



# Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
<b>afp - 2074</b>	15-Sep-2006	Number 14	Issue date 28-Jun-2019	30-Apr-2020
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## Product designation

**Ampac Orbis™, o/c 201-0510, class CS, heat detector**

(Refer to the Schedule/enclosures for further specified details)

## Agent/distributor

Ampac Pty Ltd  
7 Ledger Road, BALCATTA, WA, AUSTRALIA, 6021

## Registrant

Ampac Pty Ltd  
7 Ledger Road, BALCATTA, WA, AUSTRALIA, 6021

### Producer

Apollo Fire Detectors Ltd  
36 Brookside Road, HAVANT, HAMPSHIRE, ENGLAND, PO9 1JR

## Conformance criteria and evaluation

The Ampac Orbis™, o/c 201-0510, class CS, heat detector has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS 7240.5-2004, 'Fire detection and alarm systems - Part 5: Point type heat detectors (ISO 7240-5:2003, MOD)'

## Limitations/conditions of conformance

Limitations/conditions of conformance, where identified on this certificate, are derived from qualifications from evaluation(s) for conformity and/or other related technical documentation. All details with respect to design, assembly and installation instructions and restrictions should be checked against the producer's current technical manual/data sheets and the requirements of the Authority having Jurisdiction.

Specified limitations/conditions, determined from the evaluation for conformity, include the following.

- i. Compatibility of this fire detector and its base assembly with new or existing control and indicating equipment should be confirmed prior to installation.

This certification is issued within the scope of CSIRO Verification Services – Rules governing ActivFire Scheme and is valid only for the product(s) as submitted for evaluation and verification of conformity, subject to the following conditions.

- Reference to details, limitations and requirements, where documented as a schedule/enclosure with this certificate.
- The Registrant is responsible for their attestation of conformity and ensuring that on-going production complies with the conformance criteria defined in this certificate.
- This certificate will not be valid if any changes or modifications are made to the product which have not been notified and validated by CSIRO Verification Services.
- This certificate is subject to periodical re-validation upon verification that all requirements, as determined by the conformity assessment body, continue to be satisfactorily met by the Registrant.
- This certificate may only be reproduced in its published form, without modification and inclusive of all schedules/enclosures.
- Any changes, errors or omissions, must be submitted in writing and if necessary or requested, substantiated with relevant evidence.
- Any representations, such as advertising or other marketing related activities or articles shall reflect the correct contents of this certificate and conform with all relevant trade practices and consumer protection legislation and regulations.
- Any terms or conditions of use as applicable to content and documentation as published or accessed through web sites administered by the CSIRO Verification Services.

Issued by

David Whittaker  
Executive Officer – ActivFire Scheme



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## Producer's description

The Ampac Orbis™, o/c 201-0510, class CS, heat detector consists of a PCB assembly with a single negative temperature coefficient thermistor mounted at right angles to the PCB. It has an open-web heat lid that allows air to flow freely across the thermistor, which measures the air temperature every two seconds.

A microprocessor stores the measured value of temperature and compares it with preset values to determine whether a fixed upper limit alarm level has been reached.

This static heat detector signals an alarm when a fixed air temperature has been reached.

The Ampac Orbis™, o/c 201-0510, class CS, heat detector can be configured with the following options:

### StartUp mode

Power-up and system reactivates the StartUp mode for a period of 256 seconds, the alarm LED flashes once per second whilst the mode is active. A flashing LED present on power-up also indicates a correctly functioning detector installed with the correct polarity. Power-down or reverse polarity for up to 200ms will be allowed for system checks. Power-down or reverse polarity for over 900ms will initiate the StartUp mode.

### FastTest mode

During the StartUp period the FastTest mode removes the rate limiting and alarm confirmations and allows the detector to initiate an alarm signal within 4 seconds of application of stimulus.

### Flashing LED

The flashing LED is a feature used in some parts of the world to indicate the detector is operating. If the flashing LED is enabled the red alarm indicator LED will flash once every 4 seconds unless another mode overrides it.

### SensAlert

The sensor and sensor signal processing firmware is monitored for failure. Should this occur the yellow indicator will flash once per second during the StartUp period and once every four seconds after the StartUp period.

## Technical specification

The following details are a representative extract of the technical specification for the Ampac Orbis™, o/c 201-0510, class CS, heat detector and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

<b>Electrical:</b>	Supply voltage	8.5 - 33 Vdc
	Supply wiring	2 wires, polarity sensitive
	Power-up time	< 20 seconds
	Minimum "detector active" voltage	6 V
	Switch-on surge current at 24 V dc	< 100µA
	Quiescent current at 24 V dc	100µA
	Alarm current @ 12 volts @24 volts	
	Alarm load	600Ω (<2W)
	Holding voltage	5 - 33 Vdc
	Minimum holding current	8 mA
	Minimum voltage to light alarm LED	5 Vdc
	Alarm reset voltage	< 1 Vdc
	Alarm reset time	1 second
	Remote output (- R) characteristic	1.2 kΩ

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<b>Mechanical</b>	Materials	Detector and base moulded in white polycarbonate
	Alarm indicator	Integral indicator with 360° visibility
	Dimensions and weight of detector	100mm diameter x 50mm height, 110 grams
	Dimensions and weight of detector in base	100mm diameter x 60mm height, 160 grams
<b>Environmental</b>	Operating and storage temperature	-40°C to 85°C (no condensation or icing), but see also maximum application temperature
	Humidity	0% to 98% relative humidity
	IP rating to EN60529: 1992	23D

<b>Base designation</b>	<b>Base + detector circuit type</b>
Ampac Orbis™, o/c 201-0540, Timesaver base	Conventional
Ampac Orbis™, o/c 201-0541, Timesaver LX base	Conventional
Ampac Orbis™, o/c 201-0542, Timesaver diode base	Conventional
Ampac Orbis™, o/c 201-0543, Timesaver relay base	Conventional
Ampac Orbis™, o/c 201-0545, LX base	Conventional