PERTRONIC INDUSTRIES LIMITED

DATASHEET

Weatherproof Analogue Addressable Heat Detectors
5251B-WP, 5251RB-WP

Overview

The Weatherproof Analogue Addressable Heat Detectors (5251B-WP, 5251RB-WP) measure the temperature in their surroundings and continually report this temperature measurement to the fire panel. The panel will initiate an alarm if the temperature measurement goes above the threshold defined in the panel configuration.

The rate-of-rise (ROR) heat detector (5251RB-WP) also sends an alarm signal to the panel if the temperature increases rapidly. The rate of rise alarm is pre-configured in the detector.

A suitably configured fire panel will display the location of any detector which has triggered an alarm. The fire panel can also identify any active detector by lighting up two red LEDs on the detector housing.

The LEDs briefly light up ("blink") when the detector is polled. The fire panel may be configured to disable LED blink.

These detectors are designed to provide open area protection in areas subject to moisture and is waterproof to IP 67. They are supplied complete with a 300 mm wire tail and a molded plastic mounting base.

The detector's address on the analogue addressable loop is easily configured using the CP500 handheld programmer.

Weatherproof Analogue Addressable Heat Detector 5251B-WP with special mounting base

Features

» Analogue addressable (AA) communication with fire panel
» Temperature threshold configurable in the fire panel
» AA circuit address configurable with CP500 programmer
» F220 fire panel monitors up to 159 detectors per AA loop
» F100A fire panel monitors up to 99 detectors per AA loop
» Dual LEDs for 360° visibility
» Optional remote LED indicator available (note 1)
» IP 67 rating
» Lead length 300 mm
» Supplied complete with special mounting base
» Mounting base provides an optional anti-tamper feature
» SAI Global StandardsMark listed to AS ISO 7240.5:2004
» Meet the requirements of NZS 4512:2021 s. 2.16.1
» FPANZ listings: PI/252 (5251B-WP); PI/247 (5251RB-WP)

Specification

Operating Voltage	15 to 32 V dc
Average Standby Current	300 µA (note 2)
Alarm Current	6.5 mA (LEDs on)
Remote Output Voltage	22.5 V dc, no load (minimum)
Remote Output Current	10 mA
Diameter	104 mm (in special mounting base)
Height	51 mm
Weight	137 g
IP Rating	IP 67
Operating Temperature	-20 °C to 50 °C
Humidity	10% to 90% RH non-condensing

Alarm Thresholds in Pertronic Fire Panels

F100A		F220	
1	57 °C	**1**	53 °C
2	66 °C	**0**	57 °C
3	74 °C	**-1**	75 °C
4	84 °C	**-2**	83 °C

Ordering Information

Product Code	Description
5251B-WP	Weatherproof AA Fixed Heat Detector with Base
5251RB-WP	Weatherproof AA ROR Heat Detector with Base
CP500	Programmer for AA Weatherproof Detectors

Notes

1. Please refer to the Remote Indicators RMIND (AU) or Remote LED Indicator DETREM (NZ) datasheets for details of Pertronic remote LED indicators.
2. Average standby (quiescent) current = 300 µA with LED blink enabled and one poll every five seconds.
3. Manufactured by System Sensor.
4. Also compatible with Pertronic F120A. Use F220 settings.

This information must not be treated as partial or complete instructions for the design, construction, installation, commissioning, or maintenance of fire detection, fire alarm, or building evacuation systems. Fire and evacuation systems must be designed and installed by properly qualified persons, in accordance with all regulatory requirements.
Unless explicitly stated otherwise, this document provides typical specifications and nominal dimensions. Actual product performance and dimensions may vary.
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