

This certificate is valid for Building Regulations & associated technical guidance in force on the date of registration and for the regulations in the countries indicated

Thermarestor TSW

Description of Product

This is an assessment of the Thermarestor system, a pre-ignition solution to the problem of electrical fires caused by excessive heat resulting from loose connections, prolonged overloads and arcing.

Thermarestor TSW is a miniature thermal switch in component form for manufacturers and system builders, designed to operate at $80^{\circ}\text{C} \pm 5$.



Key Factors Assessed

- Safety in case of Fire
- Health, Hygiene and Environmental
- Safety in Use
- Energy Economy and heat retention

Validity

This certificate was first issued on 9th January 2015 and is valid until 9th January 2019

Issue Dated 12th January 2018

Scope of Registration

Within electrical installations poorly made and loose connections can be subject to resistive heating. Similarly, electrical installations are subject to degradation over a period of time. The heat generated is confined to a relatively small area and, if the process continues over a period of time, can result in thermal runaway. When this occurs temperatures can reach in excess of 1500°C and ignite any adjacent combustible materials

The product can be used to thermally monitor electrical connection points for abnormal heat and may be utilised in multiple locations such as switch boards, twin socket outlets and shower pull cords.

It would be particularly effective in older properties; H.M.O's or flats where switch boards and meters are located within a central hallway. These hallways are paramount for means of escape and to omit the risk of fire developing within this protected area greatly improves fire safety for the building and occupants.

Electrical fatigue can also be a greater issue in H.M.O's or rented accommodation where there is not a regular check on installations and terminals can become loose and un-noticed introducing arcing and heat generation. The fact that the thermal switch component is a non-resettable switch is of great significance as it requires authorised attention to reset the electrical system and any faults investigated.

There are also options of a linked alarm to the device, either locally, remote to an existing alarm system or both. I would favour the local or both as using a remote existing alarm relies on whether this unit is functioning correctly and where that alarm receives maintenance. Alternatively, where the electrical supply is via a residual current device (RCD), the Thermarestor system may be used to automatically disconnect the supply in the event of excessive heat being detected.

Conditions of Certificate

In accordance with BS7671:2008, it is claimed that the product can provide protection against Thermal Effects (Chapter 42) by mitigating the harmful effects of heat or fire.

A test report was also provided which was carried out by Schneider Electric UK Ltd (Report No. AG3239). As part of the testing, resistive heating faults were simulated under laboratory conditions which confirmed that the TSW thermal switch component activated in accordance with its design parameters.

As the product is more likely to be found within notifiable locations such as the switchboard/fuse location it should only be undertaken by a registered competent electrician as required by Approved Document P. The manufacturer also requires an approved contractor status to install and certify the installation who should:

Ensure the correct selection of the product for proposed location

Certify they have followed the installation guide

Provide commissioning and installation certificate at completion in conformity with BS 7671:2008.

LABC consider that, Thermarestor, will meet the functional requirements of the Building Regulations (listed below) if the criteria detailed in this certificate are met;



The Building Regulations 2010 (as amended) England & Wales

| | |
|--------------|---|
| Regulation 7 | Materials and workmanship |
| Note: | The products are acceptable. |
| AD B | Fire Safety |
| Note: | Subject to limitations detailed within the Scope section. |
| AD P | Electrical Safety - Dwellings |
| Note: | Subject to limitations detailed within the Scope section. |



The Building Regulations 2010 (as amended) England

None presently



The Building Regulations 2010 (as amended) Wales

None presently



The Building (Scotland) Regulations 2004 (as amended)

If you would like to discuss a specific use of the product in Scotland it will require an additional assessment under the Scottish Building Regulations and accordingly you should contact the LABSS STAS Administrator at www.labss.org

Non-Regulatory Information



LABC Warranty

The use of the Thermarestor has not been assessed to meet the requirements of the LABC Warranty Technical Manual. If you would like to discuss a specific use please make an enquiry to technical.services@labcwarranty.co.uk

Supporting Documentation

Test report provided by Schneider Electric UK Ltd Report No. AG3239 with Appendix 1 to 3.

Product specification document (no reference number available)

Approved Installer Agreement Document

Approved Installed Application Form

Thermarestor Installation Guide

UK Installation Certificate

Fire service evidence and reports of sources of electrical fires

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