





**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
- 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 positionsSupply voltage 24 V AC/DC
- Overload protection
- Setpoint value signal 2 10 V DC
- Release button to allow for manual operation

# **TECHNICAL INFORMATION**

FUNCTION, TECHNICAL DATA, Produktbeziehungen

#### **Functional description**

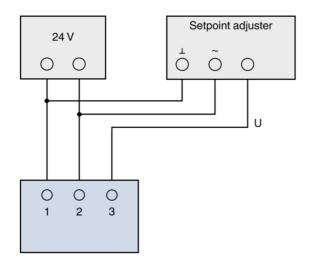
The actuator moves the blade of a shut-off damper to any position between the OPEN and CLOSED positions.

The control input signal is a voltage signal.

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

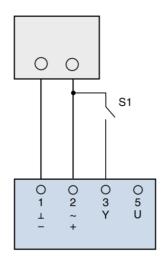
Order code detail	Function	Control	Direction of rotation	
			1	2
B20	Variable	Variable control		
	Open/close	1-wire control, 2-wire control	OPEN	CLOSED

## Variable control initiated by a voltage signal



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

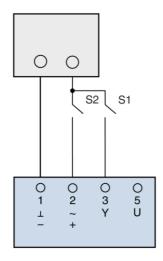
## 1-wire control for modulating actuators



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 ± 20 %, 50/60 Hz	
Supply voltage (DC)	24 V DC ± 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, $R_a > 100 kΩ$	
Connecting cable	4 × 0.75 mm², 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	Туре	Supply voltage
B20	M466DT6 with M536AJ4	LM24A-SR	24 V

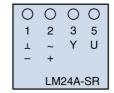
Actuator LM24A-SR



Electrical connection

## LM24A-SR, connecting cable core identification

# BK RD WH OG



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

LM24A-SR and LM24A-SR-F