Design office of Fire automatics Ltd.

RUBEZH

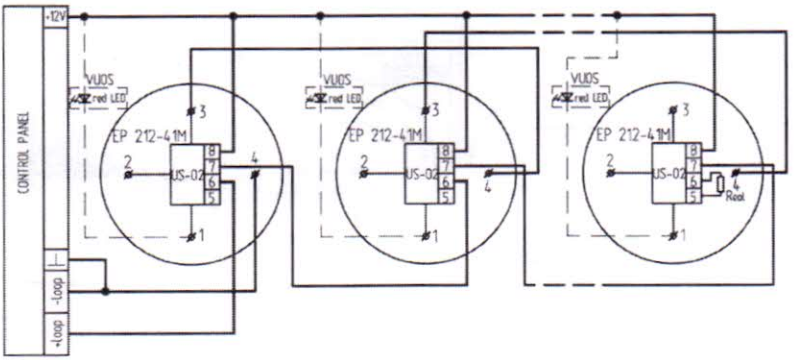
25 Ulyanovskaya str.
Saratov, 410056, RUSSIA
tel +7 (8452) 510-877
tel +7 (8452) 222-972
fax +7 (8452) 222-888
http://www.rubezh.ru/en/
sales@rubezh.ru

APPLICATION GUIDE

PHOTOELECTRIC SMOKE DETECTOR EP 212-41M with US-02 Adapting device

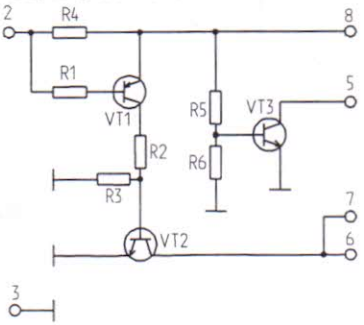
The present scheme describes how to connect photoelectric smoke detector EP 212-41M with US-02 adapting device to 4-wire control panel.

Scheme № 1
Wiring scheme of the detector with US-02.



Note: VUOS - Remote Indicator;
R_{eol} - End Of Line Resistor (or complex element, see control panel manual);

Scheme № 2
Adapting device US-02. Electrical circuit.



Functioning description

US-02 adapting device serves for connection to four-wire control panel loops. In accordance with wiring scheme №1 detector should be connected to the 2nd (+) and the 3rd (-) US-02 contacts. Voltage (+12V) is supplied to the 8th US-02 contact. The loop is connected to the 6th contact. Voltage is supplied to the detector through the current-measuring resistor R4. At standby mode transistor VT1 is closed, transistor VT2 is closed too respectively. Loop current is set by the end of line resistor connected between the 5th and 6th US-02 terminals. Under voltage input on the 8th terminal transistor VT3 opens and current runs through the loop. At that US-02 doesn't perform any influence on the loop (that corresponds to NO relay). Under detector triggering the current consuming by the detector is running through the current-measuring resistor R4. When transistor VT1 opens, transistor VT2 opens respectively. Open transistor VT2 bridges the loop (that corresponds to NC relay).