#### **Features**

- Fully Expandable 1 to 8 Loop and or
- 8 to 120 Zone Fire Alarm Control Panel
- Large Graphic (240 x 64 pixel) Display
- 500mA Loop Current
- 4 Programmable Monitored Inputs
- 4 Programmable Monitored Sounder Outputs
- 5 Programmable Relays
- 2 Auxiliary Power Outputs
- Programmable via front panel
- Networkable
- Supports High Level Graphics Interface
- Supports a Range of Panel Add-ons
- SS645:2019, EN54-2 and EN54-4 compliant
- TÜV SÜD PSB and LPCB Listed



**FireFinder Plus** is an Intelligent Analogue Addressable/Conventional Fire Alarm Control Panel that is available in 1 to 8 loop and or 8 to 120 conventional zones panel options.

The *FireFinder Plus* is suitable for medium to large sized fire detection systems and is compatible with Apollo XP95, Discovery, Series 65 and Orbis Detectors.

Powerful and flexible programming is achieved via AMPAC's configuration tool *ConfigManager Plus* which includes many pre-engineered programming functions. Simple system programming is easily achieved via the front panel.

**FireFinder Plus** is configurable as a peer to peer network up to 99 panels/nodes with a maximum of 250 Loops.

**FireFinder Plus** supports a large range of internal and external optional Panel Add-ons.

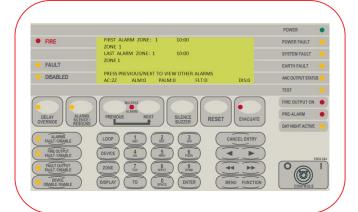
- Fire Fan Control Module
- 8-way Switch and Indicator Module
- 32 Zone Alarm Indicator Module
- Zone Disable and Indicator Module
- 16-way Input Board
- 8-way Relay Board
- 8-way Sounder Board
- 8 Zone Conventional Board
- Front panel mounted printer
- SmartTerminal (LCD Repeater)



FireFinder Plus SP1X Control Panel

The *FireFinder Plus* standard cabinet accommodates the following:

- a locked glazed outer door
- 1 to 4 loops or
- 8 to 32 Zone Board
- up to 64 Zone indicators or
- 16 Zones/Disable Modules or
- · two Add-on modules plus
- two Add-on termination boards



FireFinder Plus Controls and Indicators





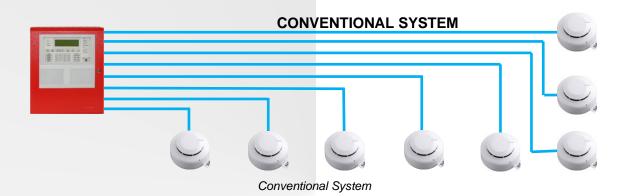


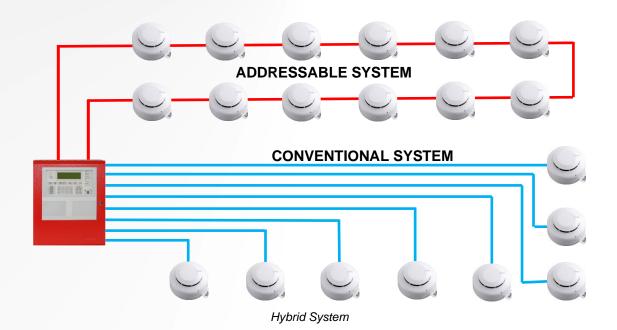






Addressable System



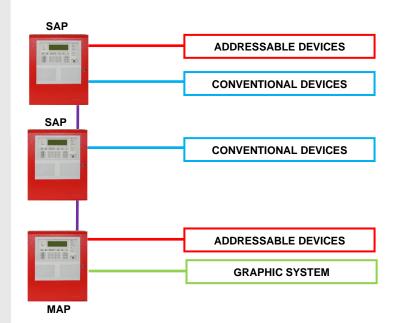


#### **Benefits**

- Ability to view the addressable devices status on the Main Alarm Panel (MAP)
- Ability to view the conventional zone of the Sub-Alarm Panel (SAP) at the MAP
- Most of the existing cables to the conventional zone can be re-used especially for retrofitting and upgrading of projects.
- Conventional devices have the ability to function as addressable devices
- Supports event logging of Addressable devices as well as Conventional zones at the MAP
- Isolation of both Addressable devices and Conventional zones at the MAP
- More effective in maintenance of the fire alarm system with low cost upgrading

#### Additional Features

- Comprehensive Auto Learning Function
- Modular expansion up to 4 loops
- Supports up to thirty SmartTerminal LCDA's
- Advanced balanced loop receive circuitry for highly effective common mode noise rejection
- Single-Ended and Redundant loop configuration capabilities
- Loop Statistics tool support for loop poll monitoring and loop noise level
- Sounder synchronisation across loops
- Walk test and silent walk test modes for zones
- Device locator LED test
- Dirty devices tool support for displaying and scrolling through dirty devices
- Events upload via PC configuration tool.
   Exportable to html and can be imported into Excel spreadsheet
- Segmented log events storing a total of 2000 events in 5 separate event segments for alarm, fault, system and disable events
- Day/night modes incorporating Normal, Investigation, Dependencies A, B, C and delays to outputs
- PC wizard for downloading and uploading Boot, Application and configuration files
- Support for up to 5000 programmable zones
- Advance Cause & Effect programming
- Intuitive resolve configuration wizards for extra, mismatched and missing devices



Hybrid Network System



8 Zone Conventional Board

The FireFinder Plus can also be connected to AMPAC's SmartView which is a remote high-level graphic interface used to monitor the fire alarm system to assist in giving precise emergency information to the operators. This can be done through the addition of a High-Level Interface Card.

FireFinder Plus boasts extensive flexibility and great reliability with ease of use. It can be used as a Conventional, Addressable as well as a Hybrid (Conventional and Addressable) Fire Alarm System which allows for easy installation and servicing of the panels. Apart from that, it has better false alarm management and an early detection protocol which will reduce the damage to property in times of an emergency.

While most Addressable Systems use Zone Modules to connect to Conventional Devices which requires an individual module per zone, the FireFinder Plus does it in a way that is cost effective and reliable simply by the addition of 8 Zone Conventional Boards.

#### **Item Numbers**

#### **Panels**

FireFinder Plus 1 Loop 5A
FireFinder Plus 2 Loop 5A
FireFInder Plus 3 Loop 5A
FireFinder Plus 4 Loop 5A
FireFinder Plus 8 Zone
FireFinder Plus 16 Zone
FireFinder Plus 24 Zone
FireFinder Plus 32 Zone

#### **Panel Add-ons**

8610-0001*	Slave CPU Board (Loop Activation)
8610-0002*	Dual Loop Termination Board
4210-0006	2 Wire Network Interface Board
4310-0021	Fire Fan Module
4310-0030	8-way Switch and Indicator Module
4310-0040	16-way Input Board
4310-0050	8-way Relay Board
4310-0060	8-way Sounder Board
4310-0080	HLI Expander Board
4310-0082*	8 Zone Conventional Board
4310-0086	32Z Alarm Indicator Module (SPX range)
4310-0087	Zone Disable & Indicator Module

## **Repeater Panels**

4380-0001	SmartTerminal ABS
4380-0002	SmartTerminal inc PSU ABS
4380-0003	SmartTerminal Slimline ABS

Note – Other Panel option and accessories available. Contact Twilight Vision Pte Ltd for details: *enquiry* @twilightvision.com.sg

#### **Specifications**

poomodiiono	
Power Supply	5A PSU version
Input Voltage	195 - 264VAC
Protection	2Amp 3AG
Output Current	5.6Amps
Charger Current	1.25A
Power Supply Output Voltage: Power Supply Ripple Voltage: Power Supply Fault - Volts High (room temperature) Volts Low	27.5VDC +/- 0.1VDC 200mV 28VDC 26.5VDC
Charger Output Voltage: Battery Type: Maximum Battery Capacity: Discharge Cut-off voltage:	27.5 +/- 0.1VDC 2 x 12V Sealed Lead Acid 26Ahr 21VDC
Panel Quiescent Current 1 Loop Additional Loops (even) Additional Loops (odd)	220mA +40mA for each Loop +75mA for each Loop
Loop Capacity Max No of Devices per Loop Cabling Requirements Fault supervision	500mA max per Loop 126 2 core 1.5 to 2.5mm <sup>2</sup> O/C, S/C, Over current
Number of Zones	1999
Devices Per Zone	32 Max
Outputs: (Programmable) Relay outputs (Programmable) Auxiliary Power Outputs	4 x 24VDC @ 1 Max, 10K EOL 5 x Voltage Free - 24VDC@1A 2 x 24VDC @ 500mA
Inputs (Programmable)	4 x O/C, S/C, 10K EOL
Comms External to FACP Comms Printer port Comms PC Interface	RS485 RS232 or Parallel RS232 or USB 2.0
Temperature	-5°C to + 40°C
Humidity	25% to 95% (non-condensing)
Mechanical	
Material	1.2mm Mild Steel
Colour/Finish	Signal Red
Dimensions (mm) SP1X	500H x 405W x 150D
IP Rating	IP30 (Indoor Use Only)



# RHYTHME TECHNOLOGY PTE LTD



## **PROJECT REFERENCE - AMPAC SYSTEM**

# Fire Alarm Panel - FireFinder Plus

S/n	Project
1	3M Tuas
2	6 Woodlands Loop
3	Australian International School
4	Bedok Integrated Complex
5	Big Box
6	Buroh Crescent
7	Cathay Cineleisure Orchard
8	Causeway Point Shopping Centre
9	Century Square
10	Chevron House
11	Chin Cheng Polyclinic
12	China Square
13	Compass One Shopping Centre
14	Dyson HQ
15	iBA Proton Centre
16	JTC @ Space
17	Mandai Camp
18	Manulife Centre
19	MBT Bio Mech
20	National Cancer Centre
21	Northpoint City
22	NTUC @ Joo Koon
23	NUS Lecture Theatre 7A
24	Parkroyal @ Marina
25	Parkway Parade Shopping Centre
26	Punggol Polyclinic
27	Raffles City
28	Raffles Hospital
29	SBF Centre
30	Seletar Camp
31	Seletar Mall
32	Sin Ming Autocare
33	Singapore Management University
34	States Court
35	Suntec City Townings Chart Llub
36	Tampines Sport Hub

# RHYTHME TECHNOLOGY PTE LTD



## **PROJECT REFERENCE - AMPAC SYSTEM**

S/n	Project
37	Tanjong Pagar Centre
38	Tee Yih Jia Food hub
39	The Central
40	University Cultural Centre @ NUS
41	Vege Farm @ Neo Tiew Harvest Lane
42	Westin Stanford – Equinox
43	WIN 5
44	Woodlands Police HQ
45	YCH Cold Room Level 5
46	YS-One



# **Certificate of Product Approval**

Certificate Number: 952b Issue: 01



## **AMPAC Europe Ltd**

Unit 2 Waterbrook Estate Waterbrook Road Alton, Hampshire GU34 2UD United Kingdom

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) as detailed below:

## **Products:**

## Control and indicating equipment

8681-0108 FireFinder Plus 8681-0208 FireFinder Plus 8681-0308 FireFinder Plus 8681-0408 FireFinder Plus (refer to Appendix for details)

#### Standards:

EN 54-2: 1997 + A1: 2006

EN 54-4: 1998 + A1: 2002 + A2: 2006

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Wasantha Hunukumbure

26 June 2013

26 June 2013

Signed for LPCB

Verifier

Date of Issue

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# Appendix to Certificate Number: 952b Issue: 01 AMPAC Europe Ltd

Certified Products	Description	LPCB Ref. No.
8681-0108 FireFinder Plus	One loop, 32 Zone analogue addressable control and indicating equipment.	952b/01
Thermael Tius	Incorporating as modular units:	
	BRD68BPSC4-A FFP Brigade & Power supply control board (8610) BRD86DLTB4-A FFP Dual loop termination board (8610) BRD86FPB5-B FFP Front panel board EN54 (8610) BRD86MBA4-A FFP Main board LCD (8610) BRD86MCPU4-B FFP Main 64MB CPU card (8610) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310) PSU1888 Power supply 5A (8610)	
	Optional Modules: BRD43EZC2-A 8 Zone conventional module (4310) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310)	
	Certified with the following options with requirements from EN 54-2:	
	7.8 Output to fire alarm devices 7.9.1 Output to fire alarm routing equipment 7.9.2 Alarm confirmation input from fire alarm routine equipment 7.11 Delay to outputs 7.12.1 Dependencies on more than one alarm signal – Type A 7.12.2 Dependencies on more than one alarm signal – Type B 7.12.3 Dependencies on more than one alarm signal – Type C 8.3 Fault signal from points 8.9 Output to fault warning routing equipment 9.5 Disablement of each addressable point 10 Test condition	
8681-0208 FireFinder Plus	Two loop, 32 Zone analogue addressable control and indicating equipment.  Incorporating as modular units:	952b/02

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# Appendix to Certificate Number: 952b AMPAC Europe Ltd

Certified Products	Description	LPCB Ref. No.
	BRD68BPSC4-A FFP Brigade & Power supply control board (8610) BRD86DLTB4-A FFP Dual loop termination board (8610) BRD86FPB5-B FFP Front panel board EN54 (8610) BRD86MBA4-A FFP Main board LCD (8610) BRD86MCPU4-B FFP Main 64MB CPU card (8610) BRD86SCB3-A FFP Slave CPU card (8610) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310) PSU1888 Power supply 5A (8610)	
	Optional Modules: BRD43EZC2-A 8 Zone conventional module (4310) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310)	
	Certified with the following options with requirements from EN 54-2:	
	7.8 Output to fire alarm devices 7.9.1 Output to fire alarm routing equipment 7.9.2 Alarm confirmation input from fire alarm routine equipment 7.11 Delay to outputs 7.12.1 Dependencies on more than one alarm signal – Type A 7.12.2 Dependencies on more than one alarm signal – Type B 7.12.3 Dependencies on more than one alarm signal – Type C 8.3 Fault signal from points 8.9 Output to fault warning routing equipment 9.5 Disablement of each addressable point 10 Test condition	
8681-0308 FireFinder Plus	3 1 1	952b/03
	Incorporating as modular units:	
	BRD68BPSC4-A FFP Brigade & Power supply control board (8610) BRD86DLTB4-A FFP Two Dual loop termination boards (8610) BRD86FPB5-B FFP Front panel board EN54 (8610)	

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# Appendix to Certificate Number: 952b AMPAC Europe Ltd

Certified Products	Description	LPCB Ref. No.
	BRD86MBA4-A FFP Main board LCD (8610) BRD86MCPU4-B FFP Main 64MB CPU card (8610) BRD86SCB3-A FFP Two Slave CPU cards (8610) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310) PSU1888 Power supply 5A (8610)	
	Optional Modules: BRD86DLTB4-A FFP Dual loop termination board (8610) BRD86SCB3-A FFP Slave CPU cards (8610) BRD43EZC2-A 8 Zone conventional module (4310) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310)	
	Certified with the following options with requirements from EN 54-2:	
	7.8 Output to fire alarm devices 7.9.1 Output to fire alarm routing equipment 7.9.2 Alarm confirmation input from fire alarm routine equipment 7.11 Delay to outputs 7.12.1 Dependencies on more than one alarm signal – Type A 7.12.2 Dependencies on more than one alarm signal – Type B 7.12.3 Dependencies on more than one alarm signal – Type C 8.3 Fault signal from points 8.9 Output to fault warning routing equipment 9.5 Disablement of each addressable point 10 Test condition	
	Incorporating as modular units:	
	BRD68BPSC4-A FFP Brigade & Power supply control board (8610) BRD86DLTB4-A FFP Two Dual loop termination boards (8610) BRD86FPB5-B FFP Front panel board EN54 (8610) BRD86MBA4-A FFP Main board LCD (8610) BRD86MCPU4-B FFP Main 64MB CPU card (8610) BRD86SCB3-A FFP Two Slave CPU cards (8610)	

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# Appendix to Certificate Number: 952b AMPAC Europe Ltd

Certified Products	Description	LPCB Ref. No.
	BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310) PSU1888 Power supply 5A (8610)	
	Optional Modules: BRD86DLTB4-A FFP Dual loop termination board (8610) BRD86SCB3-A FFP Slave CPU cards (8610) BRD43EZC2-A 8 Zone conventional module (4310) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310)	
	Certified with the following options with requirements from EN 54-2:	
	7.8 Output to fire alarm devices 7.9.1 Output to fire alarm routing equipment 7.9.2 Alarm confirmation input from fire alarm routine equipment 7.11 Delay to outputs 7.12.1 Dependencies on more than one alarm signal – Type A 7.12.2 Dependencies on more than one alarm signal – Type B 7.12.3 Dependencies on more than one alarm signal – Type C 8.3 Fault signal from points 8.9 Output to fault warning routing equipment 9.5 Disablement of each addressable point 10 Test condition	
8681-0408 FireFinder Plus	Four loop, 32 Zone analogue addressable control and indicating equipment.  Incorporating as modular units:  BRD68BPSC4-A FFP Brigade & Power supply control board (8610)  BRD86DLTB4-A FFP Two Dual loop termination boards (8610)	952b/04
	BRD86DLT84-A FFP Two Dual loop termination boards (8610) BRD86FPB5-B FFP Front panel board EN54 (8610) BRD86MBA4-A FFP Main board LCD (8610) BRD86MCPU4-B FFP Main 64MB CPU card (8610) BRD86SCB3-A FFP Three Slave CPU cards (8610) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310)	

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Certified Products	Description	LPCB Ref. No.
	PSU1888 Power supply 5A (8610)	
	Optional Modules: BRD86DLTB4-A FFP Dual loop termination board (8610) BRD86SCB3-A FFP Slave CPU cards (8610) BRD43EZC2-A 8 Zone conventional module (4310) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310)	
	Certified with the following options with requirements from EN 54-2:	
	7.8 Output to fire alarm devices 7.9.1 Output to fire alarm routing equipment 7.9.2 Alarm confirmation input from fire alarm routine equipment 7.11 Delay to outputs 7.12.1 Dependencies on more than one alarm signal – Type A 7.12.2 Dependencies on more than one alarm signal – Type B 7.12.3 Dependencies on more than one alarm signal – Type C 8.3 Fault signal from points 8.9 Output to fault warning routing equipment 9.5 Disablement of each addressable point 10 Test condition	

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# **Certificate of Product Approval**

Certificate Number: 966b Issue: 02

# TPCB BOLLANDING

## **AMPAC Technologies PTY Ltd**

7 Ledgar Road Balcatta 6021 Australia

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) as detailed below:

## **Products:**

## Control and indicating equipment

8681-0108 FireFinder Plus 8681-0208 FireFinder Plus 8681-0308 FireFinder Plus 8681-0408 FireFinder Plus (refer to Appendix for details)

#### Standards:

EN 54-2: 1997 + A1: 2006

EN 54-4: 1998 + A1: 2002 + A2: 2006

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.

Wasantha Hunukumbure

26 June 2013

05 December 2012

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# Appendix to Certificate Number: 966b AMPAC Technologies PTY Ltd

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Certified Products	Description	LPCB Ref. No.	
8681-0108 FireFinder Plus	One loop, 32 Zone analogue addressable control and indicating equipment.	966b/01	
	Incorporating as modular units:		
	BRD68BPSC4-A FFP Brigade & Power supply control board (8610) BRD86DLTB4-A FFP Dual loop termination board (8610) BRD86FPB5-B FFP Front panel board EN54 (8610) BRD86MBA4-A FFP Main board LCD (8610) BRD86MCPU4-B FFP Main 64MB CPU card (8610) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310) PSU1888 Power supply 5A (8610)		
	Optional Modules: BRD43EZC2-A 8 Zone conventional module (4310) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310)		
	Certified with the following options with requirements from EN 54-2:		
	7.8 Output to fire alarm devices 7.9.1 Output to fire alarm routing equipment 7.9.2 Alarm confirmation input from fire alarm routine equipment 7.11 Delay to outputs 7.12.1 Dependencies on more than one alarm signal – Type A 7.12.2 Dependencies on more than one alarm signal – Type B 7.12.3 Dependencies on more than one alarm signal – Type C 8.3 Fault signal from points 8.9 Output to fault warning routing equipment 9.5 Disablement of each addressable point 10 Test condition		
8681-0208 FireFinder Plus	Two loop, 32 Zone analogue addressable control and indicating equipment.  Incorporating as modular units:	966b/02	

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# Appendix to Certificate Number: 966b AMPAC Technologies PTY Ltd

Certified Products	Description	LPCB Ref. No.
	BRD68BPSC4-A FFP Brigade & Power supply control board (8610) BRD86DLTB4-A FFP Dual loop termination board (8610) BRD86FPB5-B FFP Front panel board EN54 (8610) BRD86MBA4-A FFP Main board LCD (8610) BRD86MCPU4-B FFP Main 64MB CPU card (8610) BRD86SCB3-A FFP Slave CPU card (8610) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310) PSU1888 Power supply 5A (8610)	
	Optional Modules: BRD43EZC2-A 8 Zone conventional module (4310) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310)	
	Certified with the following options with requirements from EN 54-2:	
	7.8 Output to fire alarm devices 7.9.1 Output to fire alarm routing equipment 7.9.2 Alarm confirmation input from fire alarm routine equipment 7.11 Delay to outputs 7.12.1 Dependencies on more than one alarm signal – Type A 7.12.2 Dependencies on more than one alarm signal – Type B 7.12.3 Dependencies on more than one alarm signal – Type C 8.3 Fault signal from points 8.9 Output to fault warning routing equipment 9.5 Disablement of each addressable point 10 Test condition	
8681-0308 FireFinder Plus	Three loop, 32 Zone analogue addressable control and indicating equipment.  Incorporating as modular units:	966b/03
	BRD68BPSC4-A FFP Brigade & Power supply control board (8610) BRD86DLTB4-A FFP Two Dual loop termination boards (8610) BRD86FPB5-B FFP Front panel board EN54 (8610)	

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# Appendix to Certificate Number: 966b AMPAC Technologies PTY Ltd

l				
Certified Products	Description	LPCB Ref. No.		
	BRD86MBA4-A FFP Main board LCD (8610) BRD86MCPU4-B FFP Main 64MB CPU card (8610) BRD86SCB3-A FFP Two Slave CPU cards (8610) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310) PSU1888 Power supply 5A (8610)			
	Optional Modules: BRD86DLTB4-A FFP Dual loop termination board (8610) BRD86SCB3-A FFP Slave CPU cards (8610) BRD43EZC2-A 8 Zone conventional module (4310) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310)			
	Certified with the following options with requirements from EN 54-2:			
	7.8 Output to fire alarm devices 7.9.1 Output to fire alarm routing equipment 7.9.2 Alarm confirmation input from fire alarm routine equipment 7.11 Delay to outputs 7.12.1 Dependencies on more than one alarm signal – Type A 7.12.2 Dependencies on more than one alarm signal – Type B 7.12.3 Dependencies on more than one alarm signal – Type C 8.3 Fault signal from points 8.9 Output to fault warning routing equipment 9.5 Disablement of each addressable point 10 Test condition			
	Incorporating as modular units:  BRD68BPSC4-A FFP Brigade & Power supply control board (8610)  BRD86DLTB4-A FFP Two Dual loop termination boards (8610)  BRD86FPB5-B FFP Front panel board EN54 (8610)  BRD86MBA4-A FFP Main board LCD (8610)  BRD86MCPU4-B FFP Main 64MB CPU card (8610)  BRD86SCB3-A FFP Two Slave CPU cards (8610)			

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# Appendix to Certificate Number: 966b AMPAC Technologies PTY Ltd

Alvii Ac Technologies I I I Eta					
Certified Products	Description	LPCB Ref. No.			
	BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310) PSU1888 Power supply 5A (8610)				
	Optional Modules: BRD86DLTB4-A FFP Dual loop termination board (8610) BRD86SCB3-A FFP Slave CPU cards (8610) BRD43EZC2-A 8 Zone conventional module (4310) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310)				
	Certified with the following options with requirements from EN 54-2:				
	7.8 Output to fire alarm devices 7.9.1 Output to fire alarm routing equipment 7.9.2 Alarm confirmation input from fire alarm routine equipment 7.11 Delay to outputs 7.12.1 Dependencies on more than one alarm signal – Type A 7.12.2 Dependencies on more than one alarm signal – Type B 7.12.3 Dependencies on more than one alarm signal – Type C 8.3 Fault signal from points 8.9 Output to fault warning routing equipment 9.5 Disablement of each addressable point 10 Test condition				
8681-0408 FireFinder Plus	Four loop, 32 Zone analogue addressable control and indicating equipment.  Incorporating as modular units:	966b/04			
	BRD68BPSC4-A FFP Brigade & Power supply control board (8610) BRD86DLTB4-A FFP Two Dual loop termination boards (8610) BRD86FPB5-B FFP Front panel board EN54 (8610) BRD86MBA4-A FFP Main board LCD (8610) BRD86MCPU4-B FFP Main 64MB CPU card (8610) BRD86SCB3-A FFP Three Slave CPU cards (8610) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310)				

This Certificate is maintained and held in force through regular surveillance activities and subject to the corresponding ISO 9001 Certificate being maintained.



Wasantha Hunukumbure

26 June 2013

05 December 2012

Signed for LPCB

Verifier

Date of Issue

Date of First Issue





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# Appendix to Certificate Number: 966b AMPAC Technologies PTY Ltd

Certified Products	Description	LPCB Ref. No.
	PSU1888 Power supply 5A (8610)	
	Optional Modules: BRD86DLTB4-A FFP Dual loop termination board (8610) BRD86SCB3-A FFP Slave CPU cards (8610) BRD43EZC2-A 8 Zone conventional module (4310) BRD43ZAMC2-A 32 Zone alarm MIMIC internal card (4310) Certified with the following options with requirements from EN 54-2:	
	7.8 Output to fire alarm devices 7.9.1 Output to fire alarm routing equipment 7.9.2 Alarm confirmation input from fire alarm routine equipment 7.11 Delay to outputs 7.12.1 Dependencies on more than one alarm signal – Type A	
	<ul> <li>7.12.2 Dependencies on more than one alarm signal – Type B</li> <li>7.12.3 Dependencies on more than one alarm signal – Type C</li> <li>8.3 Fault signal from points</li> <li>8.9 Output to fault warning routing equipment</li> <li>9.5 Disablement of each addressable point</li> <li>10 Test condition</li> </ul>	

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# Appendix to Certificate Number: 966b AMPAC Technologies PTY Ltd

Alternative Model Numbers and Labelling

LPCB Ref No.	Model No.	Alternative Model No./Label	Cross-listed Company	Cross-listed Co. Cert/Ref No.
966b/01	8681-0108 FireFinder Plus	8681-0108 FireFinder Plus	AMPAC Europe Ltd	952b
966b/02	8681-0208 FireFinder Plus	8681-0208 FireFinder Plus	AMPAC Europe Ltd	952b
966b/03	8681-0308 FireFinder Plus	8681-0308 FireFinder Plus	AMPAC Europe Ltd	952b
966b/04	8681-0408 FireFinder Plus	8681-0408 FireFinder Plus	AMPAC Europe Ltd	952b

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# CERTIFICATE OF CONFORMITY

No. CLS1B 081402 0007 Rev. 00

Initial No. CLS1B 14 02 81402 003

Certificate Holder:

**Twilight Vision Pte Ltd** 

60 Paya Lebar Road

#04-38

Paya Lebar Square Singapore 409051 SINGAPORE

**Certification Mark:** 



Product:

Fire Alarm Panels

**Brand Name:** 

**AMPAC** 

Model(s):

Fire Finder PLUS

**Product Details:** 

1 to 4 Loop Intelligent Analogue Addressable/Conventional

Fire Alarm Panel

Use of this certificate is for SCDF approved plans before

2020-04-01

Standard(s):

BS EN 54-2:1997/A1:2006 BS EN 54-4:1998/A2:2006

SS CP 10:2005 (cl 2.2, 2.3, 2.4 & 2.5)

Country of Origin:

Australia

Test Report(s):

Refer to following page(s)

Valid until:

2025-02-09

Products listed under Class 1B must have TÜV SÜD PSB PLS mark as shown above affixed/printed on them. Failure to comply with this requirement may result in revocation of this certificate.

Page 1 of 2

Issued on:

2020-01-14

Vice-President (Certification Department) TÜV SÜD PSB

Accredited Certification

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# CERTIFICATE OF CONFORMITY

No. CLS1B 081402 0007 Rev. 00

Initial No. CLS1B 14 02 81402 003

Test Report(s):

7191057435-EEC13-CKH, 7191057435-EEC13/01-CKH & 7191057435-EEC13/02-CKH BRE TE 248041 & BRE TE 248041-SW

Page 2 of 2

Issued on: 2020-01-14

Vice-President (Certification Department)



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