KSUC

Valid from week of manufacture 18/2017 and serial number that ends 3.0

Description

The KSUC is designed to work with the KSUA in a network. The KSUC receives alarm signals from smoke detectors in external fire alarm systems. These fire zones can then be defined in the KSUA to close dampers, etc. The KSUC has 2 relays that can be used as slave relays for the relays in the KSUA. The KSUC can also be used purely as a minor alarming unit, for example to monitor isolating switches or pressure indicator for smoke extraction fans. KSUC can also be used for stand-alone operation.

General

- Slave unit for KSUA
- 16 alarm inputs per KSUC
- Indications with LEDs for all 16 inputs
- 2 outputs. (relays)
- Compact ABS plastic case
- Integrated transformer
- Jackable terminals

Maximum configuration

16 inputs can be connected to relay outputs in a central fire alarm system, etc. Two KSUCs can be connected to the KSUA for alarming. One additional KSUC can be used for other alarms. In total, six outputs (relays) can be slaved to the KSUA (three KSUCs with two relays in each).

Installation

Designed for wall installation.

Supply voltage

230 VAC 50 Hz 6VA. Protected with 1A at least.

Protection class

IP66

Ambient temperature

Max +35°C, min -10°C.

Weight

0.7 kg

Inputs

- Bus for KSUA master unit (RS485)
- Terminals 4-18, input for detector groups or alarm inputs. These must be normally closed.
- Input for 230V 50Hz

ON Control AB, Stationsvägen 2, 516 31 Dalsjöfors. Sweden
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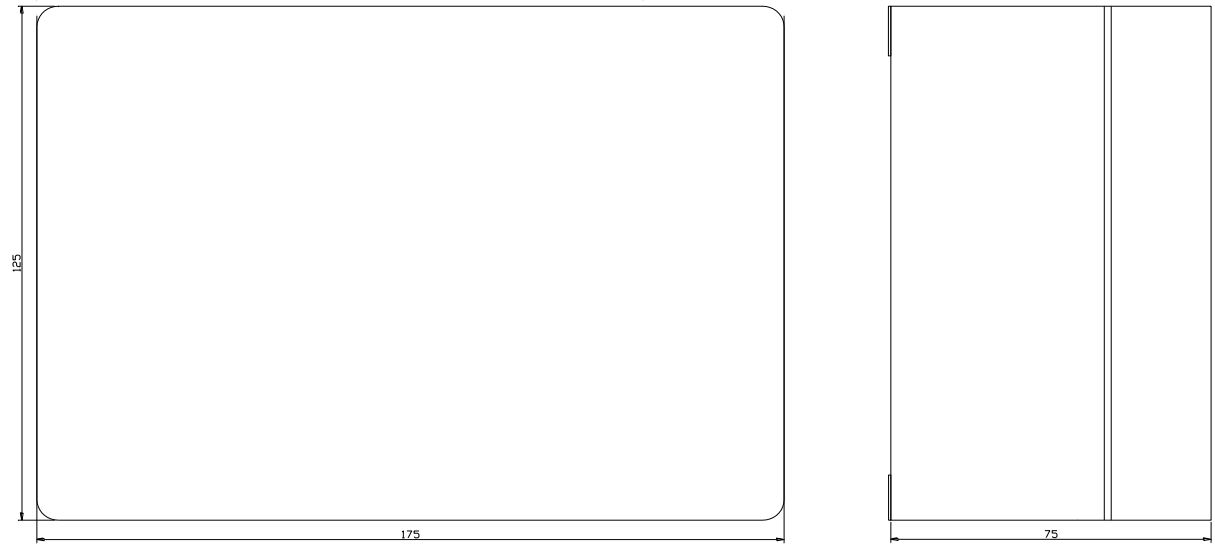
Size



KSUC in network mode

The KSUC will only work in a network if the KSUA has been correctly installed. To communicate, the KSUA and KSUC use a communication protocol which, at level 1, is based on RS485. For more information about the network structure, see the description of KSUA.

Addresses and jumpers

Jumpers 1,2,4,8 and 16 are used to select the address of the KSUC. Jumpers 4 and 8 are used for local configuration of the KSUC

FUNCTION IN KSUA	JUMPER
Detector alarm 65e-80e	1 Off
Detector alarm 81e-96e	1 On
Alarming unit	2 On
Specifically for smoke extraction fan test	4 On
Stand-alone	A On
Relay 1 i KSUC inverted	8 On

Description of jumpers in night mode.

Jumper **I** is used to terminate the network with 120 ohm. See the description of the network structure for KSUA

Description of KSUC as alarming unit.

If jumper 2 is set to On, the inputs can be used for receiving alarms other than fire alarms. To clearly identify this type of function, the name KSUC3 is used in the relevant menus in the KSUA.

The function causes a sum alarm to be indicated in the KSUA when a circuit is broken. The circuit causing the alarm can be identified from the KSUC LED for the relevant circuit, in the KSUA and also via Modbus. Incidentally, no connection of these inputs can act on the dampers or fans in the system.

Relays in the KSUC

The two relays can each be defined in the KSUA as linking information from the relays in the KSUA. Possible alternatives are Fan relay 1, Fan relay 2, Sum alarm and triggered detector.

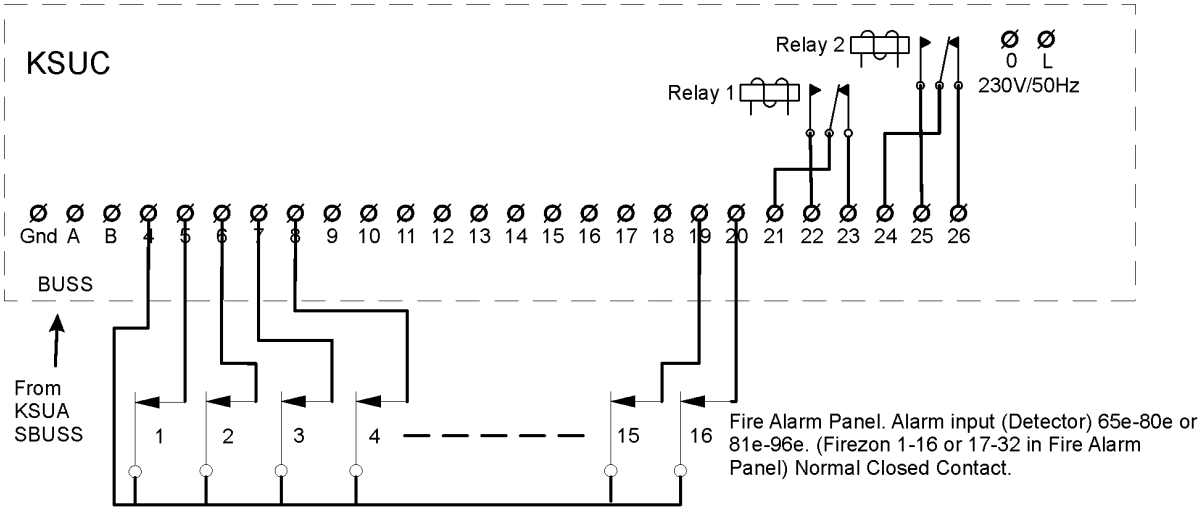
Alarm for smoke extraction fans.

It is possible to have a number of alarms in an installation of smoke extraction fans. The isolating switch is an example of an obvious alarm point. To carry out the function test with a pressure sensor on the fan, connect it to input 16 on KSUC3. The configuration is as follows: Jumpers 2 and 4 connected in the KSUC. Change these settings in the KSUA: Configure KSUC3 relay 1 to follow fan relay 2. Activate input 16 in KSUC3. When the smoke extraction fan is started, the pressure sensor must indicate pressure within 30 seconds with a closing contact. If no pressure is generated, a sum alarm is triggered in the KSUA. When the smoke extraction fan test finishes, everything returns to the normal operating state. If you want the bus cable to KSUC3 (alarming unit) to be monitored so that the smoke extraction fan starts if there is a fault, you can set jumper 8 to ON. This causes Relay 1 to open if there is a fault or when the smoke extraction fan should start.

Description of KSUC stand-alone

Stand-alone operation, jumper A = ON, means that relay 1 is closed and relay 2 is open if there is no alarm from any of the inputs. All the inputs must be connected to make the LEDs light up. An alarm occurs when the input is opened. When an alarm occurs, relay 2 opens and 1 closes. For a power failure alarm, it is best to use relay 2.

Connections



Connection of a fire alarm panel.

230V 50Hz

Must be connected via fixed cables to a group fuse of at least 2A. The isolating switch must be positioned close to the unit. The KSUC is built with reinforced insulation, so no ground is necessary.

Malfunctions.

If a communication error occurs the KSUA will take over. See also the description of the KSUA.

LEDs

Every time a correct message is received, the Operation LED switches on or off in order to indicate that communication with the master is working correctly. The Error LED lights up if communication stops.
There is a green LED for each input, showing whether the input is closed or open. If an input is in use, it should be green.

Fuses

There is an automatic resettable fuse that is rearmed after the unit has cooled down a couple of minutes.

Indicators and buttons

Operation

Green LED showing that the unit is receiving power and showing received messages.

Error

Indicates that there is no incoming communication.

Jumpers

Jumpers 1,2,4,8 are used to set the various options in the table above.

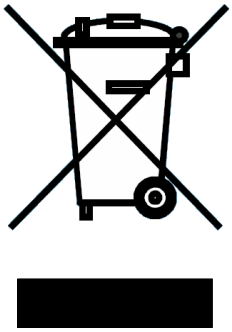
Troubleshooting

*"**ERROR**" LED lights.*
Check in the KSUA that a damper is assigned to detector 65e-96e or that a relay is defined. If not, the KSUC will not be called. Jumper 1 must be Off if detector 65e-80e is used. For detector 81e-96e, jumper 1 must be On. Otherwise, check the jumper settings against the table above.

If KSUC3 is used (jumper 2 On) an input must be defined in menu 24 in the KSUA to allow the unit to be called by the KSUA.

Check the network connection.

Disposal of old Electrical & Electronic Equipment (Applicable throughout the European Union and other European countries with separate collection programs)



This symbol, found on your product or on its packaging, indicates that this product should not be treated as household waste when you wish to dispose of it. Instead, it should be handed over to an applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences to the environment and human health, witch could otherwise be caused by inappropriate disposal of this product. The recycling of materials will help to conserve natural resources. For more detailed information about the recycling of this product, please contact your local city office, household waste disposal service or retail store where you purchased this product.