



FIPRON STICKER P Installation Instruction
version 1.0

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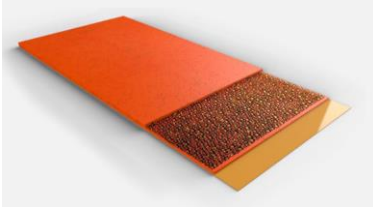
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1. Introduction

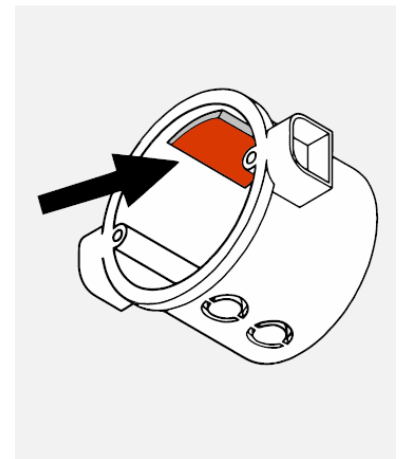
This instruction is intended to get the knowledge for technically correct installation, adjustment and commissioning work when installing FIPRON STICKER P.

2. FIPRON STICKER P



FIPRON STICKER P is a plate type fire extinguisher. It is intended for the protection against fires in electric sockets and small connectors, which have confined space of up to 0,03 liters.

FIPRON STICKER P is efficient for liquidating fires of class A, B, C and is intended for the protection of any electric interconnections. Its operating temperature is 120 °C and its normal ambient temperature range is from -50 °C to +80 °C with relative humidity of up to 90%. FIPRON STICKER P is placed directly in a protected socket or connector in a place where a potential short circuit, overheating, spark formation, or fire may occur. Even though most of the electrical equipment is made from the materials which are fire resistant, but when a certain temperature is reached fires usually start from fumes which are released from the equipment, wiring, or insulation materials.



3. Technical information of FIPRON STICKER P

- 3.1. FIPRON STICKER P is an autonomous fire-extinguishing product with thermally activated microencapsulated extinguishing agent “FIPRON” is a fundamentally new fire extinguishing mean designed specifically to protect from ignition in a small-size fire hazardous objects such as electrical sockets and connectors.
- 3.2. Trade names of the product:
 - FIPRON STICKER P;
 - FIPRON Micro-extinguisher;
 - FIPRON active fire suppression unit.
- 3.3. FIPRON STICKER P operates as an intelligent autonomous fire-extinguishing system. Influence of temperature on its active components causes the release of the extinguishing agent until the complete suppression of fire.
- 3.4. Main distinguishing features of FIPRON STICKER P:
 - flexible base allows installation in confined spaces with different bending radius;
 - lightweight ensures easy transportation of the product;
 - strength properties allow the use of the product in a wide range of temperatures.

- 3.5. The contents of the microcapsules are a gas extinguishing agent (GEA) 3M™ Novec™ 1230 FIRE PROTECTION FLUID (FK-5-1-12; $\text{CF}_3\text{CF}_2\text{O}(\text{O})\text{CF}(\text{CF}_3)_2$; 1,1,1,2,2,4,5,5,5-nonafluoride-4-(trifluoromethyl)-3-pentanone), which does not contain ozone-depleting substances.

4. Technical Characteristics of FIPRON STICKER P

Name	FIPRON STICKER P
Protected volume	up to 0,03 liters
Triggering temperature	$120 \pm 5 \text{ }^\circ\text{C}$
Class of fire	A, B, C
Protection class of the object	IP20 and higher
Optimal operating temperature, $^\circ\text{C}$	from $-50 \text{ }^\circ\text{C}$ to $+80 \text{ }^\circ\text{C}$
Size, mm (length, width, thickness)	30 x 30 x 2

5. General Operating and Installation Rules

- 5.1. FIPRON products can be installed in wall sockets, connectors, switchboards, electrical cabinets, control cabinets, large-scale storehouses of valuables, safes with a degree of protection not lower than IP20.

FIPRON CORD can be installed together with a high-voltage electrical cable in closed cable channels located both indoors and outdoors with operating temperatures from minus $50 \text{ }^\circ\text{C}$ to plus $80 \text{ }^\circ\text{C}$.

- 5.2. During the installation of the products in wall sockets, connectors, switchboards, electrical cabinets, control cabinets and other electrical equipment it is necessary to follow the rules of installation and operation of electrical equipment and observe the safety precautions regarding works with electrical equipment.
- 5.3. For the period of installation, the supply of voltage must be stopped, and measures taken to exclude the possibility of electricity supply.

In case it is not possible to disconnect the power when installing the products in an object under a voltage, it is necessary to take measures to observe electrical safety rules (work in dielectric gloves, use of a dielectric mat, and other local regulations regarding working with electrical equipment).

In the case of the use of products in multiple-compartment control cabinets, each section must have a degree of protection of not less than IP20 and be protected independently for the corresponding volume of the compartment.

- 5.4. When the product is triggered (FIPRON CORD: the red thread of the sheath burns out; FIPRON STICKER P: the product or its part has darkened) and if there are signs of failure of the electrical equipment (darkening of housings, wires, signs of overheating and sparking), the defect should be eliminated, and the product should be replaced with a new one.
- 5.5. Do not hit the product and do not carry out works related to the use of open flame near the surface of the product.
- 5.6. Re-use of disassembled product is forbidden.
- 5.7. It is necessary to replace the product if the external damage is present, signs of ignition are visible, or at the expiration of the warranty period.

6. Safety Rules

WARNING!



During the installation, electricity should be shutoff and the measures should be taken in order to exclude the possibility of electricity flow.

In case of fire ignition signs occur:



- disconnect the electric power using local or general switch;
- act in accordance with the fire regulations applied for the object;
- do not attempt to open the protected object;
- leave the premises and call fire department.

The room should be ventilated after fire extinguishing has occurred.

The components of the product are nontoxic in terms of impact on the human body and the environment. In accordance with Federal Classificatory Catalogue of Wastes, used products are disposed of as SMW (waste polymer materials which lost their consumer properties, and which do not have hazardous properties).

7. Warranties of the Manufacturing Plant

- 7.1. The manufacturer guarantees that FIPRON STICKER P complies with the manufacturing requirements of TU 28.29.22-002-89538614-2018 provided that the conditions of transportation and storage are observed.
- 7.2. Manufacturer guarantees efficient operation when the products are installed in protected objects manufactured and staffed by qualified specialists who have certificates of admission to the electrical works and **FIPRON Installation Certificate**.
- 7.3. Warranty period for FIPRON STICKER P is 5 years (60 months) after the installation.

8. FIPRON STICKER P Installation Instruction

8.1. Installation work

FIPRON STICKER P should be installed directly into the sub-panel **above** the contact group in the **upper part** of the object with the active layer facing down.



8.1.1. Prepare the surface for installation of the product. Clean the surface from dust and dirt, degrease with the alcohol cloth.



8.1.2. Carefully remove the protective film from the adhesive layer of the product.



8.1.3. Firmly press the product with the adhesive layer to the prepared surface and hold for a few seconds.



FIPRON STICKER P is installed and ready to work. During the installation process, it is forbidden to perform actions that lead to mechanical damage of FIPRON STICKER or put it to heat in excess of 80 °C.



8.2. Examples of installed FIPRON STICKER P



9. Conclusion

This instruction was created for the partners, distributors and installers of FIPRON Inc. It contains all the required basic information of FIPRON STICKER P installation process.