

# Air Damper Actuators Series LKS 210



# Air Damper Actuators

---

## **For single or double-stage burners with fully closing damper**

The air damper actuator LKS 210 is intended for use in double-stage oil- and gas burners, with a fully closing damper. The drive unit is comprised of a synchronous motor coupled to reducing gears, the last stage of which is a worm gear. Due to the self-locking characteristic of the worm, a sufficient locking moment for the complete range of applications is made available. The drive unit is permanently lubricated and totally maintenance-free.

## **Air damper infinitely adjustable**

The air damper may be regulated through a range of 90° and cams allow it to be adjusted in an infinite number of ways. This adjustment is made by way of colour-coded levers. These colour codes represent the respective performance level of the burner; blue for closing damper; orange for low performance, red for high performance. This colour-code is also to be found on the relevant circuit diagram and on the setting dial.

Due to connected auxiliary switches, the drive can rotate in both directions, corresponding to the lever settings. Valve release is carried out by the safety switches HS 1 (connected to stage 1) and MV2, the latter being separately adjustable (black lever).

The position of the air damper at any given time is indicated by means of a pointer along a scale.

## **Connections**

All the electrical components are fixed on a printed board. Two terminal blocks are available for electrical connection. The PG 11 cable entry is centrally located and easily accessible from all sides.

Connection to the air damper axle can either be performed via an internal square socket head, a half-round hole or a free shaft, depending on the mounting requirements.

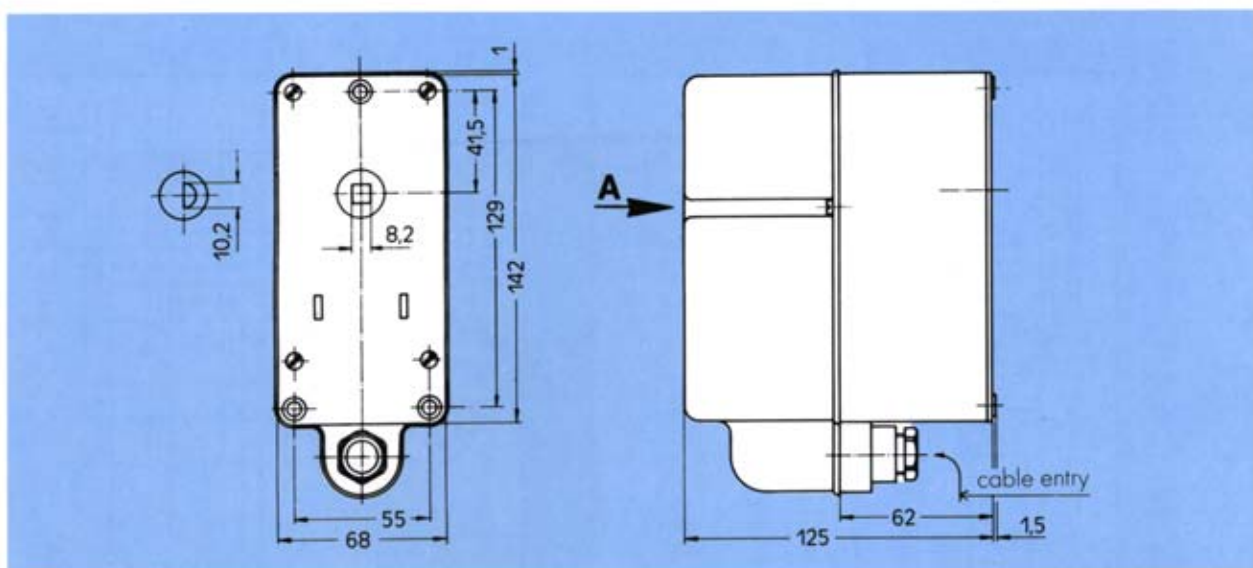
Three fastening holes (M5) are necessary for mounting the actuator on the burner housing.

# Series LKS 210

---



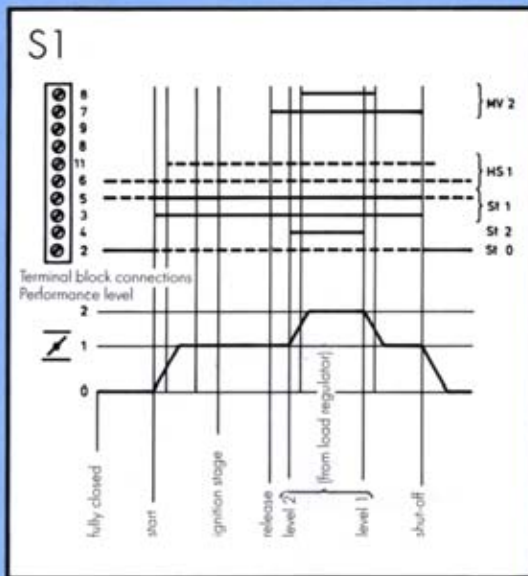
# Technical Data



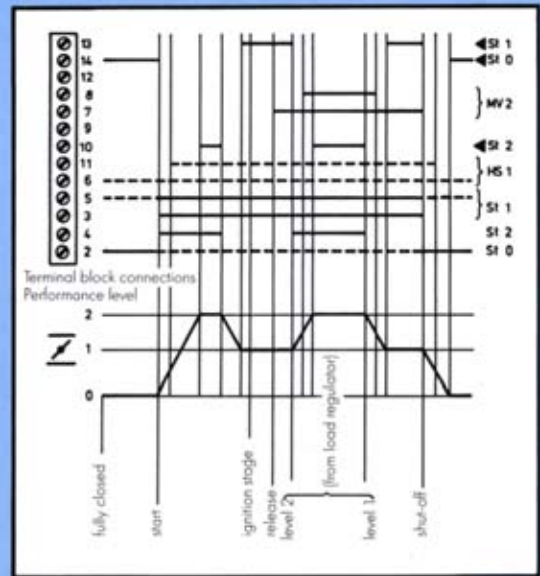
Voltage	single-phase 230 V~, 50 Hz		
Power consumption	c. 4 VA		
Position:	0...90°, infinitely adjustable via spindles stage 0: blue, fully closed stage 1: orange, simultaneously-rotating follow-up switch and a dry pilot switch (HS 1) stage 2: red, one simultaneously-rotating pilot switch MV 2: black		
Regulating time for 90°	5s	15s	25s
Torque	1,5Nm	3Nm	3Nm
Locking moment	via self-locking worm gear		
Monitoring of the air damper position	simultaneously rotating pointer		
Housing	synthetic material, black, non-combustible, self-extinguishing		
Cable entry	1 × PG 11		
Electrical connection	2 × 7-pole terminal blocks, 1 earth connector		
Mounting	with 3 × M5 screws, e.g. M5 × 50 DIN 912		
PTO	either internal square socket head 8 × 8, 20 mm half-round hole $\varnothing$ 10 mm, 25 mm deep shaft $\varnothing$ 10 mm		
Type of protection	IP 44 DIN 40 050		
Ambient temperature	- 10 to + 60 °C		
Weight	1 kg		
Available standard cable	10 cores, each 0,5 mm <sup>2</sup> , 1,2 m long/Part number: K 10F 1200		

Subject to alteration

# Series LKS 210

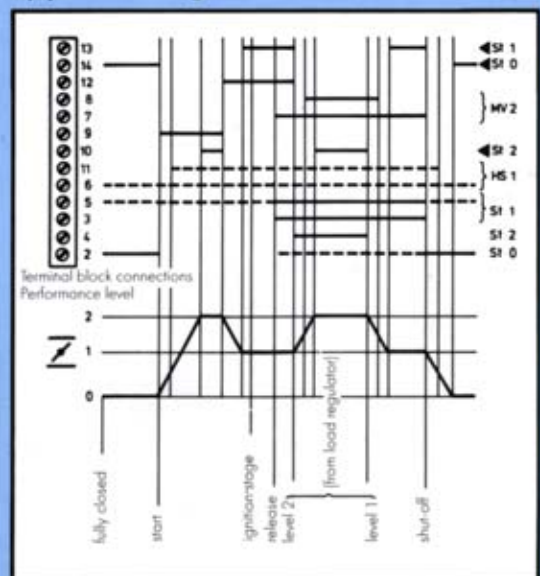


Δ pre-air in stage 1



Δ pre-air in stage 2

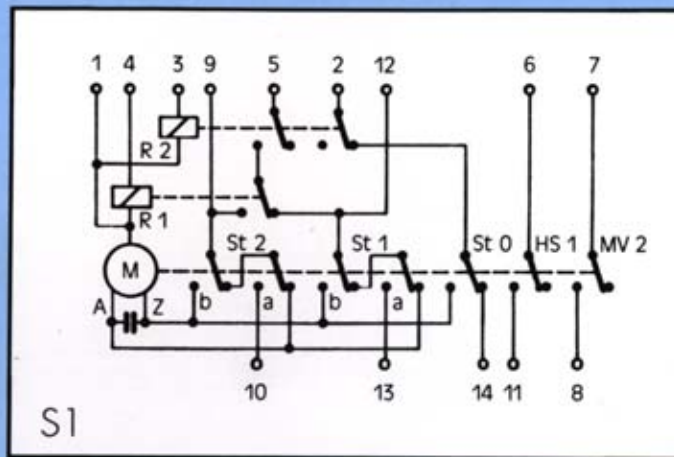
▽ pre-air in stage 2 direct connection



- phase included
- - - phase available upon request
- ◀ status indicator

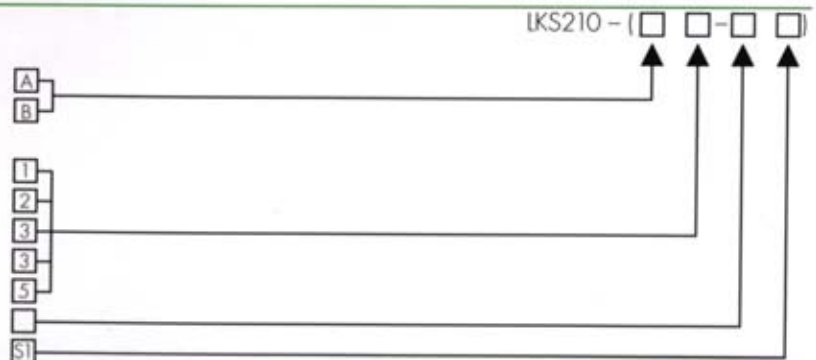
CONECTRON Motoren GmbH

Buckower Chaussee 62 · 12277 Berlin · Telefon (0 30) 72 39 06-0 · Fax (0 30) 7 21 99 72



**How to order: Please enter the relevant letter or number in the boxes:**

1. Rotating direction  
clockwise (right)   
counter-clockwise (left)
2. Shape of the PTO shaft  
internal square socket head 8×8,   
in stage 0   
half-round hole  $\phi$  10, direction of rotation A   
direction of rotation B   
shaft  $\phi$  10, free
3. Regulating time for 90° in seconds (5, 15 or 25)
4. Circuit diagram 1



All specifications refer to the actuator when viewed from the back (drawing A).

Example: LKS 210, rotating clockwise, square socket, 5s regulating time, circuit diagram S1: LKS 210 - (A2-5 S1)

Models made to customer's specifications upon request