



ACTUATOR LM24A-SR



SERVOMOTEURS MODULANTS

FOR VARIABLE VOLUME FLOWS IN AIR CONDITIONING SYSTEMS

Actuators for mechanical self-powered CAV controllers Type EN, RN, or VFC, and for flow adjustment dampers Type VFR

- Setpoint value adjustment
- Supply voltage 24 V AC/DC
- Control input signal: Voltage signal 0 – 10 V DC or 2 – 10 V DC
- Potentiometer or mechanical stops
- Positive lock connection with CAV controller or flow adjustment damper
- Retrofit possible

Application



Application

- Actuators for variable adjustment
- For moving the damper blades of Type AK and AKK shut-off dampers to any position

Description



Parts and characteristics

- Mechanical stops for limiting the damper blade positions
- Supply voltage 24 V AC/DC
- Overload protection
- Setpoint value signal 2 – 10 V DC
- Release button to allow for manual operation

INFORMATION TECHNIQUE

FUNCTION, TECHNICAL DATA, Produktbeziehungen



Functional description

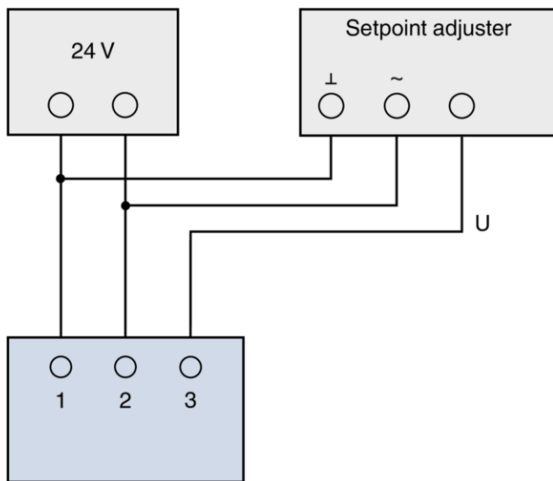
The actuator moves the blade of a shut-off damper to any position between the OPEN and CLOSED positions.

The control input signal is a voltage signal.

Control options and effect of actuator action in case of factory setting

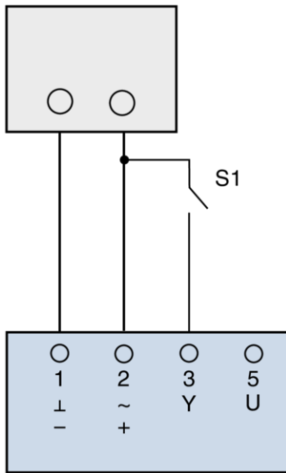
Order code detail	Function	Control	Direction of rotation	
			1	2
B20	Variable	Variable control		
	Open/close	1-wire control, 2-wire control	OPEN	CLOSED

Variable control initiated by a voltage signal



U Voltage signal 0 – 10 V DC or 2 – 10 V DC

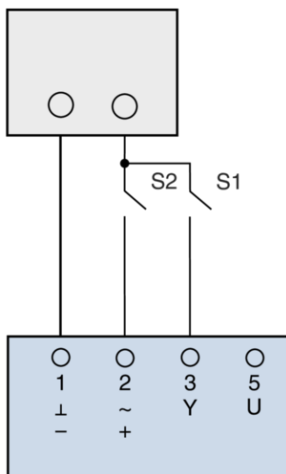
1-wire control for modulating actuators



Switch functions

- S1 open: Direction of rotation 1
- S1 closed: Direction of rotation 2

2-wire control (3-point) for modulating actuators



Switch functions

- S1 open
- S2 open: Actuator has stopped (any position)
- S2 closed: Direction of rotation 1

S1 closed

- S2 open: Actuator has stopped (any position)
- S2 closed: Direction of rotation 2

Actuators LM24A-SR and LM24A-SR-F

Supply voltage (AC)	24 V AC \pm 20 %, 50/60 Hz
Supply voltage (DC)	24 V DC \pm 20 %
Power consumption – load	1 W
Power consumption – idle	0.4 W
Power rating	2 VA
Torque	5 Nm
Running time for 90°	150 s
Position feedback	2 – 10 V DC, 1 mA
Control signal	2 – 10 V DC, $R_a > 100 \text{ k}\Omega$
Connecting cable	4 \times 0.75 mm ² , 1 m long
IEC protection class	III (protective extra-low voltage)
Protection level	IP 54
EC conformity	EMC to 2014/30/EU, RoHS to 2011/65/EU
Operating temperature	-30 to 50 °C
Weight	0.5 kg

Variants



Any attachments are to be defined with the order code of the shut-off damper.

B20

Application

- Actuator LM24A-SR
- Stepless adjustment as well as opening and closing of shut-off dampers

Parts and characteristics

- Supply voltage 24 V AC/DC
- Control input signal: Setpoint value signal 2 – 10 V DC, corresponds to the total rotation range (90°), working range is limited by mechanical stops
- Output: Position feedback 2 – 10 V
- Mechanical stops
- Direction of action can be reversed
- Release button to allow for manual operation

Actuators for the variable adjustment of shut-off dampers

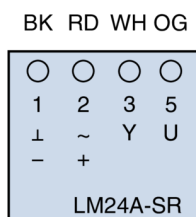
Order code detail	Actuator		Supply voltage
	Part number	Type	Supply voltage
B20	M466DT6 with M536AJ4	LM24A-SR	24 V

Actuator LM24A-SR





LM24A-SR, connecting cable core identification



- 1 ⊥, -: Ground, neutral
- 2 ~, +: Supply voltage
- 3 Y: Setpoint value signal
- 5 U: Position feedback

LM24A-SR and LM24A-SR-F