm round / 6 to 8 mm square	Weight	3 Nm	1.2 Kg
	5 Nm	Ø 10 to 16 mm round / 7 to 11 mm square		5 Nm	1.7 Kg
	10 Nm	Ø 13 to 19 mm round / 8 to 12 mm square		10 Nm	2.6 Kg
	15 Nm	Ø 13 to 19 mm round / 8 to 12 mm square		15 Nm	2.7 Kg
Minimum shaft length	40 mm		Life cycle	60'000 rotation	
Actuator cable	1000 mm cable connection		Sound level	M. 45 dB (A) S. 65 dB (A)	
Power supply	AC/DC 24V ± 15% - 50-60 Hz		IP protection	IP 54 (in vertical mounting)	
	AC 230V ± 10% - 50-60 Hz		Operating temperature	-20°...+50° C / IEC 721-3-3	
Control signal	2 point (open-closed) or modulating only AC/DC 24V		Non-operating temperature	-30°...+80° C / IEC 721-3-2	
Input signal	0-10V DC		Ambient humidity	5%...95% rH non condensing EN 60730-1	
Output signal	0-10V DC		Maintenance	Maintenance free	
Auxiliary switch rating	3(1.5) A, AC 250V (SPDT)		Mode of operation	Type I / EN 60730-1	
Power consumption operating and end position	3 Nm	2.5 W (1.6 W)	EMC	CE according to 2004 /108/EC	
	5 Nm	4.2 W (2.5 W)	UL listing	UL 873	
	10 Nm	5.0 W (2.5 W)	Customer version	on request	
	15 Nm	6.5 W (2.5 W)			
For wire sizing	3 Nm	5.0 VA			
	5 Nm	10 VA			
	10 Nm	10 VA			
	15 Nm	10 VA			

MODELS

ASR = Spring return actuator

Torque

- 3Nm = 65s (15s closing time by spring)
- 5Nm** = 65s (15s closing time by spring)
- 10Nm = 65s (15s closing time by spring)
- 15Nm = 120s (15s closing time by spring)

Power supply

- A** = 24V AC/DC
- C** = 230V AC 50-60 Hz

Auxiliary switches

- 0** = Without aux switches
- 1** = With n° 1 aux switches - only 5 Nm
- 2** = With n° 2 aux switches

Control signal

- S** = Manual shaft release (On - Off version)
- SE1** = Input 0÷10V DC, output 0÷10V (only 24V AC/DC)

ASR

5

A

1

SE1

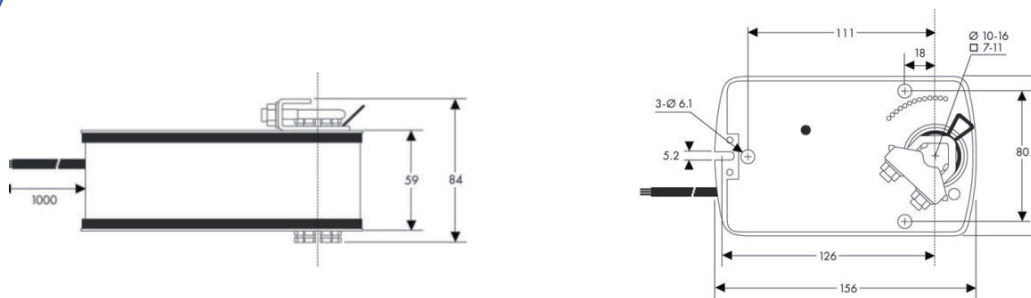
Selected Example: ASR5A1SE1

DIMENSIONS

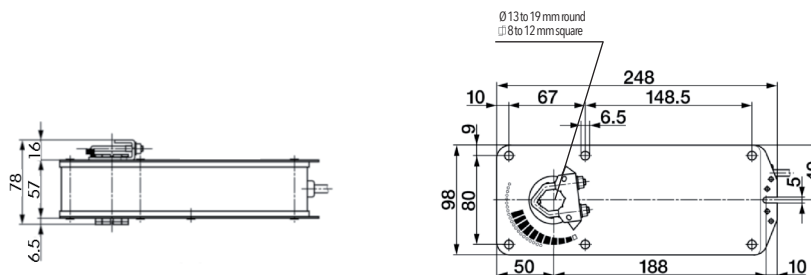
■ 3 Nm



■ 5 Nm



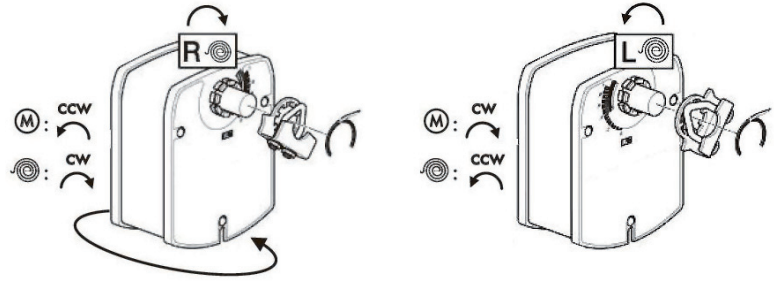
■ 10 Nm/15 Nm



ROTATION ADJUSTMENT & MECHANICAL LIMITING ANGLE

CHANGING DIRECTION OF ROTATION

ASR Actuator can be mounted in 2 direction, one CW, the other CCW.



AUXILIARY SWITCHES ASR

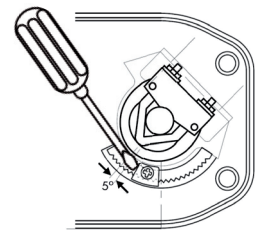
The auxiliary switches for ASR actuators are not adjustable. The switching points are fixed at 5° for switch **a** and at 85° for switch **b**.

MECHANICAL LIMITING ANGLE OF ROTATION ASR

Adjustment of mechanical limiter

1. Take limiting element and screw delivered with the actuator
2. Place limiting element at appropriate position *
3. Tighten screw

* Working range of 90° can be reduced up to 45°.

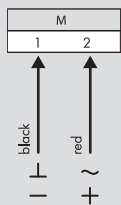


WIRING DIAGRAM

ON-OFF VERSION

Wiring diagram ASR

Power supply AC/DC 24V

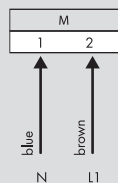


AC 24V ± 15%
DC 24V ± 15%

⚠ Connect via safety isolating transformer

Wiring diagram ASR

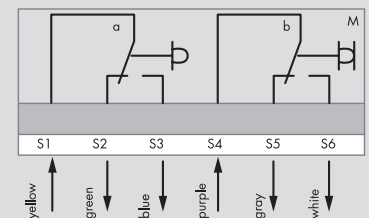
Power supply AV 230V



AC 230V ± 10%

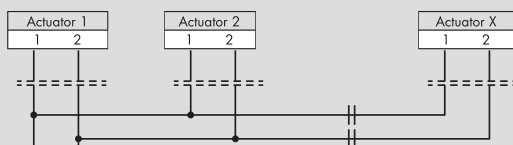
Wiring diagram auxiliary switches ASR

ASR



3A, AC 230V

Wiring diagram for parallel operation ASR



AC 24V ± 15%
DC 24V ± 15%
AC 230V ± 10% N L1

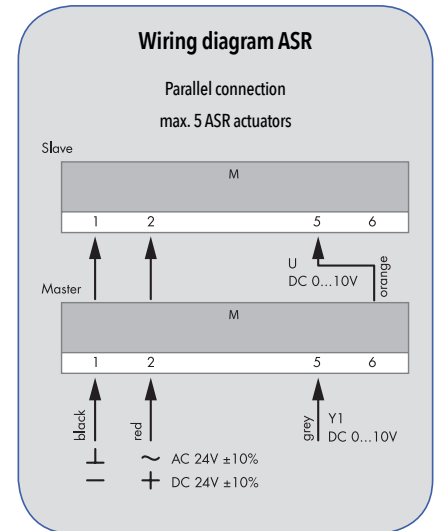
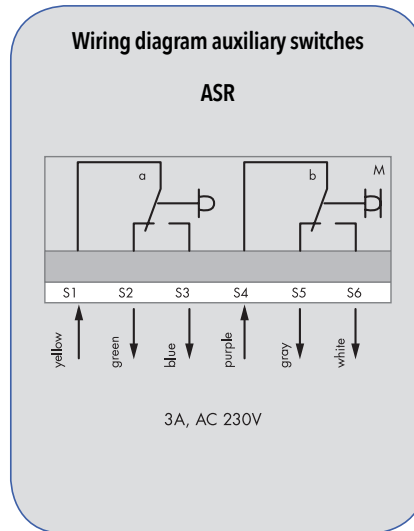
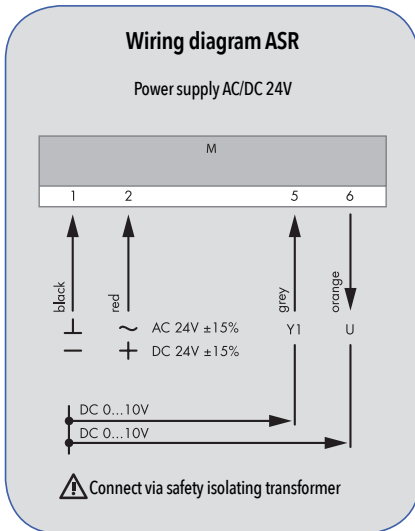
⚠ Connect via safety isolating transformer

Parallel connection of maximum 5 ASR actuators is possible. The power consumption and distance between master and slave must be observed.

REMARK

For more details of installation and commissioning, please observe our mounting instruction manual ASR.

MODULATING VERSION



REMARK

Parallel connection of maximum five ASR actuators is possible. The power consumption and distance between master and slave must be observed.

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SAFETY NOTES

- The ASR actuators are not allowed to be used outside the specified field of application as described at the front page of this data sheet.
- Only to be installed by skill educated persons. Any legal regulations or issued by authorities must be observed during installation.
- The ASR actuator may only opened by ECONEX manufacturer site. Device does not contain any parts that can be replaced by user.
- The electrical connection cable must not be removed from the ASR actuator.
- This actuator includes electrical and electronic components and may not be disposed as household garbage. Please consider the local valid legislation.
- AC 24V - 50/60 Hz - DC 24V: Connect via safety isolating transformer.
- AC 230V: To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductor (with at least 3 mm contact gap).

IMPORTANT REMARKS

This actuator includes electrical and electronic components and may not be disposed as household garbage. Please consider the local valid legislation.

AC/DC 24V: Connect via safety isolating transformer. AC 230V: To isolate from the main power supply, the system must incorporate a device which disconnects the phase conductor (with at least a 3 mm contact gap).

Consult ECONEX representatives for specific requirements and material selections for your intended application. The entire content of this technical datasheet is protected by copyright with all rights reserved ©.

The performance specifications are nominal and conform to acceptable industry standards. ECONEX shall not be liable for damages resulting from misapplication or misuse of its products.

CUSTOMISED VERSION

ECONEX offers you actuators in customised versions, e.g. with your own brand name, with colour-coordinated applications and with your particular demand on request.

Please contact us for further information.

All the reported data are subject to be changed without notice.

from 210309

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