CLAIMS

1.- A protection device (1) for protecting an electronic circuit (84), the protection device (1) comprising:

- at least one mesh surface (2A, 2B), the or each mesh surface (2A, 2B) comprising at least one cell (3A, 3B) consisting of a continuous portion of electrical circuit (20), the cell(s) (3A, 3B) being distributed on the mesh surface (2A, 2B), and
- at least one electrical circuit, comprising:
  - o an input for injecting an electrical signal for exciting the electrical circuit,
  - o an output for capturing an electrical output signal from the electrical circuit, and
  - o between said input and said output, at least one of said cells (3A, 3B),

the electrical circuit having an electrical reactance between its input and its output, and the protection device (1) comprising a detection module (8) able to detect a change of said electrical reactance,

characterized in that the protection device (1) further comprises:

- at least one interconnection surface (4) comprising a plurality of connectors (24), the connectors (24) being suitable for connecting cells (3A, 3B) of the mesh surface(s) (2A, 2B) to each other so as to form the or each electrical circuit, and
- a configuration module (6) for configuring the interconnections of the connectors (24), able to command the connectors (24) to modify the connection of the cells (3A, 3B) to each other over time.

2.- The protection device (1) according to claim 1, wherein the detection module (8) is able to detect a change of an inductive component of the electrical reactance.

3.- The protection device (1) according to claim 1 or 2, wherein the detection module (8) is able to detect a change of a capacitive component of the electrical reactance.

4.- The protection device (1) according to claim 1, 2 or 3, wherein the detection module (8) is able to periodically command the production of at least one electrical excitation signal to excite the electrical circuit, to measure a characteristic value of the response of the electrical circuit to said excitation signal, to calculate the difference between the or each measured value and a reference value, and to detect a change in the

electrical reactance in the event the calculated difference or a mean of the calculated differences exceeds a predetermined threshold.

5.- The protection device (1) according to claim 4, wherein an electrical excitation signal consists of a voltage scale, and the characteristic value of the response of the electrical circuit to said excitation signal consists of a duration so that, after the excitation of the electrical circuit by said voltage scale, the voltage of the electrical output signal reaches a reference voltage.

6.- The protection device (1) according to claim 4 or 5, wherein an electrical excitation signal consists of a voltage scale, and the characteristic value of the response of the electrical circuit to said excitation signal consists of a voltage of the electrical output signal reached after a predetermined duration following the excitation of the electrical circuit by said voltage scale.

7.- The protection device (1) according to any one of claims 4 to 6, wherein an electrical excitation signal consists of an alternating signal whose frequency varies over time, and the characteristic value of the response of the electrical circuit to said excitation signal consists of a resonance frequency of the electrical circuit.

8.- The protection device (1) according to any one of claims 4 to 6, wherein an electrical excitation signal consists of an alternating signal whose frequency varies over time, and the characteristic value of the response of the electrical circuit to said excitation signal consists of a quality factor of the electrical circuit.

9.- The protection device (1) according to any one of claims 4 to 8, wherein an electrical excitation signal consists of an alternating signal having a predetermined frequency, and the characteristic value of the response of the electrical circuit to said excitation signal consists of an amplitude of the electrical output signal.

10.- The protection device (1) according to any one of the preceding claims, wherein the electrical circuit comprises a plurality of cells (3A, 3B).

11.- The protection device (1) according to claim 10, wherein the cells (3A, 3B) of the electrical circuit comprise at least two cells (3A, 3B) electrically isolated from each other, said cells (3A, 3B) being electromagnetically coupled to each other.

12.- The protection device (1) according to any one of the preceding claims, wherein the mesh surfaces (2A, 2B) comprise a primary mesh surface (2A), comprising primary cells (3A), and a secondary mesh surface (2B), comprising secondary cells (3B) electrically isolated from the primary cells (3A), and the electrical circuit comprises at least one primary cell (3A) and at least one secondary cell (3B) electromagnetically coupled to each other.

13.- The protection device (1) according to claim 12, wherein said primary and secondary cells (3A, 3B) of the electrical circuit are electromagnetically coupled to each other at least by induction.

14.- The protection device (1) according to any one of the preceding claims, comprising a reaction module (10) able to trigger a reconfiguration of the interconnections of the connectors (24) in response to an intrusion attempt in the protection device (1) detected by the detection module (8).

15.- A method for protecting an electronic circuit (84), characterized in that it comprises the following steps:

- providing (100) a protection device (1) according to any one of claims 4 to 9,
- calibrating (102) the detection module (8), during which the or each reference value is determined,
- producing (132) at least one electrical excitation signal to excite the electrical circuit,
- measuring (134) a characteristic value of the response of the electrical circuit to the excitation signal,
- comparing (136) the or each measured characteristic value with a corresponding reference value, and
- detecting (138) a change of the characteristic impedance when a difference between a measured value and the corresponding reference value exceeds a predetermined threshold.