

Operation

The principle of operation is unique. A special solid formulation within a non-pressurised canister, when electrically activated, generates an aerosol exhibiting excellent fire extinguishing characteristics. The aerosol consists of micron-sized particles suspended in a mixture of naturally occurring gases, mainly nitrogen.

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Authorised Dealer:



EXA II

Condensed Aerosol Fire Suppression Modules

DATASHEET

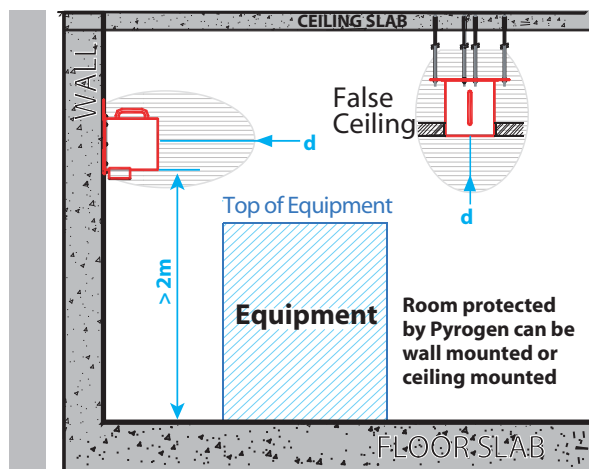
EXA modules are suitable for the following applications:

- ✓ Power Substation
- ✓ Generator Room
- ✓ Raised Floor
- ✓ Server Farm
- ✓ Warehouse
- ✓ Control Room
- ✓ Telecommunication Cabin
- ✓ Computer Room
- ✓ Computer Server Rack
- ✓ Distribution Board
- ✓ Electrical Control Cabinet

Design Principle

Minimum clearances

Due to a potential hazard of high temperatures (100 ~ 150°C) of Pyrogen aerosol at the end-plate nozzle, the minimum clearances from the discharge nozzle for each type of EXA generator should be observed during installation.

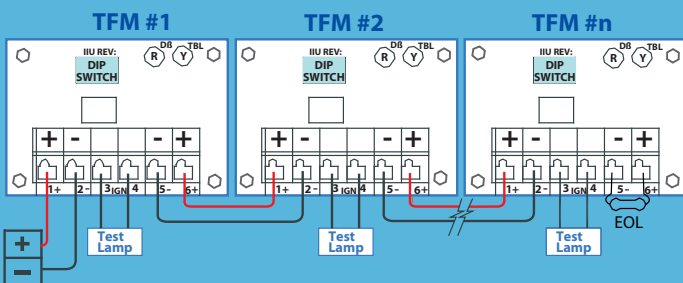


MODEL	CLEARANCE, d	MAX HEIGHT
EXA-Z3	200 mm	1 m
EXA-Z6	300 mm	1.25 m
EXA-1	400 mm	2.0 m
EXA-2	700 mm	2.5 m
EXA-5	700 mm	3.0 m
EXA-10	1000 mm	3.5 m
EXA-20 & EXA-30E	1,500 to 2,000 mm	4.0 m
EXA-50E	1,500 to 2,000 mm	4.5 m

LIMITATIONS: Intended for use in normally unoccupied areas.

Wiring Diagram For TFM Cards

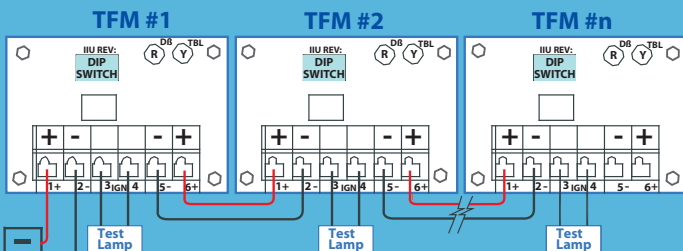
For Supervised Control System



Control Panel
Discharge Output
Terminals

NOTE: Refer to the Fire Control Panel
for End of Line resistor value.

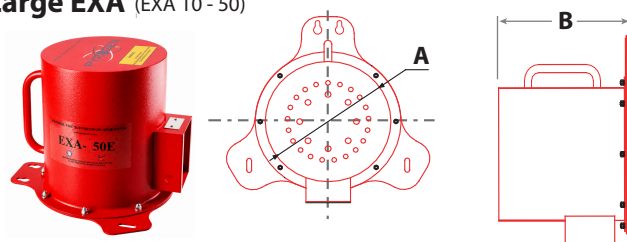
For Non-Supervised Control System



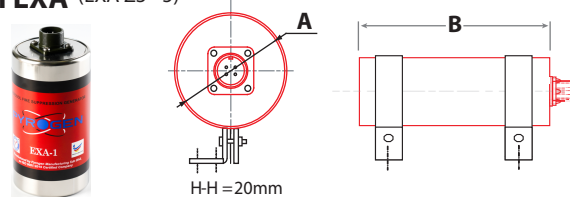
Control Panel
Discharge Output
Terminals

EXA Dimensions

Large EXA (EXA 10 - 50)



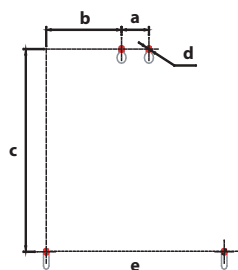
Small EXA (EXA Z3 - 5)



Unit: mm | Note: A & B Refer to Table below

Parameter	Mass of generator, g	Mass of aerosol generating compound, g	Max protected volume @ 100 g/m ³ , m ³	Nozzle outlet	Length of generator, B (mm)	Diameter of generator, A (mm)	Discharge time, s
EXA-Z3	360	30	0.3	Mono	118	38	20.0
EXA-Z6	650	60	0.6	Mono	138	51	25.0
EXA-1	940	100	1	Mono	139	64	30.0
EXA-2	1,700	200	2	Mono	217	76.2	30.0
EXA-5	3,100	500	5	Mono	232	89	30.0
EXA-10	9,000	1,000	10	Mono/Radial	200	220	30.0
EXA-20	11,500	2,000	20	Mono	254	220	30.0
EXA-30	23,500	3,000	30	Mono	342	310	35.0
EXA-50	27,500	5,000	50	Mono	413	310	35.0
EXA-30E	22,000	3,000	30	Mono	310	265	35.0
EXA-50E	26,500	5,000	50	Mono	353	265	35.0

Mounting Holes for Large EXA



Dimension, mm	a	b	c	d	e
EXA-10R	80	0	370	12	80
EXA-10L	80	0	370	12	80
EXA-20	80	0	370	12	80
EXA-30	60	165	350	12	390
EXA-50	60	165	350	12	390
EXA-30E	70	120	285	12	313
EXA-50E	70	120	285	12	313

Technical Specifications:

Descriptions	Specifications
Country of Manufacture	Malaysia
Igniter Resistance	2.0 - 4.0 Ohms
Reliable Activation Current	0.5A~1.0A
Temperature Range	-50°C to +65°C
Min Design Concentration	100g/m ³ (Class A surface fires, Class B fires); 200g/m ³ (dense cable fires)
Service Life	5 to 10 years (Normal application)
Material	Mild Steel (Large EXAs); Stainless Steel (Small EXAs)
Finish	Epoxy powder Coated (Large EXAs)
Handling and Transport:	Classifications:
Classification Code : 4.1	Class A — Combustible Solids
U.N. num. 3178, Category C	Class B — Flammable Liquids
Packing Group : III	Class C — Flammable Gases
Hazchem Code : 1[T]	Class E — Electrically Energised Fire

Limitations of use: Pyrogen systems are not suitable for fires involving chemicals which are capable of rapid oxidation in the absence of air, reactive metals, metal hydrides or metal amides, certain organic peroxides and hydrazine, and pyrophoric materials.

CAUTION: Aerosol extinguishing systems are intended for the types of fire which they are suitable extinguishing medium. The end user should consider the potential adverse effects of aerosol extinguishing agent discharge residue on sensitive equipment and other objects