



Certificate of Conformity

Certificate num.	Registration date	Version	Valid until	
afp - 3691	30-Aug-2022	Number 1	Issue date 30-Aug-2022	30-Apr-2024

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Product designation

Ampac, Models 4210-0058 / 4210-0059, zone input device

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

Agent/distributor

Ampac Pty Limited
7 Ledgar Road, BALCATTA, WA, AUSTRALIA, 6021

Registrant

Ampac Pty Limited
7 Ledgar Road, BALCATTA, WA, AUSTRALIA, 6021

Producer

Ampac Pty Limited
7 Ledgar Road, BALCATTA, WA, AUSTRALIA, 6021

Conformance criteria and evaluation

The Ampac, Models 4210-0058 / 4210-0059, zone input device has been evaluated and verified as conforming with the relevant requirements of the following criteria.

1. Australian Standard AS ISO 7240.17:2021, 'Fire detection and fire alarm systems Part 17: Transmission path isolators'.
2. Australian Standard AS ISO 7240.18:2018, 'Fire detection and alarm systems - Part 18: Input/output devices'.

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.

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, Models 4210-0058 / 4210-0059, zone input device is designed to allow up to 40 conventional detectors to be interfaced to the Ampac range of Apollo analogue addressable control panels.

The programmable End of Line (EOL) feature, incorporating Alarm Verification Facility (AVF), provides options for 3K3 Ω or 6K2 Ω resistor values. To facilitate support for detector head removal, a 10uF capacitor can also be selected for use with the appropriate diode bases on the conventional detection circuit.

The Ampac, Models 4210-0058 / 4210-0059, zone input device is loop powered and incorporates bi-directional isolation circuitry to provide protection against detection loop short circuits. On board LED status indication is provided for service and commissioning purposes.

Technical specification

The following details are a representative extract of the technical specification for the Ampac, Models 4210-0058 / 4210-0059, zone input device and may be subject to change. Complete and current details should be determined from the designated producer's technical manual/data sheets.

Schedule of variant designations

The following is a schedule of validated variant designations of the certified/listed equipment.

Variant		Description
Type	Ident	
Item No (Model)	4210-0058	DIN mount, loop powered, zone input device with bi-directional short circuit isolation
	4210-0059	Surface mount, loop powered, zone input device with bi-directional short circuit isolation

Schedule of properties/characteristics

The following schedule is an extract of physical and operational properties/characteristics of the certified/listed equipment.

Item No.	4210-0058	4210-0059
Mount, enclosure	DIN	Surface, enclosed
Operating voltage	17 to 28 Vdc (nominal voltage 27 Vdc)	
Quiescent current	3K3 EOL: 7.5 mA 6K2 EOL: 5 mA 1uF EOL: 2 mA	
Alarm condition current	23 mA	
Operating Temperature	-20°C to 70°C	
Humidity	0 to 95% RH (non-condensing or icing)	
Dimensions	150 mm H x 110 mm W x 25 mm D	150 mm H x 200 mm W x 52 mm D
Material	Grey ABS	
IP rating	-	IP44

Schedule of transmission path isolator characteristics

The following is schedule of transmission path isolator characteristics of the certified/listed equipment.

Parameter	Description	Value
V _{max}	Maximum line voltage	28 Vdc
V _{min}	Minimum line voltage	17 Vdc
V _{SO max}	Maximum voltage device isolates	16 Vdc
V _{SO min}	Minimum voltage device isolates	12 Vdc
V _{SC max}	Maximum voltage device reconnects	17 Vdc
V _{SC min}	Minimum voltage device reconnects	12 Vdc
I _{C max}	Maximum rated current	1 A
I _{S max}	Maximum rated switch current	3.3 A
I _{L max}	Maximum leakage current (test pulse)	60 mA
Z _{C max}	Maximum series impedance switch closed	100 m Ω

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Supplementary information

Schedule of relevant articles

The following schedule is an extract of articles significant and/or related as evidence of conformity.

Reference		Title / description	Date issued (or date validated)	Source
Type	Ident.			
Report	XF3359/R2	Evaluation for Conformity of the AMPAC 4210-005x series input output and zone interfaces to the requirements of AS ISO 7240.18:2018 and AS ISO 7240.17:2021	25-Aug-2022	CSIRO Fire Systems Laboratory, AU.
Document	PDS4210-0058-2 DRAFT	AMPAC Advanced Warning Systems Ampac Zone Input Output Device	7-Apr-2022	Ampac Pty Limited, AU
	MAN3053-1	AMPAC Advanced Warning Systems Zone Input Device – Installation Guide Item Number – 4210-0058 & 4210-0059	17-Sep-2013	
	MAN3052-1	AMPAC Advanced Warning Systems Input Output Device Range – Installation Guide Item Numbers – 4210-0050 to 4210-0057	17-Sep-2013	