Certificate of Compliance

FIRE PROTECTION EQUIPMENT

This certificate is issued for the following equipment:

Model VDOT-ASD-100 Single Zone Aspirating Smoke Detector
Model VDOT-ASD-400 Four Zone Aspirating Smoke Detector

Approval Guide Listing:
Category: Fire Protection: Electrical Signaling: Alarm Signal Initiating Devices: Fire detection, Smoke Actuated: Fire Detectors-Smoke;
Category: Fire Protection: Electrical Signaling: Alarm Signal Initiating Devices: Fire detection, Smoke Actuated: Very Early Warning Fire Detection (VEWFD) Systems;

Zeta Alarms Ltd
Detection House 72-78 Morfa Road
Swansea SA1 2EN,
United Kingdom

This certifies that the equipment described has been found to comply with the applicable requirements, as stated in the Approval Report(s), of the following FM Approval Standards and other documents:

Approval Standards		*Other Standards*	
Class Number	*Date*	*Organization, Designation*	*Date*
3230	2020	None	

Original Approval Job Identification: PR464509   Approval Granted: 29 November 2022

Related Report:

Subsequent Revisions:

To verify the availability of the Approved product, please refer to www.approvalguide.com

J. E. Marquedant
Manager of Electrical Systems
FM Approvals
1151 Boston-Providence Turnpike,
Norwood MA, 02062 USA

29 November 2022
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Date

Certificate of Compliance

Detection, Fire Alarm and Signaling Equipment | Smoke Detectors | **Alarm Signal Initiating Devices, Smoke Detectors, Very Early Warning Fire Detection (VEWFD) Systems**

VDOT-ASD-100

Model VDOT-ASD-100 Single Zone Aspirating Smoke Detector

Smoke detection technology	Forward Light Scattering Mass Detection, using a short wavelength blue LED as the detection light source
Sensitivity range	Programmable, 0.005%/m to 20%/m (0.00016%/ft to 6.6%/ft)* * Operation beyond 12%/m (4%/ft) obscuration is not allowed by the Standard
Sampling pipe	OD: 25mm; ABS/UPVC
Pipe length – Single pipe network	100m (18 holes) 60m (25 holes)
Pipe length – Two branch network	2x80m (2x15 holes)
Pipe length – Four branch network	4x60m (4x10 holes)
Alarm Levels	Alert, Action, Fire 1, Fire 2
Displays and Controls	6-digit Numerical LED detector display; 20 LED segment smoke level bar graph; 4 Fire Alarm LED Indicators; 4 Fault LED Indicators; "Isolate" and "Power" LED indicators;

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	""Reset", "Isolate", "Silence", "Test" and "Scan" momentary membrane switches
Relay Outputs	7 configurable relays, rating 2.0A @ 30Vdc
Communication protocols	Two RS-485 terminals
Maximum coverage	1000 sq. m
Operating voltage range	19.2 to 28.8Vdc
Operating temperature range	0° to 40°C
Sampling air temperature range	-20° to 60°C
Humidity range	0 to 95% RH, non-condensing
Power consumption	340 mA maximum
Enclosure	Metal, Indoor use only
Compatible fire alarm control panels (FACPs) and power sources	The detector is to be used with Approved control panels providing separate circuits for power and alarm initiating devices. Power to the detector (both primary and standby) can also be provided by an independent FM Approved power source. The required 24Vdc primary power and 24 hour standby power for detector must be obtained locally from a means suitable for NFPA 72 applications and is to be installed in the same room as the detector with the wiring in conduit an not exceeding 6 m.

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VDOT-ASD-400

Model VDOT-ASD-400 Four Zone Aspirating Smoke Detector

Smoke detection technology	Forward Light Scattering Mass Detection, using a short wavelength blue LED as the detection light source; The High Sensitivity Aspirating Smoke detector has four Aspirators an four Flow Sensors, while one common Fan Board controls all four aspirators
Sensitivity range	Programmable, 0.005%/m to 20%/m (0.00016%/ft to 6.6%/ft)* * Operation beyond 12%/m (4%/ft) obscuration is not allowed by the Standard
Sampling pipe	OD: 25mm; ABS/UPVC
Pipe length – pipe network (optimized for Maximum Pipe Length)	100m (18 holes) per one aspirator: total 400m and up to 72 sampling holes if all four aspirators are used
Pipe length – pipe network (optimized for Maximum Number of Sampling Holes)	Single Pipe – 60m - 25 sampling holes Four Pipes – 240m – 100 sampling holes
Alarm Levels	Alert, Action, Fire 1, Fire 2
Displays and Controls	6-digit Numerical LED detector display (with zone display capability); 20 LED segment smoke level bar graph; 4 Fire Alarm LED Indicators; 4 Fault LED Indicators; "Isolate" and "Power" LED indicators; ""Reset", "Isolate", "Silence", "Test" and "Scan" momentary membrane switches

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Relay Outputs – Terminal Board	7 configurable relays, rating 2.0A @ 30Vdc
Zone Relay Outputs – Zone Relay Board (optional)	16 configurable relays, rating 2.0A @ 30Vdc
Communication protocols	Two RS-485 terminals
Maximum coverage	2000 sq.m
Operating voltage range	19.2 to 28.8Vdc
Operating temperature range	0° to 40°C
Sampling air temperature range	-20° to 60°C
Humidity range	0 to 95% RH, non-condensing
Power consumption	860 mA maximum
Enclosure	Metal, Indoor use only
Compatible fire alarm control panels (FACPs) and power sources	The detector is to be used with Approved control panels providing separate circuits for power and alarm initiating devices. Power to the detector (both primary and standby) can also be provided by an independent FM Approved power source. The required 24Vdc primary power and 24 hour standby power for detector must be obtained locally from a means suitable for NFPA 72 applications and is to be installed in the same room as the detector with the wiring in conduit an not exceeding 6 m.

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Detection, Fire Alarm and Signaling Equipment | Smoke Detectors | **Alarm Signal Initiating Devices, Smoke Detectors**

VDOT-ASD-100

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VDOT-ASD-400

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