

Three Zone Automatic Gas Extinguishing Panel

The ExGo, three zone automatic extinguishing panel is approved to EN12094-1 (European Standard for Fixed Firefighting Systems - Components for Gas Extinguishing Systems) and EN54 - Parts 2, 4 and 13.

The ExGo system detects a fire in the same manner as a fire alarm system, but in addition to sounding alarms, it also controls the release of an extinguishing agent.

The extinguishing agent can take many forms from CO² through to other specialist gases (e.g. Aerosol and Clean Agent) developed solely for extinguishing purposes. The extinguishant agent is released into the atmosphere in the area where a fire has been detected, reducing the density of oxygen in the atmosphere, thus extinguishing the fire.

The ExGo system is used primarily in areas of significant value/strategic importance to businesses e.g. computer suites, telecom switch-rooms, Battery energy storage systems (BESS) etc, providing a cost-effective solution to protect your work place or asset.



Features

- LCD display providing clearer status indication and programming routines
- Multiple languages - options for customisable slide-in labels to support local languages (GBEx version)
- Software for downloading configuration and event logs
- Passcode or optional key switch for Level 2 access
- Time and date-stamped event log and improved diagnostics
- Company logo can be displayed on LCD during normal conditions
- Large LCD/ digital countdown timer
- RS485 for remote status indicators (maximum of 7)
- PC download via USB

Specification

Base technology	Flash-based processor
Display	Backlit 128 x 64 LCD
Remote status indicators	Supported via RS485 (maximum of 7)
Controls	Alphanumeric keypad, navigation keys and system keys for Reset, Mute, Silence/Resound and Sound alarms
Detection zones	3 x conventional detection zones (inc. support for I.S. barrier)
Extinguishing zones	1 x flooding/extinguishing zones. Support for Solenoid (1A continuous load) and Metron (3A, 15ms pulse) type actuators
Onboard sounder circuits	3 x 1A, 18-28vDC
Onboard relays	4 x 1A, 30vDC relay outputs (Fire, Fault & 2 x programmable)
Auxilliary supply	2 x 500mA aux supply outputs 18-28vDC (1 switched)

Programmable outputs	Support for 8 additional programmable outputs via Exp-008
Switch inputs	4 x programmable, 1 x manual trigger, 6 x release (Mode Select, Valve Monitor, Pressure Monitor, Hold, Abort, Flow)
Countdown timer	On board, large digit
Mains supply	3A universal switch mode PSU
	200-240 (+10%; -15%); 47-63 Hz; 1.0 A (max)
Battery capacity	24V 7Ah
Charger current	1A
USB ports	1 x USB port for PC connection
Event log	100 fire/trigger events, 500 general log events
Enclosure, colour	Steel IP30, grey RAL7035
Cable entry	17 knockouts in enclosure top, 13 in enclosure back
Size (H x W x D)	330mm x 400mm x 90mm
Weight	5.1Kg (panel only)
Humidity	95% Max.
Approvals	EN 12094-1:2003
	EN54-2:1997 +A1:2006
	EN54-4:1997 +A1:2002 +A2:2006

Order Codes and Options

EX-3001*:	Extinguishing Control Panel
EXM-001:	Semi-flushing bezel for Ex-3001 panel
EXS-001:	Spare Manual Release Cover
EXS-002:	EX-3001 Spare Chassis c/w PCB
EXP-001:	Enable controls (trapped) key switch assembly
EXP-001F:	Enable controls (trapped) key switch assembly - Fitted
EXP-002:	Mode Select (Un-trapped) Key switch assembly
EXP-002F:	Mode Select (Un-trapped) Key switch assembly - Fitted
EXP-012	2-position 45 degree key Switch (momentary)

*NOTE

EX-3001 = EX3001 is referenced in other documentation

ExGo

Remote Status Indicator Panels

The ExGo Remote Status Indicators are available in two formats, a basic display only with optional key switches or a manual release version with optional key switch for automatic/manual mode.

The ExGo extinguishing system detects a fire in the same manner as a fire alarm system, but in addition to sounding alarms, it also controls the release of an extinguishing agent.

The extinguishing agent can take many forms from CO² through to specialist gases developed solely for extinguishing purposes. The agent is released into the atmosphere in the area where a fire has been detected, reducing the density of oxygen in the atmosphere around the fire, thus extinguishing the fire.

The ExGo extinguishing system is used primarily in areas of significant value/strategic importance to businesses e.g. computer suites and telecom switch-rooms; thus providing a cost effective solution to protect your work place.



Features

- Small and compact
- RS485 network port
- Optional manual release or display only
- Surface mount or semi-flush option
- Up to 7 remote status indicators per one ExGo 1 loop panel
- 3-year warranty as standard
- Key switch option for mode select or enable controls
- Multiple languages
- Programmable inputs and outputs

Specification

Enclosure	Steel IP30 (optional IP65 version available upon request)
Dimensions (H x W x D)	190mm x 235mm x 45mm
Environmental class	Class A - indoor IP30 0°C to 40°C
Humidity	95% max
Weight (excluding batteries)	1.5Kg
Cable entries (20mm knockouts)	4x top and 4x bottom rear
Power supply	24VDC nominal (18V - 28V)
Relay outputs (optional)	2x rated at 1A 30 V AC/DC (max) 10mA 5V (min) programmable (requires EXP-007F)
Key switches 1 x programmable	Ex-3021 and Ex-3031 - Fitted
Manual release	Ex-3020 and Ex-3021 - No; Ex-3030 & Ex-3031 - Yes
External inputs (monitored)	2 x programmable
Communications	Rs485 to Ex-3000 series control panel
Display	Graphic LCD 124 x 64 pixels
LED indicators	12 in Total: Fire, Release, Timer, Disablement, Mode and Fault indications.

Order Codes and Options

EX-3020:	RSI c/w LCD + LED indicators
EX-3021:	RSI c/w LCD + LED indicators with mode select key switch
EX-3030:	RSI c/w LCD + LED indicators with manual release button
EX-3031:	RSI c/w LCD + LED indicators with MR button and mode select key switch
EXM-002:	Semi-flushing bezel for RSI

Advanced, The Bridges, Balliol Business Park, Newcastle upon Tyne, NE12 8EW, UK **T:** +44 (0)345 894 7000 **E:** enquiries@advancedco.com
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2 or 8-Way Relay Output Card

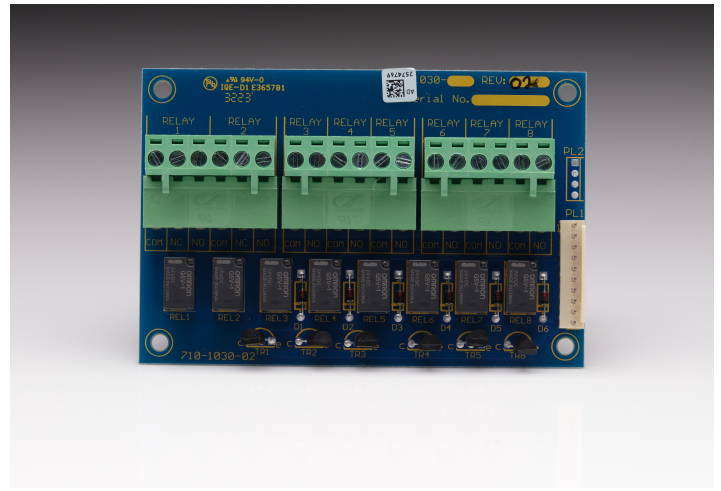
The 2 or 8 Way Relay Output Card is an internal peripheral for use with The ExGo series control panels and status indicators.

This additional PCB provides a cost effective solution to providing 2 or 8 individually programmable 1 Amp rated, volt free, clean contact outputs.

The 2 or 8 Way Relay Output Card connects directly to the panels motherboard in which each output can be individually programmed.

Ideal for any application where a number of programmable outputs are required at the panel.

The features of the 2 or 8 Way Relay Output Card not only aid commissioning and cut down on expensive ancillary hardware but also allow the system to be easily configured to provide additional outputs for the more complex cause and effect configurations using standard products.



Features

- 2 or 8 individual programmable outputs
- Each output individually programmable
- Fast response
- Each output 30V AC/DC, 1 Amp rating
- Cost effective against ancillary hardware
- Optional fail safe setup
- Easily programmable by on board keypad

Specification

Relay Outputs	2 or 8 volt free contacts - 2 x change over + 6 x normally open which can be inverted
Contact Rating	1 Amp 30 V DC/AC maximum
Power Supply	24 V DC (derived from panels motherboard)
Supply Current	65 mA maximum (all relays energised)
Protocols	As per detector manufacturer's specifications
Dimensions H x W x D mm	70 x 105 x 18

Order Codes and Options

EXP-007*:	2 Way Relay Output Card - RSI Only
EXP-008*:	8 Way Relay Output Card - ExGo Only
*F:	Relay Output Card fitted

Compatibility

The 2 Way Relay Output Card is fully compatible with the ExGo RSI panel only. Mounting pillars are provided on the back box to mount this card.

The 8Way Relay Output Card is fully compatible with the ExGo Control panel only. Mounting pillars are provided on the back box to mount this card.

Limitations

Each output is fully programmable for any output function allowed within the ExGo control panel. Only one Relay O/P Card can be fitted to an ExGo control panel or Remote Status Indicator.

Switch end-of-line module

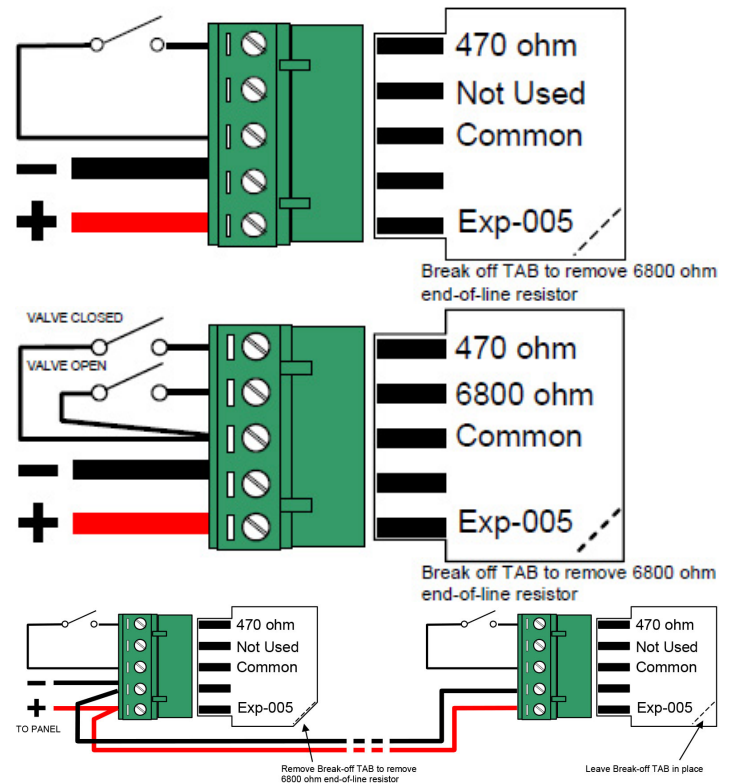
The EXP-005 switch module provides a simpler way of correctly terminating the switch input circuits of the ExGo Series Extinguishing Control Panel/System.

The module consists of a printed circuit card and connector.

The normal 68000Ω end-of-line resistor supplied with the panel is not used.

The diagrams show typical applications and their wiring.

If multiple switches are connected to the circuit, the modules (and their switches) can be daisy-chained on the circuit. A break-off tab (to remove the end-of-line resistor) must be removed on all modules except the last module on the circuit.



Specification

Dimensions (H x W x D)	Overall: 38mm x 27mm x 15mm
Dimensions (H x W x D)	PCB: 27mm x 20mm x 2mm
End-of-line resistance	6800 Ohms
SW #1 active resistance	470 Ohms general input - switch; valve input - closed switch
SW #2 active resistance	6800 Ohms general inputs - not used; valve input - open switch
Maximum operating voltage	30V DC
Environmental class	Indoor -5°C to +40°C
Humidity	95% max

Order Codes and Options

EXP-005:	Switch End of Line module (pack of 5)
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Compatibility

Compatible with the ExGo series Gas Extinguishing Panel input circuits.

Limitations

For use in gas extinguishing installations where an EOL module is required.

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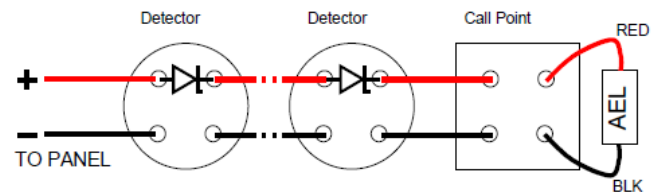
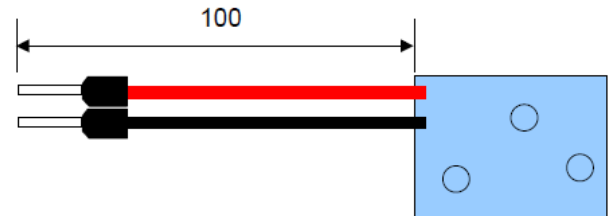
Zone Active End-of-Line Module

The Zone Active end-of-line Module provides active end-of-line monitoring for zone circuits fitted with detector diode bases in accordance with BS5839-1 Clause 12.2.2f.

The normal 6800Ω end-of-line resistor supplied with the panel is not used.

The module will create an open circuit condition on the panel if a detector is removed from its base.

Refer to panel manuals for details of the number of detectors that can be connected to the zone circuit.



Specification

Dimensions (H x W x D)	Overall: 27mm x 20mm x 7mm (max)
End-of-line resistance	6800 Ohms
Environmental class	Indoor -5°C to +40°C
Humidity	95% max
Operating voltage	17-30V DC
Zone voltage	20V DC typical
Current consumption (fault condition)	40μA typical

Order Codes and Options

EXP-006:	Zone active End of Line (pack of 5)
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Compatibility

Compatible with the ExGo Series Gas Extinguishing Panel input circuits.

Limitations

For use in gas extinguishing installations where an EOL module is required.

Logo & Extraction Tools - PC-Net Software

To support the ExGo series a suite of PC tools has been developed with advanced programming features.

For our gas panel systems we provide an easy to use logo programming application and a user friendly PC extraction software for customised reports and back up of system configurations.

PC-NET-007, Logo Programming software permits the creation of, and allows upload to the ExGo series, a customised logo allowing the product to be branded by the end user.

PC-NET-013, Ex Extraction software allows full download of Gas system configuration and event log. The user-friendly software provides a quick reporting log book, showing full system configuration, full event logs and a quick reporting guide to customise system reports for end users.

Features

- USB upload/downloads
- User-friendly Windows based software
- Export information to Office applications
- Download event logs and system configuration
- Customised printouts
- Panel branding via electronic logo

Order Codes and Options

PC-NET-007:	Ex-3000 Series Logo Programming Software
PC-NET-013:	Ex-3000 Series Extraction Software
UP-015	USB Lead (2M A-B Type)

Compatibility

Compatible with the ExGo series gas Extinguishing control panel.

Conventional Photoelectric Smoke Detector

The photoelectric smoke detector has been designed with a unique symmetrical chamber.

The chamber ensures optimum air entry from all directions and offers immunity to ambient light into the detectors.

A custom ASIC provides superior and reliable detection performance whilst reducing the problems of false alarms.

A patented moulding profile helps to enhance long term stability by removing airborne contamination before it can enter the sensing chamber.



Features

- EN54-7:2018 approved (Cert No. 603a/08)
- Double dust trap protects the smoke chamber from contamination
- Central LED providing 360 degree visibility
- Magnetic test feature
- Anti-Tamper locking feature
- Robust and reliable
- Unique range of Decorline finishes are available
- 3 year warranty
- Part Number 20-AS1000-ADV

Specification

Operating Voltage	10-30V
Stand by Current	I=75 uA
Alarm Current	Ial=50mA
LED Current Consumption	Iled=6mA @24Vdc
Operating Temperature Range	-30°C / +70°C
Humidity (no condensing)	95% RH
Height with Base	54 mm
Diameter	110mm
Approvals / Certification	EN54-7:2018

Order Codes and Options

20-AS1000-ADV:	Photoelectric Smoke Detector
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Conventional Class A1R Rate Of Rise Heat Detector

The Rate Of Rise Heat Detector meets the requirements of EN54-5 class A1R and provides the highest level of protection when smoke detection is unsuitable.

A single centrally positioned, NTC thermistor that supervises the ambient temperature with low thermal inertia.

A custom ASIC provides superior and reliable detection performance whilst reducing the problems of false alarms.



Features

- EN54-5:2017 +A1:2018
- Central LED providing 360-degree visibility
- Magnetic test feature
- Anti-Tamper locking feature
- Robust and reliable
- Unique range of Decorline finishes are available
- 3-year warranty
- Part Number 20-AS3500A1R-ADV

Specification

Operating Voltage	10-30V
Stand by current	I=75 uA
Alarm current	Ial=50mA
LED current consumption	Iled=6mA @24Vdc
Operating Temperature Range	-30°C / +70°C
Humidity (no condensing)	95% RH
Height with base	54 mm
Diameter	110mm
Approvals / Certification	EN54-5:2017

Order Codes and Options

20-AS3500A1R-ADV:	Class A1R Rate Of Rise Heat Detector
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Conventional Class P Thermal Detector

The 20-AS3500-ADV user programmable rate of rise detector and high-temperature detector meets the requirements of EN 54-5 class A1R and class B and provides the highest level of protection when smoke detection is unsuitable.

The thermal detector incorporates a single centrally positioned NTC thermistor that continuously samples temperature variations in the protected area.

Via the VPU100 the 20-AS3500-ADV can be configured as a rate of rise class A1R or high-temperature class B thermal detector.

Via the VPU100 the production date of each device can be read.



Features

- EN54-5:2017 +A1:2018 approved
- Central LED providing 360 degree visibility.
- Magnetic test
- Anti-tamper locking feature.
- Unique Decorline finishes available.
- 3-year warranty.
- Part Number 20-AS3500-ADV

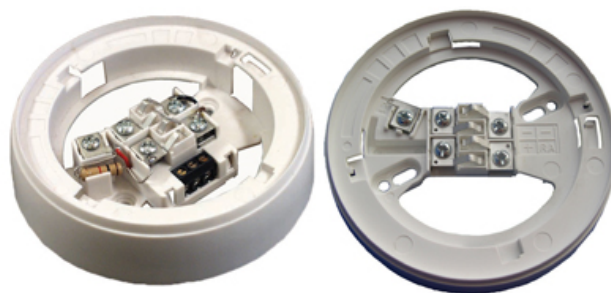
Specification

Operating Voltage	10-30V
Average standby current	60 uA @24Vdc
Maximum allowed alarm current	40mA (externally limited)
Maximum allowed remote device current	20mA (externally limited)
Low-temperature mode alarm threshold (class A1R)	58°C
High-temperature mode alarm threshold (class B)	78°C
Operating Temperature Range	-30°C / +70°C
Humidity (no condensation)	95% RH
Height with base	54 mm
Diameter	110mm

Order Codes and Options

20-AS3500-ADV:	Conventional Class P Thermal Detector
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Conventional Detector Bases



Specification

Material	ABS
Base diameter	110mm
Operating Temperature Range	-20°C / +65°C
Humidity (non condensing)	95% RH
ABLR100 relay base output relay contacts	1 Normally Closed 2 Common 3 Normally Open
Terminal connection	Maximum 2.5mm ²

Order Codes and Options

20-ABR100-ADV:	Universal resistor base
20-ABDR100-ADV:	Universal resistor+diode base
20-ABSR100-ADV:	Deep resistor base
20-ABLRD100-ADV:	Deep resistor+diode base
20-ABLR100-ADV:	Resistor relay base

Conventional Zone Module

TheAxis conventional zone monitor allows a zone of conventional detectors to be interfaced to an Axis intelligent loop.

The zone can be powered from the analogue loop or from an external power supply - selection is made by two jumper switches.

The current limitation of the zone circuit is programmable and adjustable by the control panel.

The unit is able to identify all conditions on the conventional zone such as normal, open circuit, short circuit and alarm. In addition it monitors the power supply of the detection line - external or loop.

The unit provides fast and secure signalling and incorporates a bi-directional short circuit isolator.

A single change over relay output is provided which can be switched on by a command from the control panel. This can be used for example, to provide a reset to certain conventional devices.

The communication loop is fully isolated from the zone circuit and external power supply.

The module is designed to be compatible with the majority of well known European conventional detectors.



Features

- Provides high reliability and error detection
- Short circuit isolators in each device to the requirements of EN54-17
- Large capacity, up to 240 devices per loop
- Auto addressing capability (by the control panel) or manually using a hand held programmer.
- Adjustable current limit and reset pulse duration via the control panel
- Digital checking of double address
- Programmable relay output
- Line quality information

Specification

Power Supply	20-40 V
Average Current Consumption	I=120 uA
Standby Current	500uA
Power Up Time	2 sec
Operating Temperature Range	-30°C / +70°C
Humidity (non condensing)	95% RH
Zone End of line device	Capacitor (Ceol): 4.7uF
Conventional Zone Current Threshold	6 to 20mA (Alarm Threshold 2.5 to 15mA)
Relay Nominal Switching Current	I=2A V=30Vdc
Dimensions H x W x D mm	93 x 130 58
Weight grams	190
Approvals	EN54-17:2005
	EN54-18:2005

Order Codes and Options

20-VMCZ100-ADV:	AV Conventional Zone Module
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Manual Release and Emergency Stop Button

The yellow Manual Release and blue Emergency Stop Button complement the ExGo extinguishing and suppression control panels.

EXP-010 Manual Release Button (EN12094-3 Type B) incorporates a latching push button switch. Break the glass and press the button to activate the circuit. Press the reset switch to deactivate.

EXP-011 Emergency Stop Button (EN12094-3 Type B) incorporates a momentary (non-latching) push button switch. Break the glass and press and hold the button to activate the circuit.

The buttons are easy to wire, and multiple units can easily be connected together in series on an input circuit.

They are compatible with the ExGo gas extinguishing panel and remote status indicator panel input circuits.

Installation requires EXP-005 switch EOL for terminating the switch input circuits.



Approvals

- EN12094-3:2003
- EN54-17

Features

- Robust aluminium die-cast housing with a door aperture angle > 180°
- Operating instructions in the form of symbols for EN54-11 compliance
- Replaceable door label
- Red LED for optical indication of activation
- Easy to replace standardised glass plate, see Part Number options
- Button housing can be opened with key, see Part Number options

Specification

Dimensions (H x W x D)	126mm x 126mm x 35mm
Approvals EN12094-3:2003	EXP-010 0786-CPD-20251
	EXP-011 0786-CPD-20363
Protection Class	IP43
Temperature	-20° C to +60° C (continuous operation)
	-25° C to +70° C (max. 12 hours)
Humidity	95% humidity (non-condensing)
Activation Module	EXP-005 Module
Cable Glands	2 x 20mm (top or bottom entry)
Weight	420g

Order Codes and Options

EXP-010	Manual Release Button (EN12094-3 Type B)
EXP-011	Emergency Stop Button (EN12094-3 Type B)
EXS-003	Spare Key for EXP-010 and EXP-011
EXP-005	Switch EOL Modules

Hold and Abort Switch

The Hold and Abort Switch Modules complement the ExGo extinguishing and suppression control panels.

The modules comply with the requirements of BS7273-1.

The switches are easy to wire and multiple units can easily be daisy-chained together on an input circuit.

A range of finishes are available - white, stainless steel and brass trims. Alternatively, the unit can be supplied in an IP65 rated enclosure.

The standard units can be surface mounted or semi-flush mounted onto standard 3½" electrical boxes. The IP65 unit is surface mounted.

All units are provided with an end of line resistor (Reol).

Compatible with the ExGo gas extinguishing panel and remote status indicator panel input circuits.



Features

- Range of finishes available
- Surface or flush mount
- IP65 option
- Complies with BS7273-1 requirements
- Standard units available in white plastic finish

Specification

Dimensions (Plastic Unit)	Overall 87mm x 87mm x 41mm, Back box 87mm x 87mm x 29mm
Dimensions (Metal Trim Unit)	Overall 87mm x 87mm 47mm, Back box 87mm x 87mm x 44mm
Minimum depth behind cover	35mm
Dimensions (IP65 Unit)	Overall 72 x 72 x 62 (including switch actuator)
Environmental Class	Indoor 0°C to 40°C
Humidity	95% max
End-of-Line Resistance	6800 Ohms
SW#1 Active Resistance	470 Ohms
Maximum Operating Voltage	30VDC

Order Codes and Options

Exp-003-002:	HOLD Switch, Stainless Steel Trim Cover Plate
Exp-003-003:	HOLD Switch, Brass Trim Cover Plate
Exp-003-065:	HOLD Switch, IP65 Plastic Enclosure
Exp-004-002:	ABORT Switch, Stainless Steel Trim cover Plate
Exp-004-003:	ABORT Switch, Brass Trim Cover Plate
Exp-004-065:	ABORT Switch, IP65 Plastic Enclosure

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Multicriteria Detector

The 20-AS2000-ADV multi-criteria detector combines optical and thermal detection capability providing early fire warning with a high level of false alarm rejection.

A drift compensation algorithm maintains alarm sensitivity thresholds effectively extending the time between maintenance periods.

Via the VPU100 it is possible to read the current drift value and the production date of each device.

A single centrally positioned thermistor continuously samples the temperature variation in the protected area.



Features

- Central LED providing 360 degree visibility.
- Magnetic test.
- Anti-tamper locking feature.
- Unique Decorline finishes are available.
- 3-year warranty
- Part Number 20-AS2000-ADV

Specification

Operating Voltage	10-30V
Average standby current	60 uA @24Vdc
Maximum allowed alarm current	40mA (externally limited)
Maximum allowed remote device current	20mA (externally limited)
Alarm temperature threshold (class A1R)	58°C
Operating Temperature Range	-30°C / +70°C
Humidity (no condensing)	95% RH
Diameter	110mm
Height with base	54 mm

Order Codes and Options

20-AS2000-ADV:	Multicriteria Detector
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