EPI TAG

EPI-TAG - T1102 to T1118

CE

Description:

The EPI-TAG multiple sensor T1102-T1118 has been developed for thermal monitoring of electrical equipment in distribution boxes. If the monitored electrical equipment heats up, it is detected by the T1102-T1118 multiple sensor and the contact in the sensor is switched at 80°C (± 5°C).

Properties:

- Designed for use in distribution boxes
- Triggers at temperatures of 80°C (± 5°C)
- Quick and easy installation by a qualified electrician
- Connection to existing fire and security alarm systems
- Via a suitable interface Two-meter connection cable
- Complies with RoHS Directive 2011/65 / EU
- Glow wire flammability index according to IEC 60695-2-12
- Patented, approved and extensively tested by manufacturers and institutions such as Schneider Electric and Intertek

Application areas:

Interrupting the circuit via the RCD:

The EPI-TAG T1102-T1118 can be connected in such a way that it switches an RCD when the trigger temperature of 80°C (± 5°C) is reached, thus disconnecting the excessively heated equipment from the power supply. For this purpose the EPI-TAG T1102-T1118 is connected to the outgoing neutral terminal of the RCD and its protective conductor. When the T1102-T1118 responds, the tripping current of the RCD flows, limited by the internal resistance of the T1102-T1118.

Connection to fire and security alarm systems for monitoring:

The EPI-TAG T1102-T1118 can be connected in such a way that it transmits a signal to an existing fire or security alarm systems when triggered.

For connection to existing systems as well as building management systems, an additional module or a coupler from the manufacturer is usually required to exploit the resistance value.

mesafox

Article numbers and specifications:

Item number	Article description	Dimensions in mm (width x depth x height)
T1102	2-point sensor	31x17x19
T1104	4-point sensor	67x17x19
T1106	6-point sensor	103x17x19
T1108	8-point sensor	139x17x19
T1110	10-point sensor	175x17x19
T1112	12-point sensor	211x17x19
T1114	14-point sensor	247x17x19
T1116	16-point sensor	283x17x19
T1118	18-point sensor	319x17x19

Properties active components:

Resistance value for non-triggered T1102-T1118 0°C to (TA - 15 °C)	>10 GΩ
Resistance value with triggered T1102-T1118 0° C to (TA + 25 ° C)	<10 Ω
Trigger Activation Temperature (TA)	80°C ± 5°C
Max. Operating voltage (DC to AC max. 500Hz)	30V
Ambient temperature	0°C bis 50°C

Note: Insulation measurements can be carried out in the monitored fuse box with 500 VDC, because the resistance value of the non-triggered T1102-T1118 is >10 GΩ.

Properties Product cover:

UL94 classification (flammability)	V-0
Glow wire temperature	960°C
Melting range	>200ºC
Component distance of the sensors	18mm
IP protection class	IP2X

Cable properties:

Length	2m
Nominal voltage (AC)	440V
Conductor (cores)	2
Dielectric	LSF PVC
Diameter	3.6mm ± 0.1mm

EPI🟆TAG

Installation instruction T1102-T1118

SAFETY INSTRUCTIONS:

The following basic safety instructions are intended to prevent personal injury and damage to property. The operator must ensure that the basic safety instructions are observed and complied with. Ensure that all persons have read and understood the operating instructions in full. If anything is unclear or you require further information, please contact mesafox.

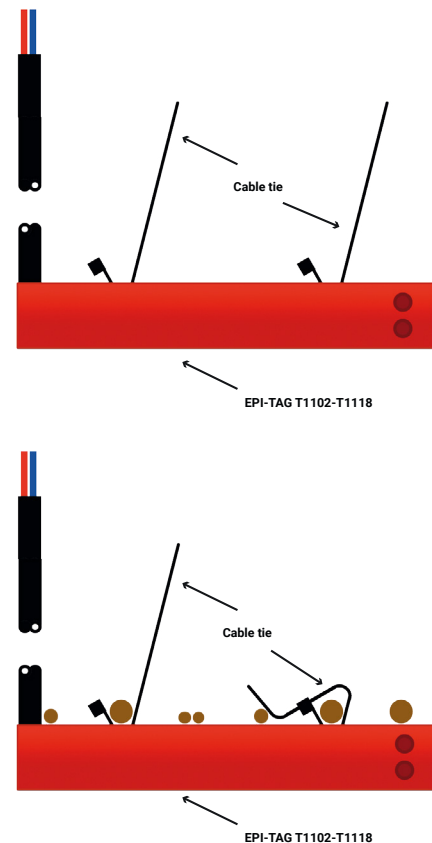**EPI-TAG system components may only be installed by qualified personnel.**

Never install or commission damaged products. Please inform us of any damage immediately. Unauthorized removal of the cover, improper use, incorrect installation or operation can lead to personal injury or damage to property, for which mesafox Handelskontor GmbH accepts no liability.

Assembly of the components:

Step 1:

Prepare the EPI-TAG T1102-T1118 for installation in the distribution box. The first step is to check the continuity. After connecting the two wires, the measuring device should indicate an open circuit (R >10 GΩ). If this is not the case, the EPI-TAG must not be installed. In this case contact us and install a working EPI-TAG unit.

As shown in the schematic diagram 1, install the EPI-TAG T1102- T1118 with the supplied cable tie onto the existing circuit breakers in the distribution box. To do so, pull the supplied cable ties through the slots provided on the back of the EPI-TAG T1102-T1118 without closing the cable ties. Position the EPI-TAG T1102-T1118 on the existing miniature circuit breakers and fix it to the outgoing line as shown in the schematic diagram 1. How to position the EPI-TAG T1102-T1118 on the miniature circuit breakers is shown in the schematic diagram 3.


Cable tie

EPI-TAG T1102-T1118

Cable tie

EPI-TAG T1102-T1118

Schematic illustration 1

https://epi-tag.com - mesafox Handelskontor GmbH - info@mesafox.de   mesafox

Step 2:

Make sure that the cable ties do not obstruct the cable entry at the miniature circuit breakers or other components. As shown in diagram 2, tighten the cable ties to hold the EPI-TAG T1102-T1118 securely over the circuit breakers. When both supplied cable ties are fastened, the EPI-TAG T1102-T1118 has a secure hold and has a direct contact to the miniature circuit breakers.

Cut off the rest of the cable tie, taking care not to damage the cable.
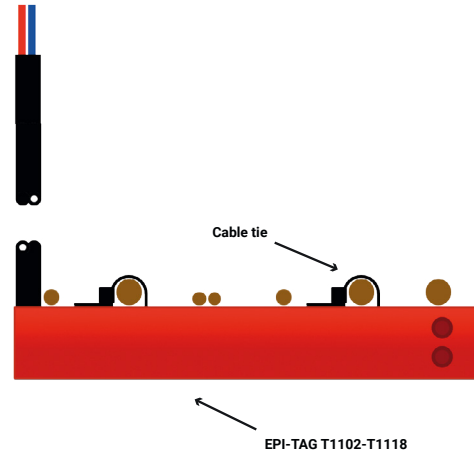
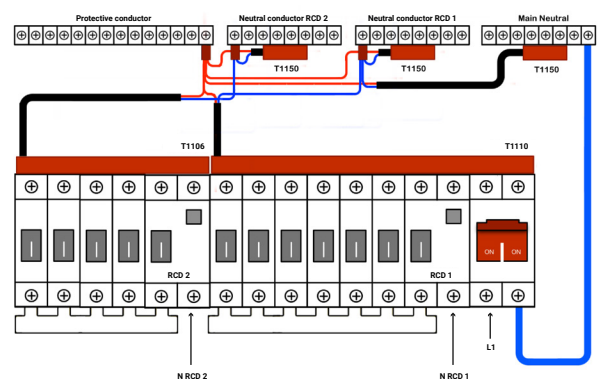Schematic illustration 2

Connection of the EPI-TAG T1102-T1118:

Option 1:   Interrupting the circuit with an RCD

The EPI-TAG multiple sensor T1102-T1118 is connected behind the RCD to interrupt the circuit between the neutral conductor and the protective earth. Please note that at least one two-pole RCD with a IΔn from ≤ 100mA must be installed for this purpose.

Now connect the wires of the EPI-TAG T1102-T1118 according to diagram 3 to the terminal between neutral and protective earth.

For the connection of the wires to the terminals, please observe the installation instructions of the manufacturer of the respective distribution box and RCD. If necessary, wire end sleeves must be provided here for connecting the wires.

With the supplied test clip a functional test of the EPI-TAG T1102- T1118 is possible. After connecting the EPI-TAG you have to put the test clip into the holes provided on the upper side to simulate the release of the EPI-TAG T1102-T1118.
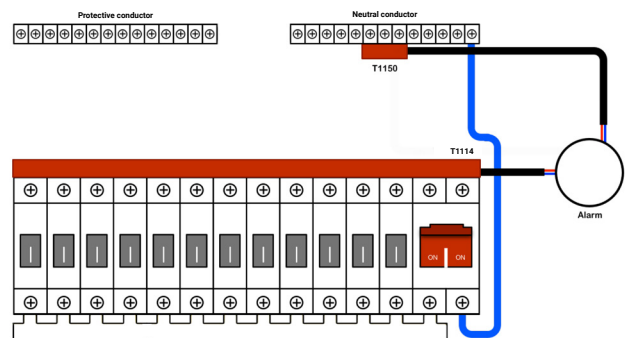

Schematic illustration 3

https://epi-tag.com - mesafox Handelskontor GmbH - info@mesafox.de

mesafox

Option 2: **Connection to a fire or security alarm system or a building management system**

The EPI-TAG multiple sensor T1102-T1118 is connected to a fault and hazard detection system or a building management system via a module or coupler. The maximum potential difference must not be higher than 30 VDC. Which coupler or module is required for connection to the third-party system must be clarified with the manufacturer of the fire or security system.

Refer to the documentation of the manufacturer used for connecting and laying out the wires in the module or on the coupler.

With the supplied test clip a functional test of the EPI-TAG T1102-T1118 is possible. After connecting the EPI-TAG you have to insert the test clip into the holes provided on the upper side to simulate the release of the EPI-TAG T1102-T1118.

Triggering and testing of components:

Schematic illustration 4

Testing the EPI-TAG multiple sensor T1102-T1118 first requires complete isolation from the power supply in the junction box to provide a safe working environment.

If several EPI-TAG components are installed in the junction box, it must first be checked which EPI-TAG T1102-T1118 was triggered. For this purpose the continuity of the single components must be checked. Therefore disconnect the wires at the terminals and connect them to your measuring device. The EPI-TAG T1102-T1118, which has a lower resistance value (R <10 Ω), should then be removed and inspected to determine the reason for tripping. When work on the cause of overheating is complete, the defective EPI-TAG unit is replaced with a new unit to ensure protection against excessive heating of the equipment in the future.

Warranty and legal information

mesafox offers a limited warranty of 12 months on all EPI-TAG components. Demonstrably defective devices will be replaced directly by mesafox after inspection. This warranty does not cover any associated installation costs. We are not liable for faulty installations and resulting damage to components and EPI-TAG products. Please always follow our instructions and other manufacturer's information to ensure proper use of the products. Technical data and illustrations are not binding. Subject to changes in product portfolio and contents, as well as misprints and errors. © mesafox Handelskontor GmbH, Reinbek/Germany. Reprinting, even in extracts, only with the written permission of mesafox Handelskontor GmbH, Reinbek/Germany. Newer versions of our documentation replace any previous publication.