

Data sheet

Actuators for dampers

AMD 610, 610 AS, AMD 620, 620 AS

AMD 710, 710 AS, AMD 720, 720 AS

AMD 810, 810 AS, AMD 820, 820 AS

Description



AMD actuators are used for the regulation of air dampers of 90° angle of rotation to be used in heating, ventilation and air conditioning applications (HVAC).

Features:

- Manual operation
- Rotation direction selection by switch
- Adjustable angle of rotation by mechanical end stop.
- Position indication
- Overload protection
- Direct mounting with universal spindle clamp
- Anti-rotation strap for preventing actuator from rotating
- Maintenance free

Main Data:

- Nominal voltage (AC or DC)
 - 230 V, 50/60 Hz
 - 24 V, 50/60 Hz
- Control Input signal: modulating or 2/3 point (depend on wiring)
- Torque: 20/30/40 Nm
- Rotation angle: 0- max. 95°
- Speed: 150 sec /90°

Ordering

Type	Torque (Nm)	Control signal	Speed (s/90°)	Supply voltage (V)	Auxiliary switch	Max. damper size (m ²)	Code No.
AMD 610	20	2/3-point	150	24 AC/DC	-	4**	082H1118
AMD 610 AS				24 AC/DC	2 aux. Switches *		082H1119
AMD 610				230 AC/DC	-		082H1120
AMD 610 AS		230 AC/DC		2 aux. Switches *	082H1121		
AMD 620		modulating		24 AC/DC	-		082H1122
AMD 620 AS				24 AC/DC	2 aux. Switches *		082H1123
AMD 710	30	2/3-point		24 AC/DC	-	6**	082H1124
AMD 710 AS				24 AC/DC	2 aux. Switches *		082H1125
AMD 710				230 AC/DC	-		082H1126
AMD 710 AS		230 AC/DC		2 aux. Switches *	082H1127		
AMD 720		modulating		24 AC/DC	-		082H1128
AMD 720 AS				24 AC/DC	2 aux. Switches *		082H1129
AMD 810	40	2/3-point	24 AC/DC	-	8**	082H1130	
AMD 810 AS			24 AC/DC	2 aux. Switches *		082H1131	
AMD 810			230 AC/DC	-		082H1132	
AMD 810 AS		230 AC/DC	2 aux. Switches *	082H1133			
AMD 820		modulating	24 AC/DC	-		082H1134	
AMD 820 A			24 AC/DC	2 aux. Switches *		082H1135	

Note:

* Actuator with built-in auxiliary switches

** Damper size:



Working cycles

2/3-point	>60.000 cycles (0°-95°-0°)
modulating	>60.000 cycles (0°-95°-0°)
	>1.000.000 partial cycles (±5°)

Technical data

Type		610/610AS (24V/230V)	710/710AS (24V/230V)	810/810AS (24V/230V)	620/620AS (24V)	720/720AS (24V)	820/820AS (24V)
Power supply	V	24 AC/DC or 230 AC/DC ± 20%					
Power consumption in motion	W	3	4,5 (24V) 4 (230V)	5,5	3	4,5	7
Power consumption in Stand by (end position)		1,5					2
Frequency	Hz	50/60					
Control Input		2/3 point *			modulating		
	V	/			0-10 (2-10) Ri = 100 kΩ		
	mA				0-20 (4-20) Ri = 500Ω		
Operating torque	Nm	20	30	40	20	30	40
Rotation angle		0...max 95°					
Ambient temperature	°C	-30 ... 50					
Ambient humidity:		5...95% r.F., non- condensating (EN 60730-1)					
Storage and transport temperature		-30 ... 80					
Protection Class		III (24V) / II (230V)					
Rated impulse voltage:	kV	24V 0,8 (EN 60730-1) 230V 4 (EN 60730-1)			0,8 (EN 60730-1)		
Grade of enclosure / Degree of protection		IP 54					
Sound power level motor: **	dB(A)	< 45					
Weight	kg	1,7					
CE marking in accordance with standards		Low voltage directive (LVD) 2006/95/EC: EN 60730-1, EN 60730-2-14 EMC Directive 2004/108/EC: EN 61000-6-2, EN 61000-6-3 RoHS CE (2011/65/EU)					

Note:

* depend on wiring

** at distance 1m

Operating mode

Valid for: AMD 610, 610AS, 710, 710AS, 810, 810AS
2- point.

Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position "R" moves the actuator to position 1. Is also BK (1+2+3) connected to the power supply the actuator is moving to position 0.

3- point.

Through connecting the power supply to BU+BN (1+2) and the direction of rotation switch on position "R" moves the actuator to position 1. If the power supply is interrupted the actuator maintains its current position. Is also BU+BK (1+3) connected to the power supply the actuator is moving in direction 0.

The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Valid for: AMD 620, 620AS, 720, 720AS, 820, 820AS

Through connecting the power supply to BU+BN (1+2) and a reference signal Y to BK (3) of 0(2)...10VDC, moves the actuator to its specified position. The actual damper position 0...100% is a feedback signal U for example to share the signal with other actuators.

The actuator is overload-proof, requires no limit switches and automatically stops when the end stop is reached.

Direct mounting

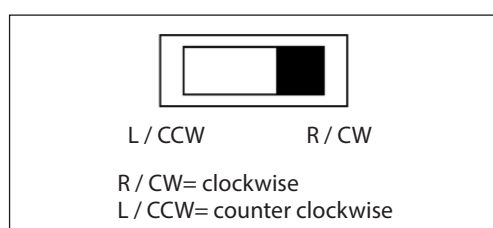
Simple direct mounting on the damper spindle with a universal spindle clamp, supplied with an anti-rotation strap to prevent the actuator from rotating.

Manual operation

Manual operation is possible with the self-resetting pushbutton (the gearing latch remains disengaged as long as the pushbutton is pressed)

Rotary direction switch

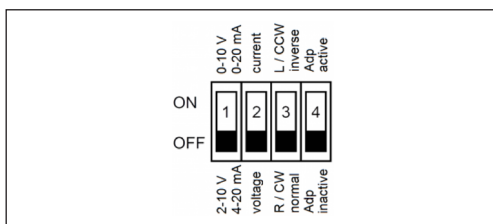
Valid for AMD:
(610, 610AS, 710, 710AS, 810, 810AS)



Mode- switch

Valid for AMD:
(620, 620AS, 720, 720AS, 820, 820AS)

DIP-Switch under the case cover



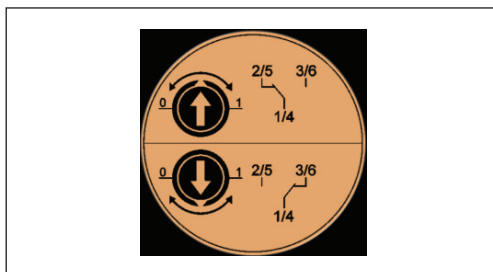
Adaption drive (Adp)

Valid for AMD:
(620, 620AS, 720, 720AS, 820, 820AS)

- Adaption on angle of rotation < 90°
- Actuator power-off
- Setting the mechanical end stops
- Actuator power-on
- Adaption to enable
- Actuator adaption on angular range
- Adaption to disable
- “Y” refers to the measured angular range

Auxiliary switches

Valid for AMD:
(610AS, 620AS, 710AS, 720AS, 810AS, 820AS)

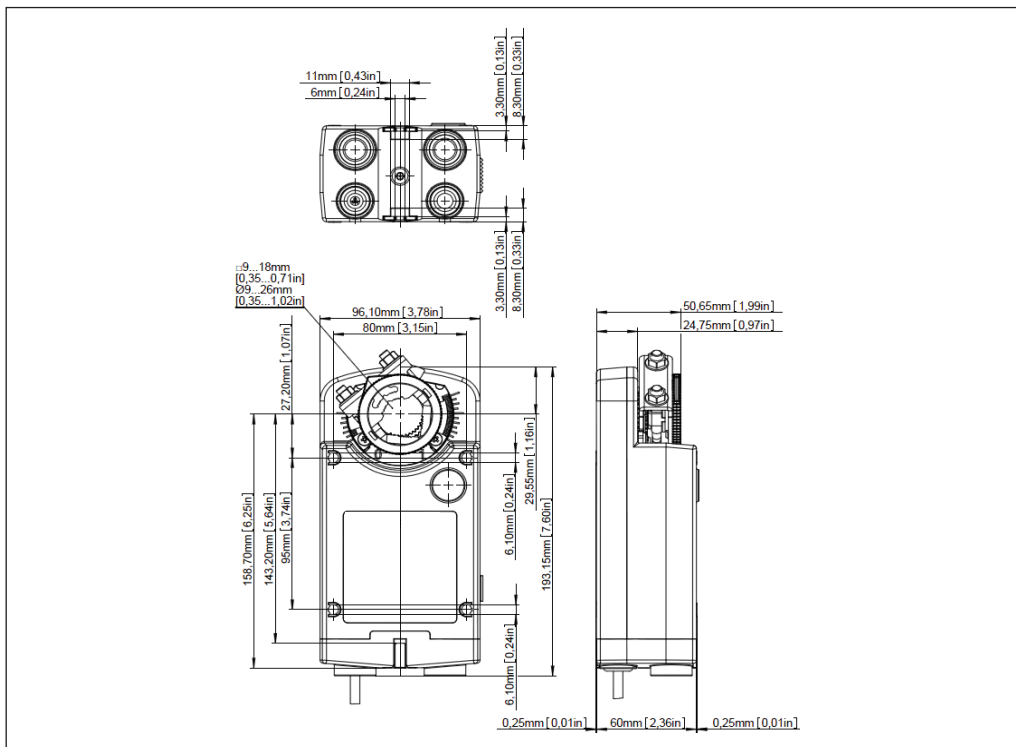


Installation

The actuators should be mounted in a dry environment, absolutely free from acrid fumes. In case of outdoor installation, the actuator has to be protected against climatic influences by suitable measures.

Clamp coupling dimensions:
∅ 9-18mm / ∅ 9-26 mm

Dimensions



Wiring

