



## Operation

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

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Authorised Dealer:



# EXA

Condensed Aerosol  
Fire Suppression Modules

## DATASHEET

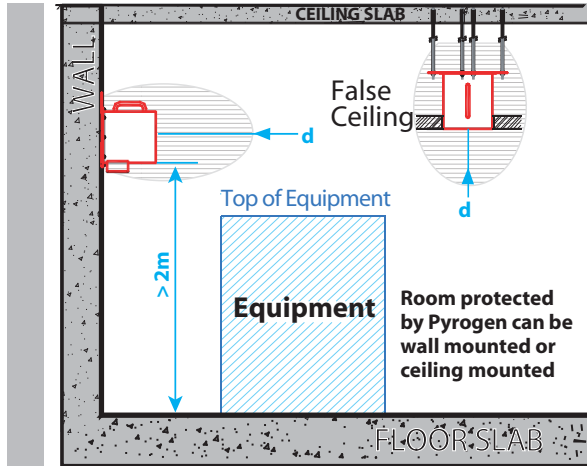
**EXA modules is suitable for the following applications:**

- ✓ 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.

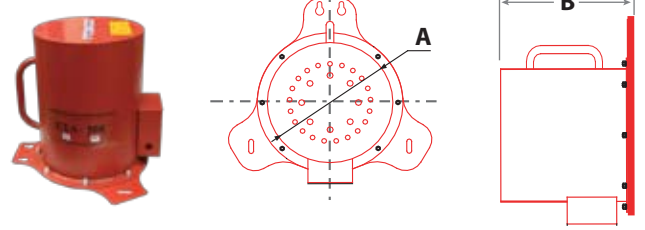


GENERAL SERIES

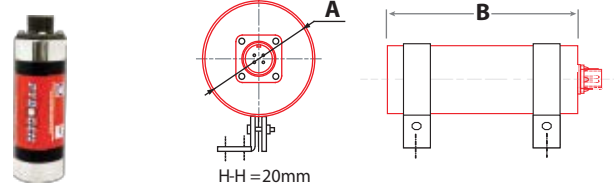
MODEL	CLEARANCE, d
EXA-Z3	200 mm
EXA-Z6	300 mm
EXA-1	400 mm
EXA-2	700 mm
EXA-5	700 mm
EXA-10	1000 mm
EXA-20...EXA-50	1500...2000 mm

## EXA Dimensions

### Large EXA (EXA 10 - 50)



### Small EXA (EXA Z3 - 5)

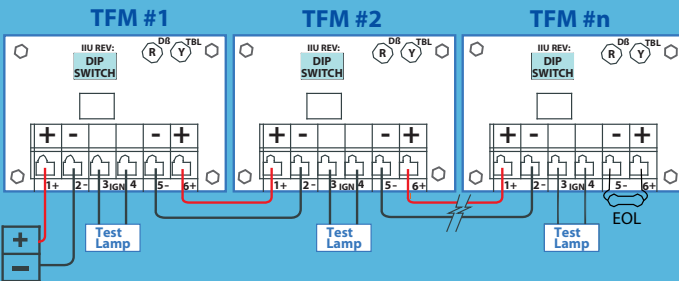


Unit: mm | Note: A & B Refer to Table below

Parameter	Mass of generator, g	Mass of aerosol generating compound, g	Max protected volume m <sup>3</sup>	Nozzle outlet	Length of generator, B (mm)	Diameter of generator, A (mm)	Discharge time, s
EXA-Z3	360	30	0.3	Mono	101	38	< 20.0
EXA-Z6	650	60	0.6	Mono	121	51	< 25.0
EXA-1	940	100	1	Mono	122	64	< 30.0
EXA-2	1,700	200	2	Mono	200	76.2	< 30.0
EXA-5	3,100	500	5	Mono	215	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	415	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

## Wiring Diagram For TFM Cards

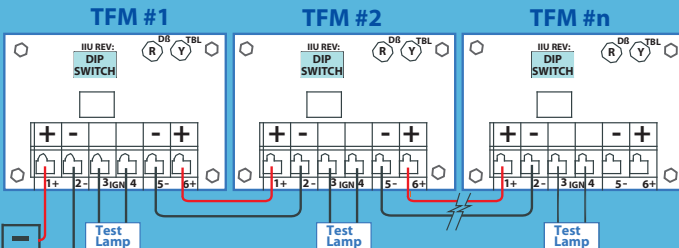
### For Supervised Control System



Control Panel  
Discharge Output  
Terminals

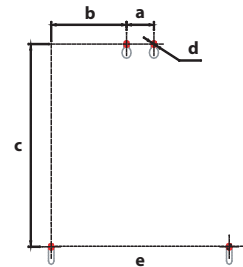
NOTE: Refer to the Fire Control Panel for End of Line resistor value.

### For Non-Supervised Control System



Control Panel  
Discharge Output  
Terminals

## 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	
County of Manufacture	Malaysia	
Igniter Resistance	2.0 - 4.0 Ω	
Reliable Activation Current	0.5A~1.0A	
Temperature Range	-50°C to +65°C	
Min Design Concentration	100g/m <sup>3</sup> (Class A surface fires, Class B fires); 200g/m <sup>3</sup> (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
UN No. :	3178	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. (Refer to AS/NZS 4487:1997-item 1.7.4)

**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