



APPLICATION – KLP47 converter of a fire detection systems line into a burglar alarm systems line enables a connection of a standard, two-lead line with fire detectors to a six-lead fire line of a burglar alarm system.

CONSTRUCTION – the converter of the line is constructed as a single electronic module, closed in a cage fitted for installation on a DIN rail. The device is equipped with screw terminals 2.5 mm². The converter is also available as an electronic circuit, fitted for installation in a first GN18 base – in this case a connection made by a 6-lead cable between this base and a central unit is required.

THE PRINCIPLE OF OPERATION – KLP47 converter has two relays which are switched by the alarm signal from a detector and by a "sabotage" signal

(interruption in the line, removal of a detector from a base). The figure shows the state of the contacts without power supply or in operational state with switches onto NO for each relay. Putting the switches onto NC draws back the movable terminals of each relay - 4 is shorted with 5 and 7 with 8. NC/NO switches are accessible from a print side, once the converter is unbolted.

The alarm of any of the detectors switches the ALARM relay's contacts - this is an "alarm" signal for the central unit of a burglar alarm system. Interruption in the line switches the SAB relay - this is a "sabotage" signal. The AL and SAB controls do not signalize alarm nor sabotage - their lighting-up is equivalent to putting voltage to a coil of a proper relay. The maximal number of the OSD23/03 detectors (along with GNP18 bases) that are able to work in a line connected to the converter, is 50. The alarm can occur in max. 12 detectors at the same time. The detectors' operational line is equipped with protection against short circuit. A short circuit is signalized in the same way as an alarm - the relay is switched into the ALARM. The alarm state in KLP47 converter can be locked - in this case, the only way to cancel it, is to shut off the power supply of the converter (clasp lock option). In another case, the alarm state lasts the leap of time, during which the detection is made, + 15 s after the smoke has ceased. (auto-reset option). After this time, the operational line is automatically auto-reset and the alarm relay goes to the operational state. A choice between a "clasp lock" and an "auto-reset" is made by setting A/Z switch adequately. The switch is accessible from the print side, after unbolting the converter. Default settings for the converter are: A (auto-reset) and 2 x NC. The operational line must be ended by a resistor of 2.7 k Ω , installed in a last base in the line.

SPECIFICATIONS:

Supply voltage	12V DC
Maximal current:	
- operational state	40mA for 2xNC 15mA for 2xNO
- alarm state	250 mA
Current-carrying capacity of the relay's contacts:	24V/1A (125V/0.5A)
Operating temperature range	-25°C to +55°C
Relative humidity	TO 80% with +40°C

