

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

DESCRIPTION

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.

FEATURES

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 ¹⁾

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 ¹⁾

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°

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

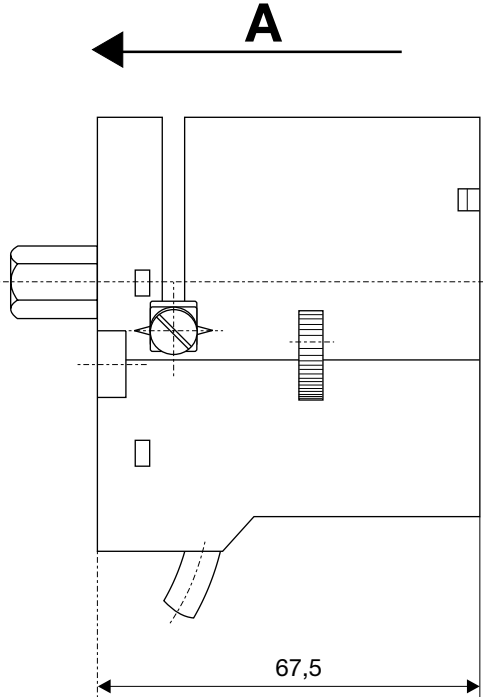
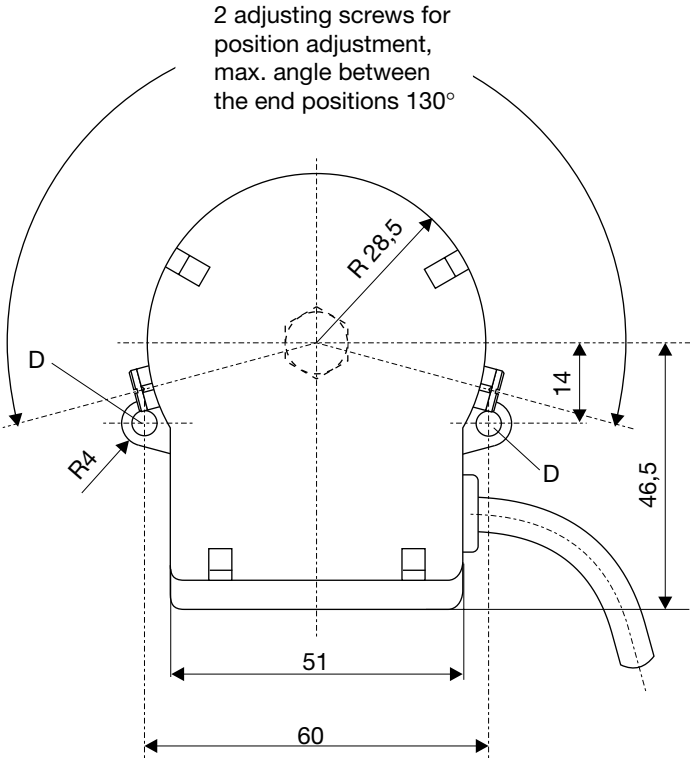
Ambient temperature

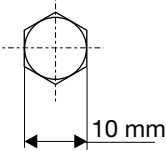
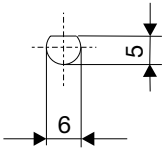
- operation 0 ... +60° C
- transport and storage -20 ... +60° C

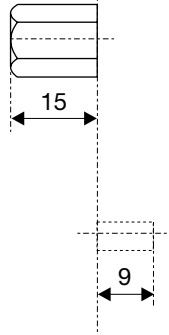
Condensation, icing and exposure to water not permitted**Weight**

- approx. 350 g

DIMENSIONAL DRAWING



Shaft Version	Nr.
	⑥
	③



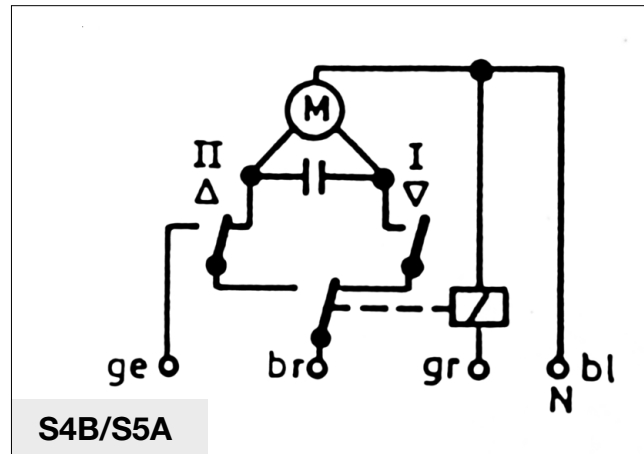
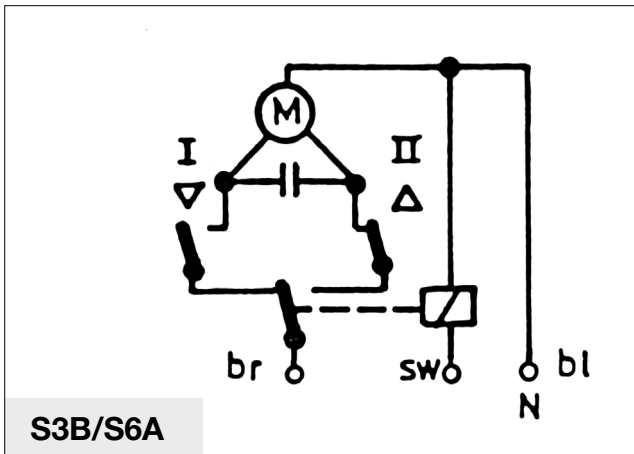
D) Fixing holes through-hole 4,4 mm inside dia

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



VARIOUS

STANDARDS AND APPROVALS

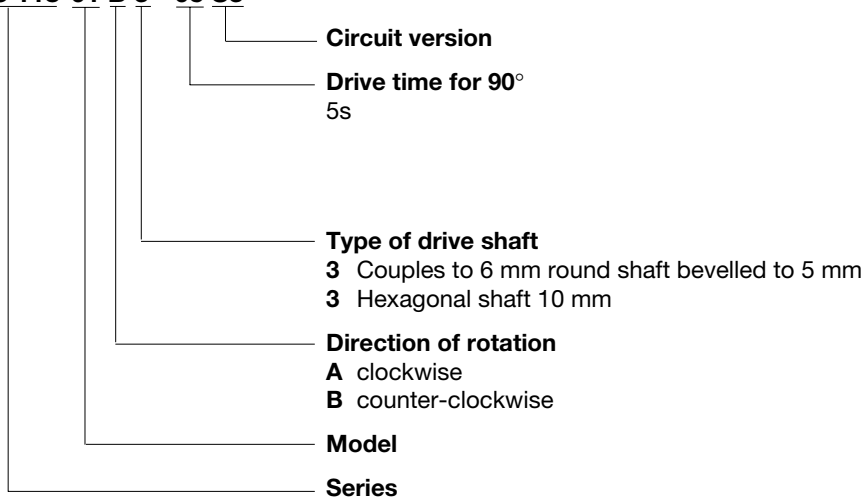
Conformity

- 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

ORDERING INFORMATION

Not for creation of new type

LKS 118-01 B 3 - 05 S3



ACCESSORIES

no accessories

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