FirePro.

FPC-5

Fire Protection Controller

Data Sheet

Issue April 2019
Version 2.0

Reinventing
Fire Suppression

1. Description

The FirePro thermal activation protection module FPC-5V2 can detect fire and activate a condensed aerosol fire suppression generator automatically in electrical cabinets and similar enclosures.

Figure 1

Input detection terminal (J7 of the PCB) is available for connecting the linear heat detector cable or a bimetallic sensor. Output terminal (J6 of the PCB) can be used to connect the condensed aerosol fire suppression generator. Both J7 & J6 terminals are not electrically polarized.

The fire protection module FPC-5V2 is powered from an internal 3V battery capable of providing the necessary amperage to activate a condensed aerosol fire suppression generator.

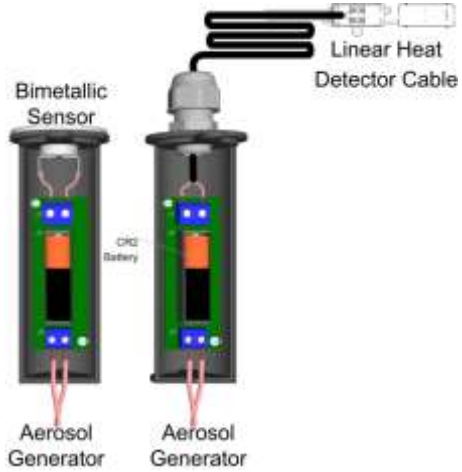

Figure 2

The FPC-5V2 module is equipped with a battery monitoring feature. The battery status is indicated by the three LEDs located on the front of the unit. **The green LED flashes** every four seconds, indicating that the battery is in good operating condition and is able to activate the aerosol generator when required.

The yellow LED is illuminated when the battery voltage level has dropped but is still able to activate the aerosol generator when required. **The red LED** is illuminated when the battery is unable to activate the aerosol generator and it is necessary to replace the battery immediately. When no LED is illuminated, either the battery is installed in reverse polarity or it is fully discharged, or the unit is set in manual mode.

The fire protection module FPC-5V2 can monitor the battery in both automatic and manual mode. **Automatic mode** means that the battery monitor function of the unit is operating continuously. **Manual mode** means that the battery monitor function of the unit does not operate continuously but only operates by pressing and holding the press switch located on the front of the unit above the LED. Automatic mode and Manual mode operation can be adjusted by changing the position of the **"SW2" switch** on the electronic PCB. When the switch is in the ON - position the unit is in Automatic mode. When the switch is in the OFF - position the unit is in Manual mode.

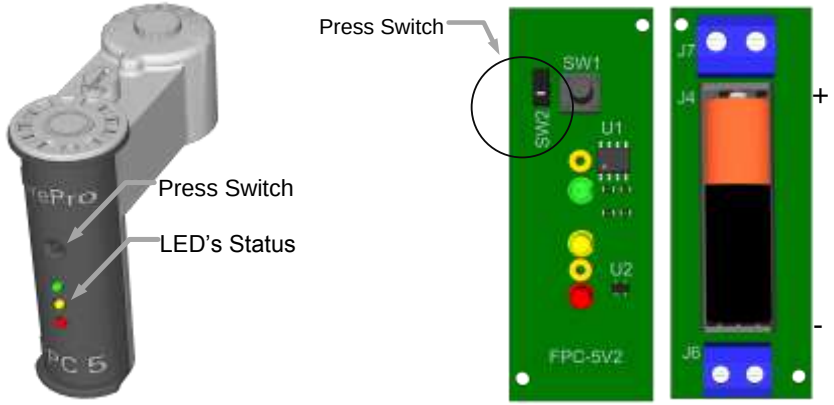

Figure 3

2.0 Specifications:

FPC-5V2	Terminals	Description
I/P terminal	J7	Linear Heat Detector cable **max 10m length**
I/P terminal	J7	Linear Heat Detector cable **max 10m length**
O/P terminal	J6	Aerosol Generator 1
O/P terminal	J6	Aerosol Generator 1
Battery		3Vdc Lithium battery (CR2 (3V))
I/P Rating		IP30
Enclosure Heat Resistance		Withstand up to 180°C degree, for a short period

Table 1

3.0 Installation guidelines:

1. Remove the top safety Knob "A" on the unit and remove the front part, containing the electronic PCB.

Figure 4

2. Pass the Condensed Aerosol Generator wires through the FPC-5V2 main body. It is important to pass the Condensed Aerosol Generator wires from the same opening of the adaptor plate / junction box coupling.

3. Install the FPC-5V2 main body to the Condensed Aerosol Generator by turning the Knob "B" to tighten the unit.

Figure 5

4. Connect the bimetallic sensor or linear heat detector cable to terminal "J7" on the electronic PCB, as indicated in figure 2.

5. Install the CR2 battery on the battery holder "J4".

6. Use a multimeter to make sure that there is no voltage at terminal "J6" on the electronic PCB. If there is a voltage reading, this means that the fire detection part of the unit has been activated, which will trigger the activation of the condensed aerosol generator when connected.

   Address this issue first and then proceed to the next step.

7. Connect the Condensed Aerosol Generator wires to terminal "J6" on the electronic PCB, as indicated in figure 2.

8. To adjust the position of the "SW2" switch for Automatic or Manual monitoring mode operation, unscrew the electronic PCB from the front section of the FPC-5V2 module.

9. Place the front section of the FPC-5V2module into the main body of the FPC-5V2. Insert and tighten safety Knob "A" to assemble the unit.

Figure 6

DISCLAIMER

FirePro Systems makes no representations or warranties of any kind, either express or implied, statutory or otherwise, including but not limited to warranties of merchantability, fitness for a particular purpose, of title, or of non-infringement of third party rights, including the intellectual property rights of others.

Any information provided by FirePro Systems, relevant to the system engineering of the project is indicative and for guidance purposes only.

It is the contractor's responsibility to verify whether any circuit design is compatible with the equipment used in the system. Furthermore, the responsibility for the preparation and/ or approval of a project, subject to its specifications/ technical features and its related documentation, designs or drawings adherence (e.g. design documentation, construction, as-built drawings, circuit diagram, cable lengths and voltage drop calculations, etc.) to local, national and international laws and regulations, falls entirely within the scope of the contractor/ consultant assigned for the installation and commissioning.

LIMITATION OF LIABILITY

In no event, regardless of cause, shall FirePro Systems be liable for any indirect, special, incidental, punitive or consequential damages of any kind, whether arising under breach of contract, tort (including negligence), strict liability or otherwise, even if advised of the possibility of such damages.

NOTE

FirePro is constantly updating its products and systems to the state of the art and therefore reserves the right to make changes in design, equipment and technology. You cannot therefore base any claims on the data, illustrations or descriptions contained in this literature.

FirePro Systems
8 Faleas Street, Agios Athanasios Industrial Area, CY-4101 Limassol, Cyprus - EU
Tel.: +357 25 379999 | Fax: +357 25 354432 | Email: mail@firepro.com
www.firepro.com