

5. SERVICE SCHEDULE

Table 1

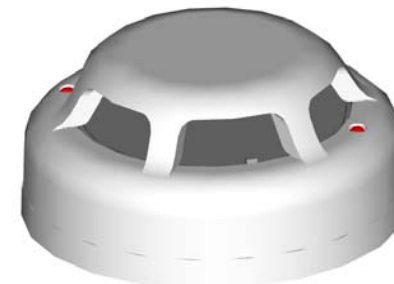
	Task	Periodicity
1.	Inspection for visible physical damage	weekly
2.	Satisfactory operation test	monthly
3.	Check and clean dust contamination	every 6 months
4.	Check and clean base and head contacts and connections	Annually

6. WARRANTY

The manufacturer guarantees product compliance with the EN 54-7:2001. The warrant period is 36 months from the date of purchase, providing that requirements covered in section 5 have been observed.

UniPOS Ltd

SHORT CIRCUIT ISOLATOR 6202L



1. INTRODUCTION

Short circuit isolator 6202L is designed to cut off (to isolate) a short circuited segment in a line (loop). In this way the variable units in automatic fire detectors, manual call points and others, which are not in the short circuited segment remain active and the line (loop) protection level is higher. Where isolators are not included, in case of a short circuit the fire control panel interrupts the power supply of the line (loop) and all units stop working.

A segment is a part of a loop between two adjacent isolators.

2. TECHNICAL DATA

- | | |
|---|---|
| 2.1. Supply voltage | - (18 - 26)V DC |
| 2.2. Current consumption in quiescent state, at 26 V DC | - not more than 100 µA |
| 2.3. Equivalent resistance of isolator in a line: <ul style="list-style-type: none">- in quiescent state- in alarm state | <ul style="list-style-type: none">- < 1 Ω- > 6,5 k Ω |
| 2.4. Connection to fire control panel | - two- wire |
| 2.5. Degree of protection | - IP40 |
| 2.6. Operating temperature range | - minus 10°—/ plus 60°— |
| 2.7. Temperature limits | - minus 40°—/ plus 70°— |
| 2.8. Relative humidity resistance | - (92 ⁺³ ₋₂)% at 25°— |



2.9. Dimensions (base incl.):

- diameter - Ø 106 mm
- height - 48 mm

2.10. Weight (base incl.)

- 0,150 kg

3. STRUCTURE AND FUNCTION

The short circuit isolator layout is seen on fig.1 6202L consists of two main parts: a base and an isolator head. The latter comprises a circuit board. The contact plates are fixed to the base. The isolator head is fixed on the base by the means of bayonet joints. When locating the isolator head on the base, make sure the bench mark stands about 20 mm before the respective bench mark on the base; then rotate clockwise to fix. The bench marks should fully coincide when fixed. Option: A flat point screw is provided on the adapter head to prevent unauthorized removal. A 2 mm tip screwdriver is required for locking and unlocking.

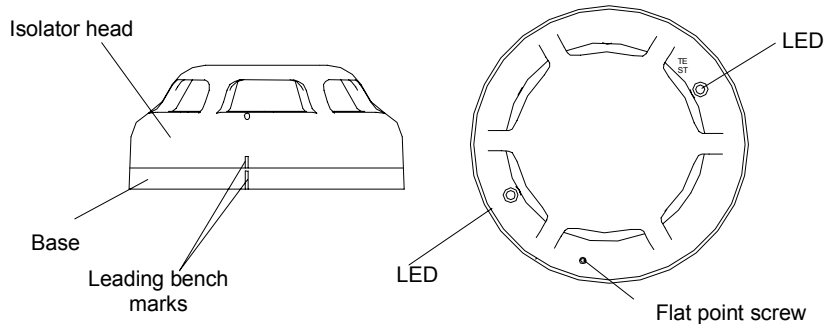


Fig.1

The short circuit isolator, connected between two adjacent segments, monitors the resistance of the segments. When resistance value reaches a fixed low threshold, the isolator switches over to alarm state. The surface yellow LEDs illuminate and the line (loop) power supply (negative wire) is interrupted in isolator's point of connection. When the resistance of the isolated wire segment is restored to the normal limits, the isolator automatically switches over to its quiescent state. The LEDs extinguish and the power supply is resumed. Isolator diagram is fully symmetrical in relation to the input and output wire segment. In Line configuration (fig. 2.1.) due to one side power supply the isolator is capable to isolate short circuit detected in the segment after the isolator in relation to the fire control panel. In Loop configuration (fig.2.2.) due to both sides power supply the isolator is active in both directions i.e. the short circuited wire segment is isolated by two adjoining isolators. When in Line configuration connect isolators at the beginning of a line; in Loop configuration connect isolators at both loop ends; use one isolator for maximum 32 fire detectors.

4. PREPARING THE ISOLATOR FOR OPERATION

4.1. Connection diagram

Connection diagram of isolator base to shielded fire alarm line is shown on fig.2.1 in line configuration, and on fig.2.2 in loop configuration.

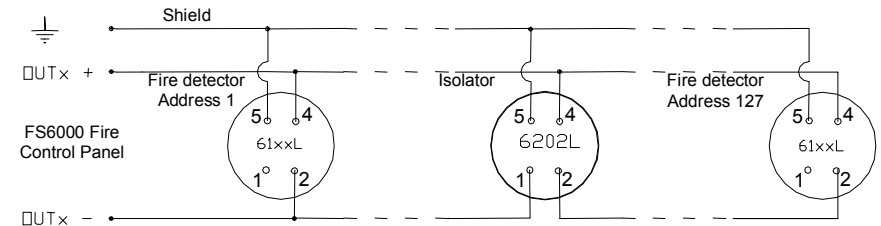


Fig.2.1.

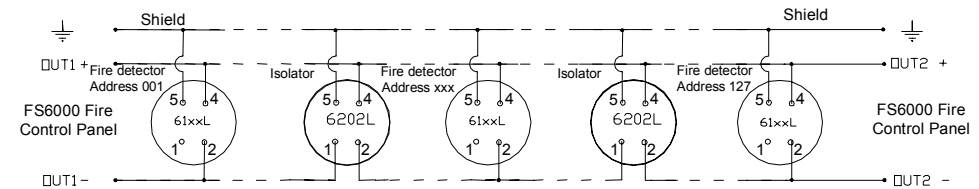


Fig.2.2.

4.2. Mounting

Separate the base from the head by turning the isolator head in an anti-clockwise direction. Feed the connection cable through the cable entry in the centre of the base. Fix the base on the ceiling using appropriate fixings. Complete the wiring as shown on fig. 2.1 or 2.2. Replace the isolator head on the base by offering the isolator head to the base ensuring bench marks are no more than 20 mm apart. Rotate the isolator head in a clockwise direction to complete location. Lock the isolator head to the base by screwing the flat point screw, using a 2 mm tip screwdriver, ensure not to over tighten.

4.3. Testing

According to fig.2.1 the isolator is supplied with output voltage 18 VDC in 26 VDC and output resistance not lower than 20 Ω. Terminals 4 and 1 are to be terminated by resistor < 20 Ω. Upon activation the yellow LED is illuminated and remains active until short circuit is eliminated. Exchange the wires, connected to terminals 1 and 2. Complete the same test procedure to terminals 4 and 2.

Short circuit isolators are tested, in real conditions, by terminating the negative and positive wires (after the isolator) of the line or loop configuration.