

ACTUATOR

## LKS 118

FOR AIR DAMPERS ON OIL AND GAS BURNERS

PRODUCT HANDBOOK



### APPLICATION

The LKS 118 air damper actuator is designed to be fitted to oil and gas burners for simple 2 position actuation.

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# GENERAL

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## DESCRIPTION

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A synchronous motor powers a output shaft via gear reducer.

An optional micro-switch is available for position indication. The opening angle can be easily and steplessly adjusted via two limit switches.

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## FEATURES

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**Electric actuator up to 0.6 Nm**

- **Drive time: 5 sec.**
- **for simple damper movements on small burners**
- **Variants:** - clockwise or counter clockwise rotation
  - with optional micro-switch
  - shaft version
- **Easily adjustable limit switches**
- **Synchronous motor**

# TECHNICAL DATA

## SPECIFICATION

### Type overview

clockwise rotation <sup>1)</sup>

Diagram 2)	Shaft 3)	Drive time 4)	Load torque 5)	Holding torque	Voltage 6)	Type	Remarks
Nr.	Nr.	s	Nm	Nm	V		
S5	3	5	0,6	0,4	230	LKS 118-05 A 3-5 S5	With feedback
S6	3	5	0,6	0,4	230	LKS 118-06 A 3-5 S6	

Counter-clockwise rotation <sup>1)</sup>

Diagram 2)	Shaft 3)	Drive time 4)	Load torque 5)	Holding torque	Voltage 6)	Type	Remarks
Nr.	Nr.	s	Nm	Nm	V		
S3	3	5	0,6	0,4	230	LKS 118-03 B 3-5 S3	
S4	3	5	0,6	0,4	230	LKS 118-04 B 3-5 S4	With feedback

### Legend

- 1) when viewing from direction A (see dimensional drawing)
- 2) see "Circuit diagrams"
- 3) see "Dimensional drawing"
- 4) at 50 Hz for 90°  
at 60 Hz, Drive times are about 20 % shorter
- 5) under nominal conditions  
under extreme conditions (e.g. +60 °C, 230V -15%) the torques will be 25% lower
- 6) +10% -15%; 50...60Hz  
at -15%; torque reduced by approx. 20% at undervoltage

## Technical Data

### Housing

- impact-proof plastic  
Colour: black

### Drive motor

- reversible synchronous motor

### Switch point setting

- via steplessly adjustable limit switch

### Position indicator

- none

### Connection system

- fixed 3 or 4 core cable connection, cable length approx.  
50 cm

### Gearing

- spur gearing, maintenance-free

### Output shaft

- standard: Couples to 6 mm round shaft bevelled to 5 mm.  
The output shaft position can easily be corrected by  
turning a gear wheel by hand

### Fitting and fastening

- Fixing from outside using 2 M4 screws

### Mains voltage

- 230 V -15% +10%

### Mains frequency

- 50 Hz or 60 Hz

### Safety class

- II VDE 0631

### Power consumption

- approx. 9 VA

### Duty cycle

- 50% in 2 minutes

### Interference suppression

- N (according to VDE 0785)

### Actuating angle

- max. 130°

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**Mounting position**

- any

**Protection**

- IP 00 (DIN 40050)

**Cable connection**

- fixed, 3 or 4 core

**Direction of rotation**

- see "Type overview"

**Torque and holding torque**

- see "Type overview"

**Drive times**

- 5 sec for 90°

**Switch**

- 2 limit switches  
operation with adjustable stops
- switching voltage  
AC 24...230 V
- switching capacity  
with inductive loads 250 VA

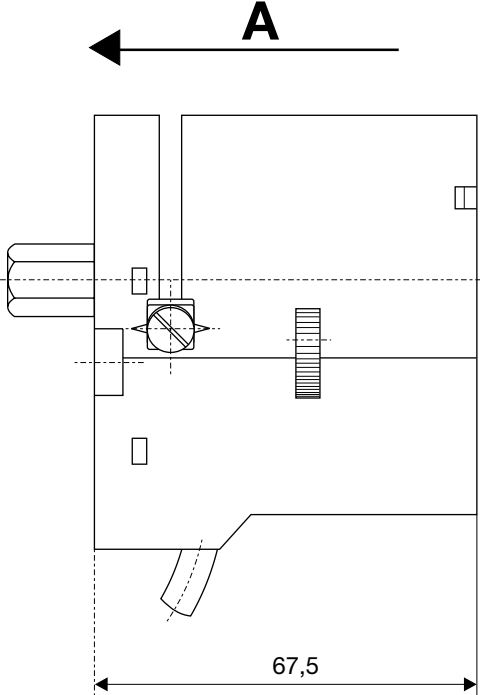
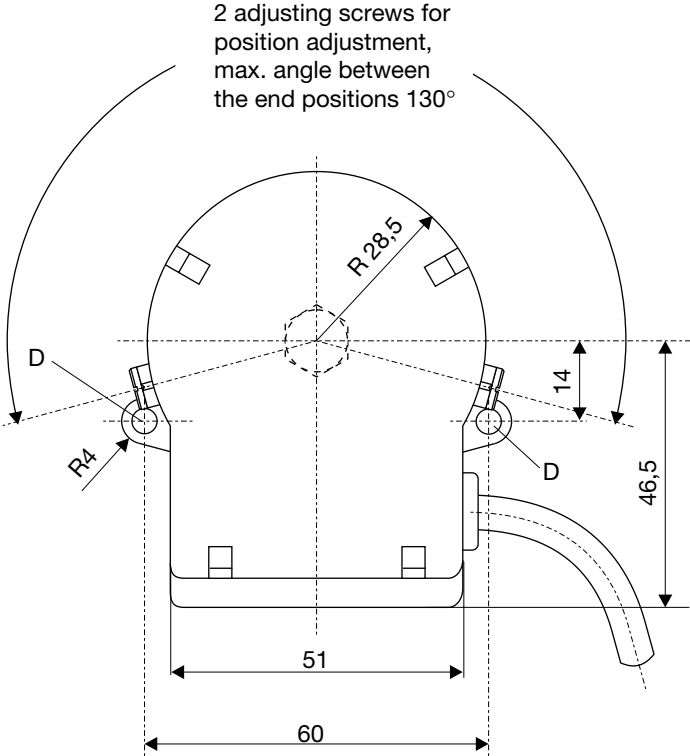
**Ambient temperature**

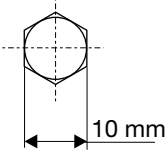
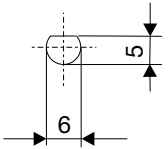
- operation 0 ... +60° C
- transport and storage -20 ... +60° C

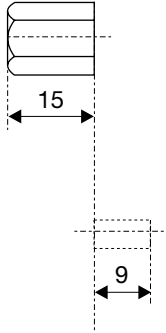
**Condensation, icing and exposure to water not permitted****Weight**

- approx. 350 g

**DIMENSIONAL DRAWING**



Shaft Version	Nr.
	⑥
	③



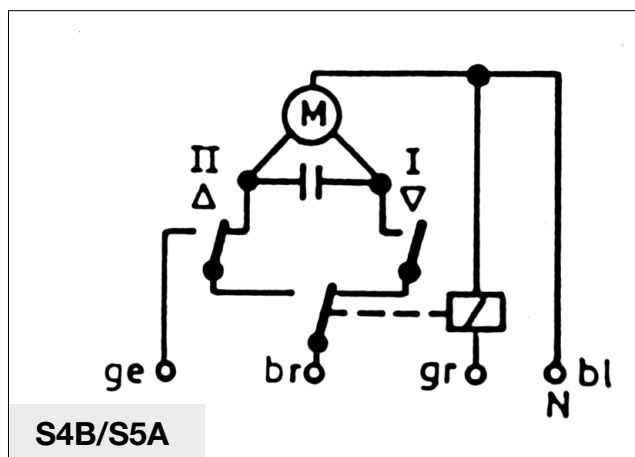
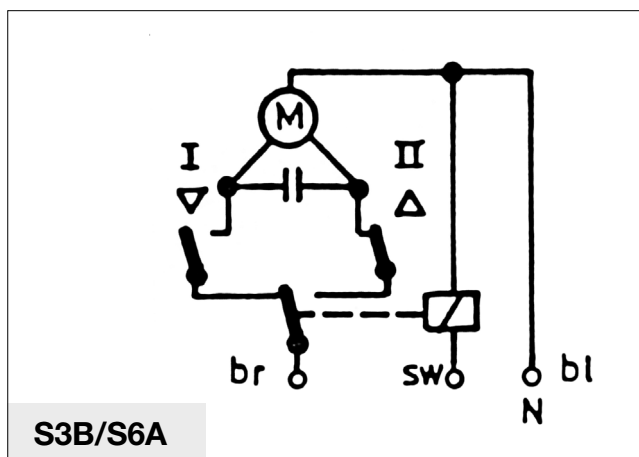
D) Fixing holes through-hole 4,4 mm inside dia

# INSTALLATION AND OPERATION

## INSTALLATION AND FINAL CHECKOUT

- The regulations and standards applicable in each particular case must be observed.
- Installation and commissioning must only be carried out by qualified technicians.
- Electrical wiring must comply with national and local regulations.
- Always lay the burner ignition cable separately and as remotely as possible from the device and other cables.
- Carefully check all cabling and wiring prior to commissioning.
- Disconnect the actuators completely from the power supply when working close to terminals and connections.
- Electromagnetic emissions must be checked on a case by case basis.

## CIRCUIT DIAGRAMS



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# VARIOUS

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## STANDARDS AND APPROVALS

### Conformity

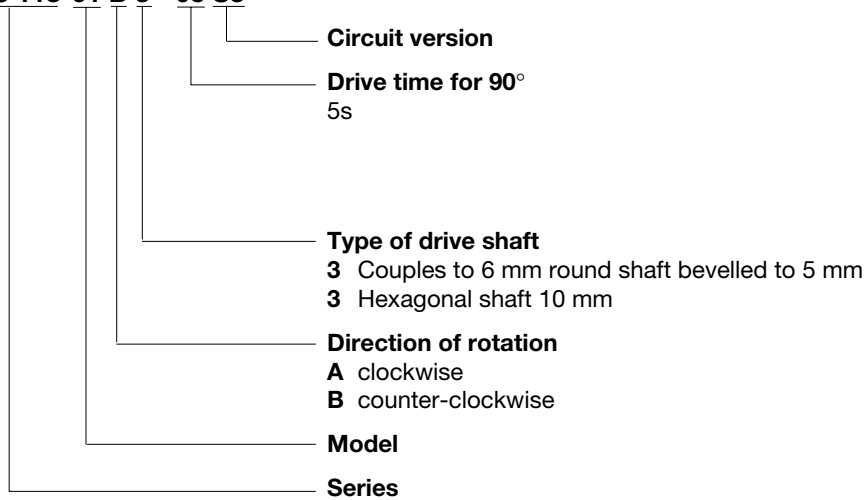
- In accordance with EU Directives 73/23/EU and 93/68/EU. Conforms to EN 60730 – 1 : 1991 A1 and A11 : 1991 EN 60730 – 2 – 5 : 1991

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## ORDERING INFORMATION

Not for creation of new type

### **LKS 118-01 B 3 - 05 S3**



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## ACCESSORIES

no accessories

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**Honeywell**

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