

Communication and control unit for smoke control dampers

- Display of operating states and fault messages
- Control and monitoring up to 6 smoke control dampers in combination with the communication- and power supply units BKNE230-24



Technical data

Electrical data	Nominal voltage	AC 24 V
	Nominal voltage frequency	50/60 Hz
	Nominal voltage range	AC 19.2...28.8 V
	Power consumption in operation	3.5 W
	Power consumption for wire sizing	5.5 VA
	Power consumption for wire sizing note	Imax 6.4 A @ 2.5 ms
	Connection supply / control	Terminals, 18 x 1.5 mm ²
Safety data	Protection class IEC/EN	III, Safety Extra-Low Voltage (SELV)
	Degree of protection IEC/EN	IP20
	EMC	CE according to 2014/30/EU
	Mode of operation	Type 1
	Ambient temperature	0...50°C
	Servicing	maintenance-free
Weight	Weight	0.16 kg

Safety notes



- The device must not be used outside the specified field of application, especially not in aircraft or in any other airborne means of transport.
- Only authorised specialists may carry out installation. All applicable legal or institutional installation regulations must be complied during installation.
- The device may only be opened at the manufacturer's site. It does not contain any parts that can be replaced or repaired by the user.
- The device contains electrical and electronic components and must not be disposed of as household refuse. All locally valid regulations and requirements must be observed.

Product features

- Default/Configuration** The BKSE24-6 is factory programmed for 6 smoke control dampers. The command CLOSE is stored in the memory.
- Command storage
In case of temporary power failure, the last command is stored.

Mode of operation The BKSE24-6 receives the position signals from the BKNE230-24 devices and sends the control commands back via the 2-wire cable. The operation of the dampers is indicated by 2 LEDs - OPEN, CLOSED or fault.

Smoke extraction zoning

The required smoke extraction zones must be taken into account when making the groupings and when wiring the BKSE24-6.

The BKSE24-6 offers two modes of operation:

Input 1 (terminal 10) can receive the command from a switch or button. The command OPEN (terminal 10/12) or CLOSE (terminal 10/11) has a priority 1.

Input 2 (terminals 8/9) is activated by superordinate system such as a fire alarm system. The command OPEN on the input 1 has priority over input 2. Input 2 can only be activated if input 1 is positioned to AUTO (terminal 10 open).

Control signals

Input 1 (Priority 1)

- signal duration: $t_{min} = 1 \text{ s}$

- input impedance: $R(\text{terminals } 10/11) = 66 \text{ k}\Omega$; $R(\text{terminals } 10/12) = 66 \text{ k}\Omega$

Input 2 (Priority 2) terminals 8/9 (electrically isolated from input 1)

- input level DC: $U(\text{high}) = \text{DC } 18...30 \text{ V}$; $U(\text{low}) < \text{DC } 12 \text{ V}$

- input current DC: $I = 5 \pm 0.5 \text{ mA}$

- input level AC: $U(\text{high}) = \text{AC } 16...30 \text{ V}$; $U(\text{low}) < \text{AC } 8 \text{ V}$

- input current AC: $I = 2.5 \pm 0.5 \text{ mA}$

- signal duration: $t_{min} = 0.5 \text{ s}$

Auxiliary contacts: $0.5 \text{ A @ AC } 24 \text{ V}$

Cable lengths: 2-wire cable a/b: max. 600 m (0.75 mm^2), Control input: max. 600 m (0.75 mm^2)

Simple direct mounting The BKSE24-6 can be clipped directly on to a 35 mm DIN mounting rail and connected by two 9-pin connector terminals.

Monitoring

If the smoke control dampers do not reach their commanded position within the permissible running time, the corresponding LED flashes and the contact terminal 18 is opened (current fault). If the faulty damper still reaches its commanded position, terminal 18 is closed and the fault indicator lights up constantly until the fault is reset (stored fault).

A fault that has occurred remains stored until the smoke control dampers have run a full cycle without fault or until it is cleared manually with the SET/INIT key.

Functional test

After a fault message, a system test can be triggered by pressing the SET/INIT key. An automatic system test follows after programming the pin assignment or after switching on the supply voltage.

Factory settings

The BKSE24-6 is factory programmed for 6 smoke control dampers. The command CLOSE is stored in the memory.

Command storage

In case of temporary power failure, the last command is stored.

Accessories

Electrical accessories

Description

Type

Communication and power supply unit for smoke control dampers actuators 24 V with connector

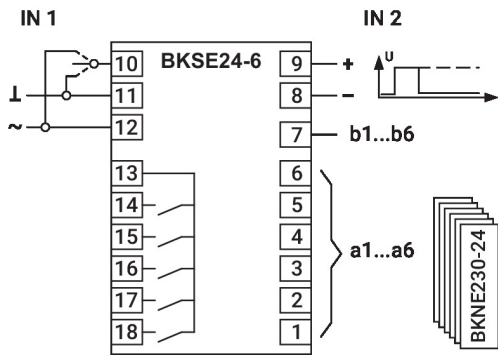
BKNE230-24

Electrical installation



Supply from isolating transformer.

Wiring diagrams
AC 24 V



- Terminals**
 1...6, 7 = Connection
 BKNE230-24
 8/9 = Input 2
 10/11 = Input 1 CLOSE
 10/12 = Input 1 OPEN
 10 = Input 1 AUTO
 13 = COM
 14 = Delay 0 s (Fan)
 15 = Delay 60 s (Fan)
 16 = Dampers OPEN
 17 = Dampers CLOSED
 18 = Fault message

Dimensions

Dimensional drawings

