

Attachments

Open/Close actuators



For the opening and closing of dampers in air conditioning systems

Actuators for Type JZ, JZ-AL, JZ-LL, JZ-LL-AL, JZ-HL, JZ-HL-AL multileaf dampers

- Change of the damper blade position for two different operating situations
- Supply voltage 24 V AC/DC or 230 V AC
- Control input signal: 1-wire-control or 2-wire control (3-point)
- Mechanical stops
- Retrofit possible

Optional equipment and accessories

- Fast-running actuators
- Auxiliary switch



Fast-running actuator



Multileaf damper with actuator

Type		Page
Open/Close actuators	General information	OC – 2
	Function	OC – 3
	Variants	OC – 4
	24 V	OC – 5
	230 V	OC – 8
	Auxiliary switch	OC – 10

Application

Application

- Actuators for opening and closing

- Opening and closing of Type JZ, JZ-AL, JZ-LL, JZ-LL-AL, JZ-HL, JZ-HL-AL multileaf dampers

Description

Parts and characteristics

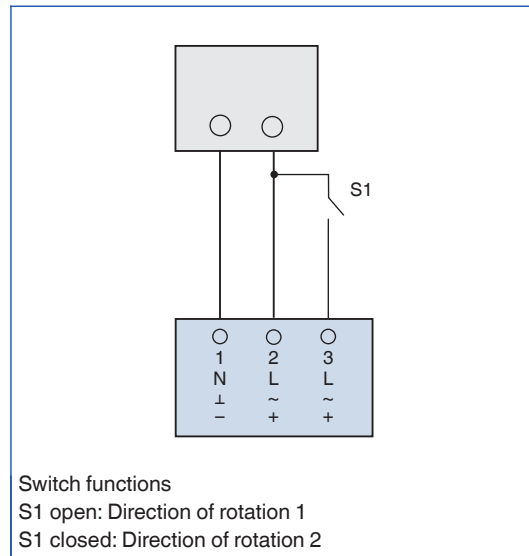
- Mechanical stops for limiting the damper blade positions
- Actuators with overload protection
- Control input signal: 1-wire-control or 2-wire-control (3-point, open/close)

- Optional auxiliary switch for capturing the end positions
- Release button to allow for manual operation

Functional description

The actuator moves the blades of a multileaf damper into OPEN or CLOSED position.

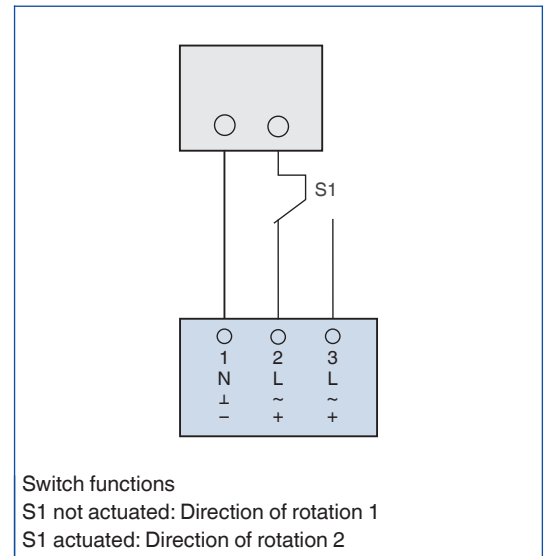
1-wire control



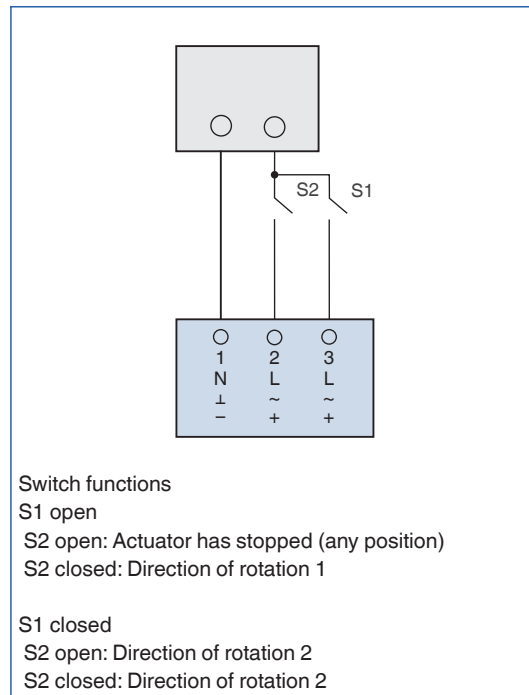
1-wire control or 2-wire control (3-point) can be used.

1-wire control is actually an open/close control.

2-wire control (open/close)



2-wire control (3-point)



Any attachments are to be defined with the order code of the multileaf damper.

Actuators for multileaf dampers

Order code detail	Actuator		Auxiliary switch		Torque	Supply voltage
	Part number	Type	Part number	Type		
Z12	M466DD6	SM230A	-	-	20 Nm	100 – 240 V AC
Z13	M466DG3	GM230A	-	-	40 Nm	100 – 240 V AC
Z14	M466DD5	SM24A	-	-	20 Nm	24 V
Z15	M466DG1	GM24A	-	-	40 Nm	24 V
Z16	M466DD6	SM230A	M536AI3	S2A	20 Nm	100 – 240 V AC
Z17	M466DG3	GM230A	M536AI3	S2A	40 Nm	100 – 240 V AC
Z18	M466DD5	SM24A	M536AI3	S2A	20 Nm	24 V
Z19	M466DG1	GM24A	M536AI3	S2A	40 Nm	24 V
Z42	M466DU4	LM230A	-	-	5 Nm	100 – 240 V AC
Z43	M466EM8	NM230A	-	-	10 Nm	100 – 240 V AC
Z44	M466DU5	LM24A	-	-	5 Nm	24 V
Z45	M466EM9	NM24A	-	-	10 Nm	24 V
Z46	M466DU4	LM230A	M536AI3	S2A	5 Nm	100 – 240 V AC
Z47	M466EM8	NM230A	M536AI3	S2A	10 Nm	100 – 240 V AC
Z48	M466DU5	LM24A	M536AI3	S2A	5 Nm	24 V
Z49	M466EM9	NM24A	M536AI3	S2A	10 Nm	24 V

Fast-running actuators for multileaf dampers

Order code detail	Actuator		Auxiliary switch		Torque	Supply voltage
	Part number	Type	Part number	Type		
ZS21	M466EU4	SMQ24A	-	-	16 Nm	24 V
ZS22	M466EU4	SMQ24A	M536AI3	S2A	16 Nm	24 V

Application

- Actuators 24 V for opening and closing
- Opening and closing of Type JZ, JZ-AL, JZ-LL, JZ-LL-AL, JZ-HL, JZ-HL-AL multileaf dampers

- Z48: Actuator LM24A with auxiliary switch S2A
- Z49: Actuator NM24A with auxiliary switch S2A
- ZS21: Actuator SMQ24A
- ZS22: Actuator SMQ24A with auxiliary switch S2A

Variants

- Z14: Actuator SM24A
- Z15: Actuator GM24A
- Z18: Actuator SM24A with auxiliary switch S2A
- Z19: Actuator GM24A with auxiliary switch S2A
- Z44: Actuator LM24A
- Z45: Actuator NM24A

Parts and characteristics

- Supply voltage 24 V AC/DC
- 1-wire-control or 2-wire-control (3-point)
- Mechanical stops
- Direction of action can be reversed
- Release button to allow for manual operation



Actuator SM24A

Actuator SM24A

Supply voltage (AC)	24 V AC ± 20 %, 50/60 Hz
Supply voltage (DC)	24 V DC -10 %, +20 %
Power rating (AC)	6 VA max.
Power rating (DC)	4 W max.
Torque	20 Nm
Running time for 90°	150 s
Control input signal	1-wire control or 2-wire control (3-point)
Connecting cable	3 × 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	1.0 kg



Actuator GM24A

Actuator GM24A

Supply voltage (AC)	24 V AC ± 20 %, 50/60 Hz
Supply voltage (DC)	24 V DC ± 20 %
Power rating (AC)	6 VA max.
Power rating (DC)	4 W max.
Torque	40 Nm
Running time for 90°	150 s
Control input signal	1-wire control or 2-wire control (open/close)
Connecting cable	3 × 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	1.7 kg



Actuator LM24A

Actuators LM24A and LM24A-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	0.2 W
Power rating	1.5 VA
Torque	5 Nm
Running time for 90°	150 s
Control input signal	1-wire control or 2-wire control (3-point)
Connecting cable	3 × 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



Actuator NM24A

Actuator NM24A

Supply voltage (AC)	24 V AC ± 20 %, 50/60 Hz
Supply voltage (DC)	24 V DC ±20 %
Power rating (AC)	3.5 VA max.
Power rating (DC)	1.5 W max.
Torque	10 Nm
Running time for 90°	150 s
Control input signal	1-wire control or 2-wire control (3-point)
Connecting cable	3 × 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	0.75 kg

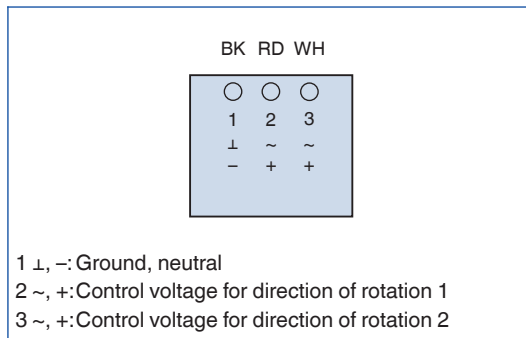


Actuator SMQ24A

Fast-running actuator SMQ24A

Supply voltage (AC)	24 V AC ± 20 %, 50/60 Hz
Supply voltage (DC)	24 V DC –10 %, +20 %
Power rating (AC)	26 VA max.
Power rating (DC)	15 W max.
Torque	16 Nm
Running time for 90°	7 s
Control input signal	1-wire control
Connecting cable	3 × 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 40 °C
Weight	1.7 kg

Actuators 24 V, connecting cable core identification



1 ⊥, -: Ground, neutral
2 ~, +: Control voltage for direction of rotation 1
3 ~, +: Control voltage for direction of rotation 2

LM24A, NM24A, SM24A, GM24A, SMQ24A

Application

- Actuators 230 V for opening and closing
- Opening and closing of Type JZ, JZ-AL, JZ-LL, JZ-LL-AL, JZ-HL, JZ-HL-AL multileaf dampers

- Z43: Actuator NM230A
- Z46: Actuator LM230A with auxiliary switch S2A
- Z47: Actuator NM230A with auxiliary switch S2A

Variants

- Z12: Actuator SM230A
- Z13: Actuator GM230A
- Z16: Actuator SM230A with auxiliary switch S2A
- Z17: Actuator GM230A with auxiliary switch S2A
- Z42: Actuator LM230A

Parts and characteristics

- Supply voltage 100 – 240 V AC
- 1-wire-control or 2-wire-control (3-point)
- Mechanical stops
- Direction of action can be reversed
- Release button to allow for manual operation



Actuator SM230A

Actuator SM230A

Supply voltage	100 – 240 V AC –15 % +10 %, 50/60 Hz
Power rating	6 VA max.
Torque	20 Nm
Running time for 90°	150 s
Control input signal	1-wire control or 2-wire control (3-point)
Connecting cable	3 × 0.75 mm ² , 1 m long
IEC protection class	II (protective insulation)
Protection level	IP 54
EC conformity	EMC to 2014/30/EU, low voltage to 2014/35/EU, RoHS to 2011/65/EU
Operating temperature	–30 to 50 °C
Weight	1.0 kg



Actuator GM230A

Actuator GM230A

Supply voltage	100 – 240 V AC –15 % +10 %, 50/60 Hz
Power rating	9 VA max.
Torque	40 Nm
Running time for 90°	150 s
Control input signal	1-wire control or 2-wire control (open/close)
Connecting cable	3 × 0.75 mm ² , 1 m long
IEC protection class	II (protective insulation)
Protection level	IP 54
EC conformity	EMC to 2014/30/EU, low voltage to 2014/35/EU, RoHS to 2011/65/EU
Operating temperature	–30 to 50 °C
Weight	1.7 kg



Actuator LM230A

Actuator LM230A and LM230A-F

Supply voltage	100 – 240 V AC –15 % +10 %, 50/60 Hz
Power consumption – load	1.5 W
Power consumption – idle	0.5 W
Power rating	3.5 VA
Torque	5 Nm
Running time for 90°	150 s
Control input signal	1-wire control or 2-wire control (3-point)
Connecting cable	3 × 0.75 mm ² , 1 m long
IEC protection class	II (protective insulation)
Protection level	IP 54
EC conformity	EMC to 2014/30/EU, low voltage to 2014/35/EU, RoHS to 2011/65/EU
Operating temperature	–30 to 50 °C
Weight	0.5 kg

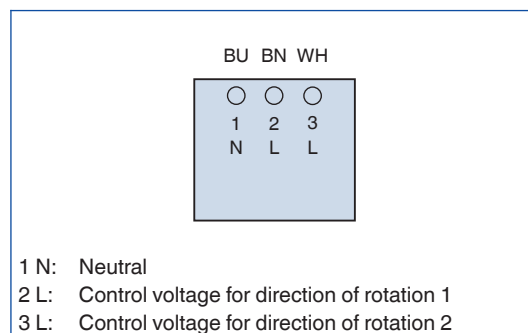


Actuator NM230A

Actuator NM230A

Supply voltage	100 – 240 V AC –15 % +10 %, 50/60 Hz
Power rating	5.5 VA max.
Torque	10 Nm
Running time for 90°	150 s
Control input signal	1-wire control or 2-wire control (3-point)
Connecting cable	3 × 0.75 mm ² , 1 m long
IEC protection class	II (protective insulation)
Protection level	IP 54
EC conformity	EMC to 2014/30/EU, low voltage to 2014/35/EU, RoHS to 2011/65/EU
Operating temperature	–30 to 50 °C
Weight	0.75 kg

Actuators 230 V, connecting cable core identification



- 1 N: Neutral
- 2 L: Control voltage for direction of rotation 1
- 3 L: Control voltage for direction of rotation 2

LM230A, NM230A, SM230A, GM230A

Application

- Auxiliary switch S2A for capturing damper blade end positions (end positions reached through actuator operation)
- Volt-free contacts for signalling or activating

switch functions

- Two integral switches, e.g. for damper blade OPEN and damper blade CLOSED
- Potentiometer for setting any switch point



Auxiliary switch S2A

Auxiliary switch S2A

Type of contact	2 changeover contacts ¹⁾
Max. switching voltage (AC)	250 V AC
Max. switching current (AC)	3 A (resistive load); 0.5 A (inductive load)
Max. switching voltage (DC)	110 V DC
Max. switching current (DC)	0.5 A (resistive load); 0.2 A (inductive load)
Connecting cable	6 × 0.75 mm ² , 1 m long
IEC protection class	II (protective insulation)
Protection level	IP 54
EC conformity	EMC to 2014/30/EU, low voltage to 2014/35/EU, RoHS to 2011/65/EU
Operating temperature	-30 to 50 °C
Weight	0.250 kg

¹⁾ If both auxiliary switches are used the switching voltages must be the same

S2A, connecting cable core identification

