FirePro-Kentec Sequential Activator (FP-SA/GEN3.0)

Data Sheet





Installation Sheet: Connecting FirePro Sequential Activators

Connections for model FP-SA/GEN3.0

This installation sheet describes connections of the FirePro Sequential Activator, model FP-SA/GEN3.0. The FirePro Sequential Activator functions as a result of settings on the Sigma A-XT Releasing Fire Control Panel. The FirePro Sequential Activator operates Fixed Condensed Aerosol Generating Fire Extinguishing System Units.

Fixed Condensed Aerosol Generating Fire Extinguishing System Units are described as generators in this installation sheet. Reference the Specifications section of this document for FirePro generator models authorized for use with the FirePro Sequential Activator.

Connections

Remove and then discard the EOL diode on the EXTING terminals of the Sigma A-XT Releasing Fire Control Panel when installing the FirePro Sequential Activator.

Sigma A-XT Releasing Fire Control Panel

Provide connections from the FirePro Sequential Activator to the Sigma A-XT Releasing Fire Control Panel using four-conductor cabling. A maximum of 20 FirePro Sequential Activators can be connected to the Sigma A-XT Releasing Fire Control Panel.

Connect FirePro Sequential Activators to the Sigma A-XT Releasing Fire Control Panel only.

Installing One Generator

Connect a generator to terminals A+ and B- of the FirePro Sequential Activator when installing one generator.

Reference Figure 1-1 illustrating the use of one generator connection to the FirePro Sequential Activator.

Installing Two Generators

Connect a generator to terminals A+ and A- of the FirePro Sequential Activator. Connect a second generator to terminals B+ and B- of the FirePro Sequential Activator.

Reference Figure 1-1 illustrating two generator connections on the FirePro Sequential Activator.

The Jumper

A jumper connection is installed on each FirePro Sequential Activator. When installing multiple FirePro Sequential Activators, remove the jumper from the first through the *second-to-last* FirePro Sequential Activator in the connection sequence. Connect the jumper to the last FirePro Sequential Activator in the multiple connection sequence.

Reference Figure 1-1 illustrating the use of multiple connections of the FirePro Sequential Activator.

Maintain the jumper connection when one FirePro Sequential Activator is connected on the Sigma A-XT Releasing Fire Control Panel.

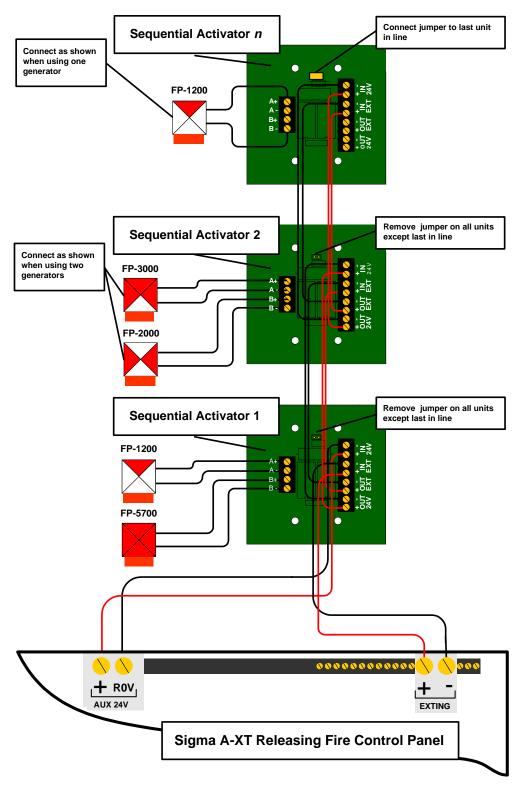






The figure below illustrates connections of the FirePro Sequential Activator:

Figure 1-1
FirePro Sequential Activator Connections





Specifications

The table below describes specifications of the FirePro Sequential Activator:

Description	Specifications	
Operating Voltage	24 VDC	
Normal Standby and Alarm	1.0 mA	
Releasing Input	24 VDC	
Normal Standby	5 mA	
Alarm	1 A (Maximum)	
Releasing Output (Class B)	24 VDC @ 1 A maximum load with 2.4 VDC maximum line drop.	
Power To Fire Single Cylinder	900 mA	
Terminals	Spring leaf 5mm pitch	
Cable Capacity	0.5 mm ² to 2.5 mm ²	
Input Delay Time	500 milliseconds +/- 100 milliseconds	
End Of Line Device	Jumper supplied	
Output Duration	2.1 seconds +/- 400 milliseconds	
Size	91mm X 91mm X 41mm	
Material	Mild Steel	
Color	Light grey textured epoxy powder coated	

The Operating Voltage, Normal Standby and Alarm current described in the table above originate at the AUX 24V output of the Sigma A-XT Releasing Fire Control Panel. The AUX 24V output connects to the In 24V terminals of the FirePro Sequential Activator. The AUX 24V output is supervised and power limited.

The Releasing Input, Normal Standby and Alarm current described in the table above originate at the EXTING output of the Sigma A-XT Releasing Fire Control Panel. The EXTING output connects to the IN EXT terminals of the FirePro Sequential Activator. The EXTING output is supervised and power limited.

The Releasing Output voltage, maximum load and maximum line drop described in the table above originate at the OUT EXT terminals of the FirePro Sequential Activator. The maximum line impedance of 2.4 VDC is shared with the EXTING output of the Sigma A-XT Releasing Fire Control Panel. This circuit is supervised and power limited.



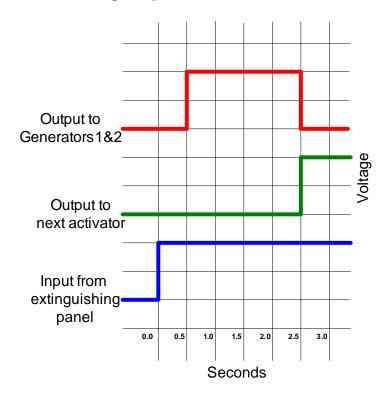
Generators

The following FirePro generator models are authorized for operation with the FirePro Sequential Activator:

- FP-100S
- FP-200S
- FP-500S
- FP-1200
- FP-2000
- FP-3000
- FP-5700

FirePro generators are manufactured by FirePro Systems Ltd.

Nominal Timing Graph



Manufacturer:Kentec Electronics Ltd Units 25-27 Fawkes Avenue, Questor, Dartford, Kent. DA1 1JQ United Kingdom Registered in England: No.1937570

Tel: +44 (0)1322 222121 Fax: +44 (0)1322 291794 sales@kentec.co.uk

Manufacturer: Kentec Electronics Ltd

Units 25-27 Fawkes Avenue,

Questor, Dartford, Kent. DA1 1JQ, United Kingdom

Registered in England: No.1937570

Tel: +44 (0)1322 222121 Fax: +44 (0)1322 291794 sales@kentec.co.uk

PRODUCT DISCLAIMERS

FirePro Systems makes no representations or warranties of any kind, either express or implied, statutory or otherwise, including but not limited to warranties of merchantability, fitness for a particular purpose, of title, or of non-infringement of third party rights, including the intellectual property rights of others.

For Materials or Equipment manufactured by Third Parties and not by FirePro Systems, the Buyer shall only be entitled to the benefit of any such warranty or guarantee as is given by the Third Party manufacturer to FirePro Systems.

LIMITATION OF LIABILITY

In no event, regardless of cause, shall FirePro Systems be liable for any indirect, special, incidental, punitive or consequential damages of any kind, whether arising under breach of contract, tort (including negligence), strict liability or otherwise, even if advised of the possibility of such damages.



Operation and User Manual

FirePro – Advanced Sequential Activator (FP-SEQACT)

Issue October 2023 Version 1.0



Table of Contents

1 SAFETY PRECAUTIONS	3
1.1 GENERAL	
1.2 PRECAUTIONS	
2 SPECIFICATION AND ORDERS	4
3 INTRODUCTION	5
4 INSTALLATION	6
4.1 MOUNT THE ENCLOSURE	6
4.2 Wiring	
5 PROGRAMMING	g
5.1 FAULT LED	g
5.2 OUTPUT LEDS	g
5.3 PUSH BUTTONS	
5.3.1 Program Delay Time Push-button	
5.3.3 Notes on Use	
6 TROUBLESHOOTING	12
6.1 OUTPUTS WILL NOT LEARN:	12
6.2 FAULT INDICATION LEDS:	
Table of Figures	
Figure 1 - Linked Sequential Activators	
Figure 2 - Remove the enclosure cover.	
Figure 3 - FP-SEQACT knockout and gland positions.	7
Figure 4 - Enclosure dimensions in mm	7
Figure 5 - FP-SEQACT wiring schematic	8
Figure 6 - SEQACT User Controls	g
Figure 7 - Output LEDs	10
Figure 8 – Example Output LED Indications	10

1 Safety Precautions

1.1 General



WARNINGS DEFINE A HAZARD THAT CAN CAUSE SERIOUS OR FATAL HARM. FAILURE TO OBEY A WARNING CAN KILL OR SERIOUSLY INJURE YOU.

WARNINGS CAN ALSO GIVE PROCEDURES OR PRACTICES WHICH WILL DAMAGE FACILITIES OR EQUIPMENT IF NOT OBEYED.



Cautions define a hazard that can possibly cause damage to facilities or equipment, loss of data or cause a system to cease operating.



Notes draw your attention to extra information, relevant to the procedures or equipment.

1.2 Precautions

BEFORE YOU INSTALL THIS PRODUCT MAKE SURE THAT YOU COMPLY WITH THE RATINGS SHOWN INSIDE THE EQUIPMENT AND IN THE SPECIFICATIONS SECTION OF THIS MANUAL.



MAKE SURE THAT YOU HAVE READ AND UNDERSTOOD THE INSTRUCTIONS PROVIDED IN THIS MANUAL BEFORE YOU WORK ON THE PANEL. IF YOU ARE NOT SURE, STOP WORK AND SEEK GUIDANCE FROM THE MANUFACTURER OR SUPPLIER.

THIS EQUIPMENT CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES. MAKE SURE THAT YOU OBEY ANTI-STATIC PRECAUTIONS AT ALL TIMES WHEN WORKING ON THE SYSTEM. FAILURE TO OBEY ESDS PROCEDURES CAN DAMAGE THE EQUIPMENT.



Only trained, competent personnel should carry out installation, programming or maintenance on this equipment.

This equipment has been designed to comply with Low Voltage Safety and Electromagnetic Compatibility (EMC) Directives. Failure to follow the installation and maintenance procedures can prevent the equipment from conforming to these standards.

2 Specification and Orders

Item	Specification Details
Product Code	FP-SEQACT
Approvals	Electromagnetic Compatibility Directive 2014/30
DC Auxiliary supply	18V DC to 30V DC
Auxiliary Current	13mA @ 24V DC
Releasing Input (V)	18V DC to 30V DC
Releasing Input (A)	Normal Standby 9mA Alarm 1.5A (Maximum)
Releasing Output	18V DC to 30V DC, pulsed, regulated to 1.2A
Terminals	Spring Leaf, 5mm pitch
Cable Capacity	0.5mm² to 2.5 mm²
Number of Outputs	4, + Next Device output
Output Duration	1 second per output
Input Delay Time	275ms
Extinguish Delay time	Configurable 0 seconds to 5 minutes.
End of Line	Integrated end of line resistor
Weight	0.62 Kg (when packaged 0.76 Kg)
Operating Temperature	Between negative 5 and positive 40 degrees centigrade (-5° to 40° C)

M	od	ماد	ടേ	OC I	Ord	or	Parts
	ratel		. 90				raits

FP-SEQACT Sequential Activator

Applications / Limitations

The sequential activator is intended for use with FirePro aerosol generators, expanding the functionality of the host panel.

Compatibility

The FP-SEQACT was tested and proven fully compatible with Advanced ExGo (Ex-3001), Kentec Sigma XT, Kentec Sigma ZXT, FirePro Delta FS (Kentec Sigma A-XT), and Notifier RP-2002 control panels.

3 Introduction

The Sequential Activator is a peripheral component that forms part of a larger fire extinguishing system.

The Sequential Activator controls the timed release of multiple aerosol extinguishing units following the activation of the release output signal from the connected host panel.

Multiple Sequential Activators can be daisy chained together to form a system. The diagram below details the connections.

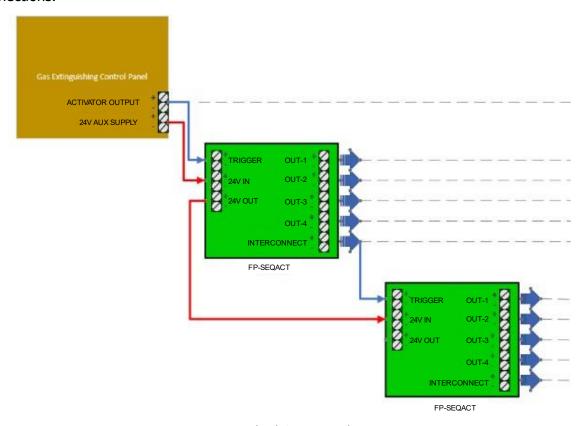


Figure 1 - Linked Sequential Activators

All Sequential Activators in a system share a common 24V Auxiliary Power Supply from the extinguishing panel. The extinguish signal is passed on to the devices from the extinguishing panel in a daisy chain topology. Once the last output circuit is activated on a sequential activator, it will pass the signal to the next sequential activator in the chain.

A programmable activation delay is available to postpone the activation of the first used aerosol output on each FP-SEQACT PCB. By default, this activation delay is set to 0 and it can be configured using an onboard push button dedicated to activation delay configuration. The delay configuration setting is saved and retrieved on any power cycle. Activation delay countdown will start when the extinguish signal is applied to the FP-SEQACT.

The FP-SEQACT output circuits are learned using an onboard push button dedicated to output circuit impedance learning. Each circuit's properties are tested, and existing circuit properties are saved and retrieved on any power cycle.

The unit connects directly to the host panel auxiliary supply and extinguishing outputs.

The FP-SEQACT features open and short circuit detection of all outputs during standby (non-alarm) condition and output current control during activation (alarm) condition.

4 Installation



THIS EQUIPMENT CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES. MAKE SURE THAT YOU OBEY ANTI-STATIC PRECAUTIONS AT ALL TIMES WHEN WORKING ON THE SYSTEM. FAILURE TO OBEY ESDS PROCEDURES CAN DAMAGE THE EQUIPMENT.



Do not hold any part of the printed circuit boards when you lift the chassis. Hold the chassis by the metal plate only. If you lift the chassis by the PCBs, you can damage the equipment.

Make sure that you isolate ALL sources of power before installing or removing any printed circuit board.

Use sufficient strength fixings to securely mount the activator assembly.

4.1 Mount the enclosure

- 1. Unscrew the two fixing screws and remove the front cover of the enclosure. See Figure 2.
- 2. Unscrew the four fixing screws and carefully remove the PCB assembly before you fix the enclosure in place. Store the removed PCB in a safe place for later.
- 3. Remove the required knockouts for the installation wiring. Install gland seals where you have removed the knockouts. See Figure 3.
- 4. Mark the positions of the three fixings on your chosen mounting surface. See Figure 4.
- 5. Drill three holes, using a 7.0 mm diameter drill-bit and fit 40mm or longer expansion plugs. Install the enclosure to the wall with M5 screws.
- 6. Remove any dust or swarf from inside the enclosure.
- 7. Put the PCB assembly over the four stand-offs and fit the four mounting screws.

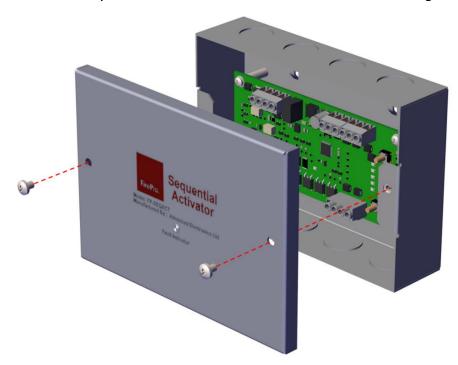


Figure 2 - Remove the enclosure cover.

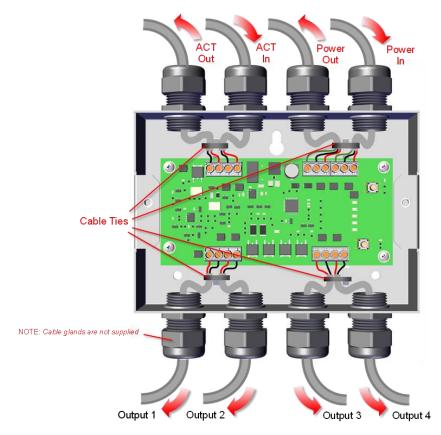


Figure 3 - FP-SEQACT knockout and gland positions.

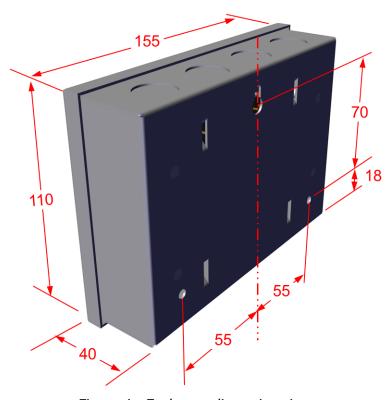


Figure 4 - Enclosure dimensions in mm

4.2 Wiring



THIS EQUIPMENT CONTAINS ELECTROSTATIC DISCHARGE SENSITIVE DEVICES. MAKE SURE THAT YOU OBEY ANTI-STATIC PRECAUTIONS AT ALL TIMES WHEN WORKING ON THE SYSTEM. FAILURE TO OBEY ESDS PROCEDURES CAN DAMAGE THE EQUIPMENT.



All electrical wiring installation work must be carried out in accordance with the code of practice or applicable national standards appropriate to the country of installation.

Any cable glands, grommets or cord-clamp bushings used to route the cable through the 20mm knockouts must have a flame retardancy rating at UL94V-1 or better.



Minimum/maximum cable size for all external connections is limited to 0.5mm²/2.5mm² (22-14 AWG).

Connect the wires as shown in Figure 5.

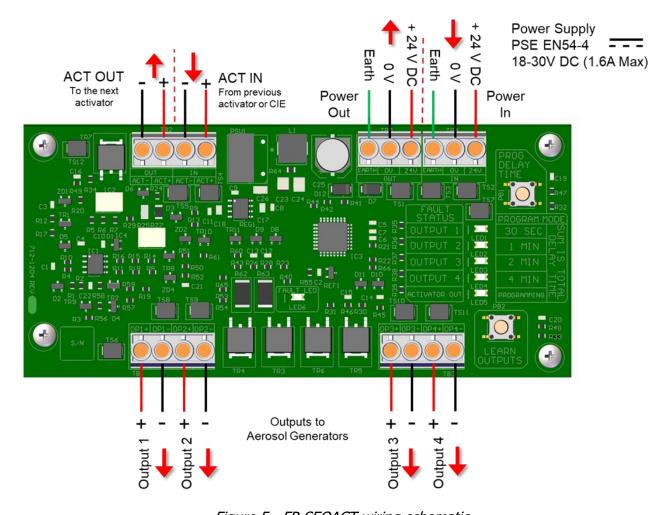


Figure 5 - FP-SEQACT wiring schematic

5 Programming

The Sequential Activator user interface comprises of 6 LEDs and two pushbuttons.

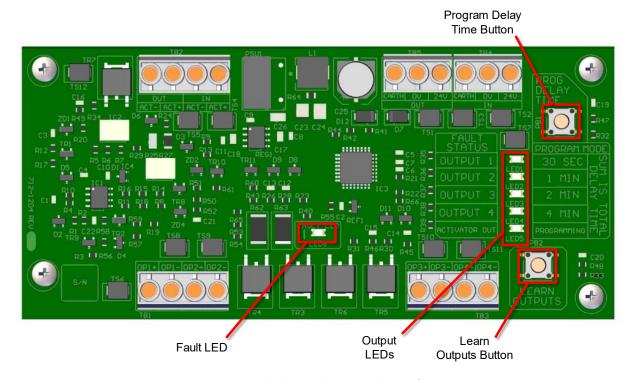


Figure 6 - SEQACT User Controls

5.1 Fault LED

The sequential activator fault LED is visible from the outside of the enclosure. On first power-up the fault LED will be on to indicate that the product has not been commissioned (learn performed).

In normal fault free operation, the fault LED will remain unlit. During a fault condition, the fault LED is lit, and the sequential activator's end of line resistor is switched out of circuit to report the fault to the host panel.

5.2 Output LEDs

The sequential activator contains five output LEDs, during normal operation, the output LEDs will remain off. During fault condition, an output LED will light in conjunction with the fault LED to indicate a fault on a particular output. Please see the trouble shooting section for further information.

Also, during activation of an output, the output LED corresponding to currently active output will light for the period of activation (1 second).

5.3 Push Buttons

The pushbuttons are used for programming or displaying the configuration of the sequential activator. They are used to put the sequential activator into four operation modes, the output LEDs display the status of the card in these operating modes.

- Display Activation Delay
- Program Activation Delay
- Display Used Outputs
- Learn Output Circuits

5.3.1 Program Delay Time Push-button

This button (labeled PROG DELAY TIME) is used to put the sequential activator into activation delay programming modes as follows:

• **Short Press:** Press and release the pushbutton to place the card in Display Activation Delay mode. The LEDs will display the current configured activation delay. The activation delay is calculated by summation of the delay represented by each LED. After a timeout of 5 seconds the card exits this mode to normal running mode.

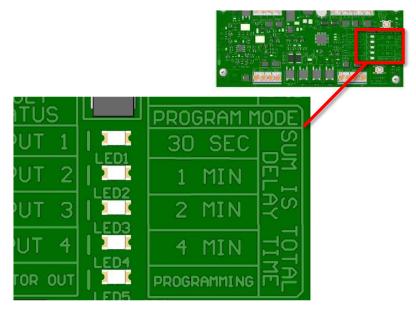


Figure 7 - Output LEDs

• **Press and Hold:** Hold the pushbutton for 2 seconds or more to place the sequential activator in Program Activation Delay mode. In this mode, the PROGRAMMING LED flashes in half-a-second periods to indicate the sequential activator is in Activation Delay Programming mode. To change the activation delay, short presses of the PROG DELAY TIME pushbutton will increase the delay by 30 seconds up to the maximum of 5 minutes. If no keypresses are registered withing 5 seconds, the current displayed delay will be stored, and the sequential activator will return to the normal running mode. The programmed delay can be confirmed using a short press of the PROG DELAY TIME button.

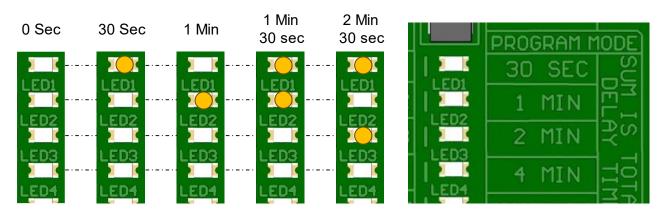


Figure 8 - Example Output LED Indications

5.3.2 Learn Outputs Pushbutton



Make sure that all circuitry is correct before you perform a learn operation.

This button (labeled LEARN OUTPUTS) is used to put the sequential activator into learning output circuit programming modes as follows:

- **Short Press:** Press and release the pushbutton to place the card in Display Used Outputs mode. The LEDs will display the outputs that are currently in use. After a timeout of 5 seconds the sequential activator exits this mode to normal running mode.
- **Press and Hold:** Hold the pushbutton for 2 seconds or more to place the sequential activator in Learn Output Circuits Programming mode. In this mode, all output circuits are scanned, and their impedances are stored. At the end of this mode, the LEDs will briefly display all currently used output circuits. The sequential activator exits this programming mode to the normal running mode after a five second timeout. The currently available output circuits can be confirmed using a short press of the Learn Outputs button.

5.3.3 Notes on Use

If the card is in activation countdown (delay programmed), and the activation signal is removed, the card will abort the activation process and resume normal running mode.

While the card is in activation countdown, configuration changes are not permitted, access to card configuration is restricted and displays current configuration only.

To erase the card configuration:

- Press and hold the Program Delay Time button until the Programming LED flashes.
- Press and release the Learn Outputs pushbutton.
- The fault LED will turn ON, and the integrated end of line resistor will be switched out of circuit to indicate to the CIE that the card is not configured.

During the commissioning of the system, the Learn Output procedure has to be carried out starting from the last sequential activator and ending to the first one. Not following the correct sequence might result in a false error free state of the system.

6 Troubleshooting

The sequential activator has a fault LED that is visible from the outside of the enclosure. During a fault condition, the fault LED will turn ON, and the sequential activator's end of line resistor is switched out of circuit to report the fault to the CIE.

6.1 Outputs will not learn:

The output impedance is out of range, the acceptable range is 1.2Ω to 7.5Ω , please check the wiring and measure the impedance across the output with the sequential activator powered off.

6.2 Fault indication LEDs:

During a fault condition, the sequential activator's end of line resistor is switched out of circuit to indicate a fault to the CIE and the Fault LED is illuminated.

Where there is more than one sequential activator in a system, the fault is passed back to the panel by each sequential activator switching its end of line resistor out of circuit.

Along with the fault LED one or more of the 5 other LEDs will turn ON to indicate a fault or faults. The 5 other LEDs are only visible by removing the front cover of the sequential activator.

The table below shows the LED combinations and describes each fault during normal operation (non-alarm).



Fault detection is not active during an activation period. To diagnose a fault, make sure that the active (extinguish) signal is removed.

LED Pattern	Fault	Action
FAULT + OUTPUT1	OUTPUT 1	Check the output for open or short circuit
FAULT + OUTPUT2	OUTPUT 2 Check the output for open or short circuit	
FAULT + OUTPUT3	OUTPUT 3	Check the output for open or short circuit
FAULT + OUTPUT4	OUTPUT 4	Check the output for open or short circuit
FAULT + ACTIVATOR OUT	ACTIVATOR OUT	Check the output for open or short circuit

PRODUCT DISCLAIMERS
FirePro Systems Ltd makes no representations or warranties of any kind, either express or implied, statutory
or otherwise, including but not limited to warranties of merchantability, fitness for a particular purpose, of
title, or of non-infringement of third party rights, including the intellectual property rights of others.

For Materials or Equipment manufactured by Third Parties and not by FirePro Systems Ltd, the Buyer shall only be entitled to the benefit of any such warranty or guarantee as is given by the Third Party manufacturer to FirePro Systems Ltd.

LIMITATION OF LIABILITY

In no event, regardless of cause, shall FirePro Systems Ltd be liable for any indirect, special, incidental, punitive or consequential damages of any kind, whether arising under breach of contract, tort (including negligence), strict liability or otherwise, even if advised of the possibility of such damages.



FirePro Systems

 $8\ \textsc{Faleas}$ Street, Agios Athanasios, CY-4101 Limassol, Cyprus - EU

Tel.: +357 25 379999 | Fax: +357 25 354432 | Email: mail@firepro.com

www.firepro.com

SYCALL RESET GLOW DOUBLE POLE RESETTABLE CALL POINTS



The Sycall Reset-Glow series of resettable manual call points mimics the feel of breaking glass whilst offering the user benefits and environmental advantages of a resettable operating element.

All variants can be easily identified by an alarm flag which rises into view upon activation.

FEATURES

- · 2 Independently switchable poles
- · Resettable element
- · Luminescent element visible for up to 8 minutes
- Available in 5* colours
- *Red version is approved to EN54-11 as a Series 01 model only.

PART NUMBERS

- SY-GD02 Series 02, Green, Dual Mounting (Flush or Surface)
- SY-YD02 Series 02, Yellow, Dual Mounting (Flush or Surface)
- SY-WD02 Series 02, White, Dual Mounting (Flush or Surface)
- SY-BD02 Series 02, Blue, Dual Mounting (Flush or Surface)
- SY-GF02 Series 02, Green, Flush Mounting
- SY-YF02 Series 02, Yellow, Flush Mounting
- SY-WF02 Series 02, White, Flush Mounting
- SY-BF02 Series 02, Blue, Flush Mounting
- SY-GS02 Series 02, Green, Surface Mounting
- SY-YS02 Series 02, Yellow, Surface Mounting
- · SY-WS02 Series 02, White, Surface Mounting
- SY-BS02 Series 02, Blue, Surface Mounting

ACCESSORIES

- SY-PC01 Sycall Hinged Protective Cover
- SY-FMP01 Sycall Flush Mounting Plate
- · SY-NIU01 Sycall "Not in Use" Label

PROTECTIVE COVERS

- SG-FS-# Smart+Guard Cover, Flush, With Sounder
- SG-SS-# Smart+Guard Cover, Surface, With Sounder
- SG-F-# Smart+Guard Cover, Flush, No Sounder
- · SG-S-# Smart+Guard Cover, Surface No Sounder

For full product code replace # with:

G = Green

Y = Yellow

W = White

B = Blue

SYCALL RESET GLOW









SPECIFICATION

Insulation Resistance	>100 Mohm @ 500 V dc
Maximum Current	3 A @ 250 V ac 5 A @ 125 V ac
Cable Termination	0.5 - 2.5 mm²
Operating Temperature	-30 to +70°C
Humidity	0-95%
IP Rating	IP42
Material	ABS/Polycarbonate/PA6+Glass Fibre

SMART\GUARD



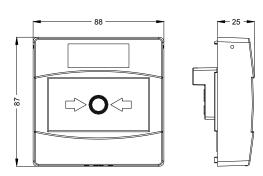


TECHNICAL DATASHEET

SYCALL RESET GLOW DOUBLE POLE RESETTABLE CALL POINTS



INSTALLATION

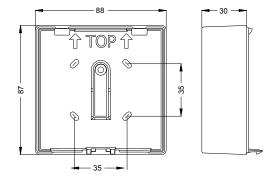


Dimensions (mm)

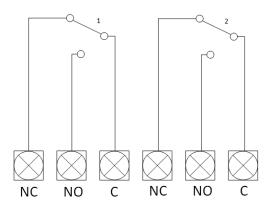
Flush Mount



Flush Mounting Plate



Surface Mount



Terminal Connections with independent poles

3700097/REV 2

We reserve the right to change or amend any design or specification in line with our policy of continuing development and improvement.

Vimpex LTD

Star Lane, Great Wakering, Essex SS3 OPJ, UK

- t. +44 (0) 1702 216999
- e. sales@vimpex.co.uk www.vimpex.co.uk

Vimpex Interguard AB

- t. +46 (0) 36 37 10 65
- e. sales@vimpex.se



BTA V3

Bulb Thermal Actuator

Data Sheet

Issue August 2020 Version 4.0



Data sheet

Bulb Thermal Actuator - BTA V3



Features

- Suitable for electrical panels, generator/ boiler rooms, obstructive accessible areas, etc.
- No electrical power source is required.

Product Overview

The FirePro BTA V3 performs the functions of fire detection and automatic activation of the fire extinguishing aerosol generator with the use of a bulb thermal sensor at a pre-selected temperature.

Approval / Certificates

EN 15276-1 (Pending)

Product Number

Complete Unit

BTA V3, at 57°C for cylindrical-type Generators	[11272]
BTA V3, at 68°C for cylindrical-type Generators	[11273]
BTA V3, at 79°C for cylindrical-type Generators	[11274]
BTA V3, at 93°C for cylindrical-type Generators	[11275]
BTA V3, at 141°C for cylindrical-type Generators	[11276]
BTA V3, at 182°C for cylindrical-type Generators	[11277]



BTA V3, at 57°C for box-type Generators	[11278]
BTA V3, at 68°C for box-type Generators	[11279]
BTA V3, at 79°C for box-type Generators	[11280]
BTA V3, at 93°C for box-type Generators	[11281]
BTA V3, at 141°C for box-type Generators	[11282]
BTA V3. at 182°C for box-type Generators	[11283]



Individual Order - Parts Ordering

BTA Mechanical Part V3, at 57°	[11284]
BTA Mechanical Part V3, at 68°	[11285]
BTA Mechanical Part V3, at 79°	[11286]
BTA Mechanical Part V3, at 93°	[11287]
BTA Mechanical Part V3, at 141°	[11288]
BTA Mechanical Part V3, at 182	[11289]



BTA Adaptor for Cylindrical-Type Generators [10585]

BTA Sleeve for Box-Type Generators [10626]



Activator Type: Thermal [10012]

Data sheet

Bulb Thermal Actuator - BTA V3



Technical

Mechanical Part

- BTA Mechanical Part consists of:
 - a) Thermo Lock with Glass Retort.
 - Spring Transmission of percussive mechanism, which initiates the capsule,
 - c) Safety Ring and Pin during transportation.
- Length 71mm, Diameter 18mm.

Thermal Activation Part

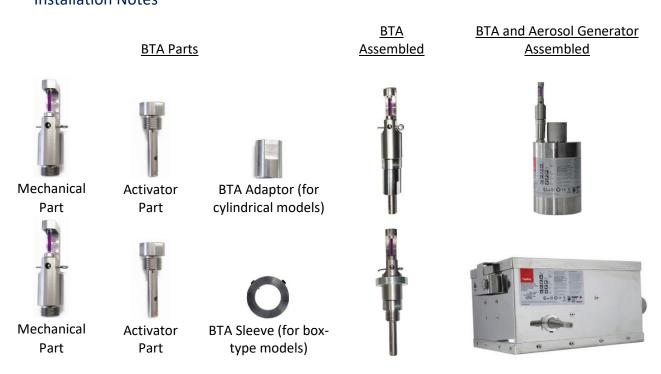
Activator with Thermal Activation Type.
 Consisting of the capsule and the solid compound.

Bulb

- Length 20mm, Diameter 3mm.
- The liquid in the bulb expands when the surrounding temperature increases. At the predetermined operating temperature the

- glass bulb 'bursts', causing the thermal mechanism to actuate the built-in firing pin, which in turn initiates the capsule, and ignites the solid compound of the Thermal Actuator.
- Response Time Index RTI 24m/ s.
- The surface area of the glass is maximized to allow maximum transfer of heat from surrounding air to bulb liquid.
- The super-fast THERMO BULB is a highperformance fast response THERMO BULB featuring improved strength and sensitivity characteristics. The response time is 25% faster than that of the standard fast bulb with superior strength condition.
- Strength (Crush Load) = 4.1 kN.
- Bulb Color indicates the operating temperature: Orange 57°C, Red 68°C, Yellow 79°C, Green 93°C, Blue 141°C, Mauve 182°C.

Installation Notes





Data sheet

Bulb Thermal Actuator - BTA V3



Component Assembly - Disassembly

FirePro DOES NOT ALLOW the replacement of the glass bulb, which is pre-installed on the BTA unit. The BTA unit consists of various delicate mechanical components that are carefully assembled and adjusted prior to dispatch as a complete assembled unit, this way, ensuring, the proper and reliable operation of the unit. Please note that ALL individual components of the BTA unit are glued together.

DO NOT ATTEMPT to tamper/ apply any external force to the BTA during installation. Ensure that the safety pin is free to move prior to removing it (from the device) when the installation is completed.

Product Handling - Limitations

The BTA needs to be handled with care, as its operation is dependent on a fragile glass bulb. The glass bulb of the BTA is sensitive to external shocks / vibrations and could break if installed in the wrong application. BTA should NOT be used in harsh environments, in the presence of intense vibrations or exposed to external forces/shocks, such as industrial heavy vehicles and other rolling stock.

Bulb Thermal Actuator Packing Information (Applies on Air Freight Packaging only)

The BTA activators are fully enclosed and protected in an aluminium packing during delivery. The aluminium packing can accommodate two BTA activators. The BTA activators intended for the cylindrical type generators, will have the BTA Adaptor installed on the main body of the activator, whereas for BTA Actuators for the box-type generators, do not need the adaptor. The BTA activators are installed on the end caps which in turn will be screwed on to the aluminium tube prior to delivery.

The protective, metal enclosure, provides sufficient protection to prevent any self-activation, due to dry heat, impact or vibration. Furthermore, even in the unlikely event of activation of the BTA activators, the metal housing will withstand any thermal energy and pressure exerted.

The protective enclosure is safe for transport by air, and as such is classified as non-dangerous cargo.

For further information regarding the unpacking instructions please refer to the "Unpacking Instructions for Bulb Thermal Activator – BTA V3".



DISCLAIMER

FirePro Systems makes no representations or warranties of any kind, either express or implied, statutory or otherwise, including but not limited to warranties of merchantability, fitness for a particular purpose, of title, or of non-infringement of third party rights, including the intellectual property rights of others.

Any information provided by FirePro Systems, relevant to the system engineering of the project is indicative and for guidance purposes only.

It is the contractor's responsibility to verify whether any circuit design is compatible with the equipment used in the system. Furthermore, the responsibility for the preparation and/ or approval of a project, subject to its specifications/ technical features and its related documentation, designs or drawings adherence (e.g. design documentation, construction, as-built drawings, circuit diagram, cable lengths and voltage drop calculations, etc.) to local, national and international laws and regulations, falls entirely within the scope of the contractor/ consultant assigned for the installation and commissioning.

LIMITATION OF LIABILITY

In no event, regardless of cause, shall FirePro Systems be liable for any indirect, special, incidental, punitive or consequential damages of any kind, whether arising under breach of contract, tort (including negligence), strict liability or otherwise, even if advised of the possibility of such damages.

NOTE

FirePro is constantly updating its products and systems to the state of the art and therefore reserves the right to make changes in design, equipment and technology. You cannot therefore base any claims on the data, illustrations or descriptions contained in this literature.



SIGMA XT ANCILLARIES

Extinguishant Hold Off

Features

- > Shrouded push button to prevent inadvertent operation
- ▶ Activation resistor included
- ▶ Compatible with all Sigma XT and Sigma XT+ models
- ▶ Robust steel surface mount enclosure
- ▶ Flush mount collar available*



Description

The K91000M10 Hold Off Unit provides a robust and convenient point to apply a temporary hold to release of fire protection extinguishant release.

The robust pushbutton is shrouded to prevent accidental operation and is coloured to comply with the requirements of BS7273-1.

The robust enclosure allows for either surface mounting or flush with optional collar. Part M10FCLGT*.

Specification		
Construction	1.2mm mild sheet steel	
IP rating	IP30	
Colour - lid & box	BS 00 A 05 grey - fine texture	
Weight	ıkg	
Contacts	1x Normally Open, 1x Normally Closed	
Operating Temperature	-5°C to +40°C	
Knockouts	20mm	
Trigger Resistor	470R 1 Watt	

Equipment		
Product Code	Description	Size
K91000M10	Extinguishant Hold Off Switch Unit - Green Button	102 X 102 X 50
KB91000M10	Extinguishant Hold Off Switch Unit - Red Button	102 X 102 X 50
M10FCLGT	Flush Mount Collar	N/A

