

# ATX™ FDES Series Self-Contained Emergency Lighting Units

## Flameproof. Fluorescent

**ATEX/IECEX:**  
Zone 1 and 2 - 21 and 22  
Ⓢ II 2 GD  
IP66/68 - IK08

### Applications

- Provides adequate lighting and/or visual indication of access on exit routes during an emergency evacuation in a hazardous environment.
- Can be installed in hazardous areas designated as Zone 1 and 2 – 21 and 22.
- Typical applications include oil refineries, petrochemical plants, pulp and paper mills.

### Features

- Power supply from 110 to 240 Vac 50/60 Hz versions.
- 3-hour duration.
- Threaded access cover with O-ring seal.
- Operates in any position.
- 8 W Fluorescent (1 or 2 lamps supplied).
- Charge indicator by 1 red LED (life time over 10 years).
- Termination 3 or 4 x 2.5 mm<sup>2</sup> (0.005 or 0.006 x 0.004 in<sup>2</sup>) terminals.
- Supplied with two fixing lugs.

### Standard Materials

- End caps and cover: aluminum
- O-ring seal: Nitrile
- Lens: tempered borosilicate glass
- Fixing brackets: zinc plated steel or 316 stainless steel
- Accessories: white painted galvanized steel
- Guard: zinc plated steel

### ATEX/IECEX Certifications and Compliances

- Certification Type: FLd
  - Gas: Zone 1 - 2
    - Conforming to ATEX 94/9/CE: Ⓢ II 2 G
    - Type of Protection: Ex d IIC
    - Temperature Class: T6
  - Dust: Zone 21 - 22
    - Conforming to ATEX 94/9/CE: Ⓢ II 2 D
    - Type of Protection: Ex tD A21
    - Surface Temperature: T80 °C (T176 °F)
- Ambient Temperature: -40 °C to +55 °C (-40 °F to +131 °F)
- CE Declaration of Conformity: 50203
- ATEX Certificate: LCIE 97/ ATEX 6012
- IECEx Certificate: IECEx LCI 04.0018
- Index of Protection according EN/IEC 60529: IP66/68
- Impact Resistance (shock): IK08
- Internal Volume: > 2 dm<sup>3</sup> (122 in<sup>3</sup>) - 2 liters

### EURASEC Certification

- EURASEC N° TC RU C-FR.Г505.B.00912

### Other Certification

- INMETRO Certificate: BVC11.0492 ①



2 x 8 W Fluorescent Sustained

FLUORESCENT/EMERGENCY: ATEX/IECEX INCREASED SAFETY

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① Inmetro certification available on special request only. Contact your local sales representative for more information.

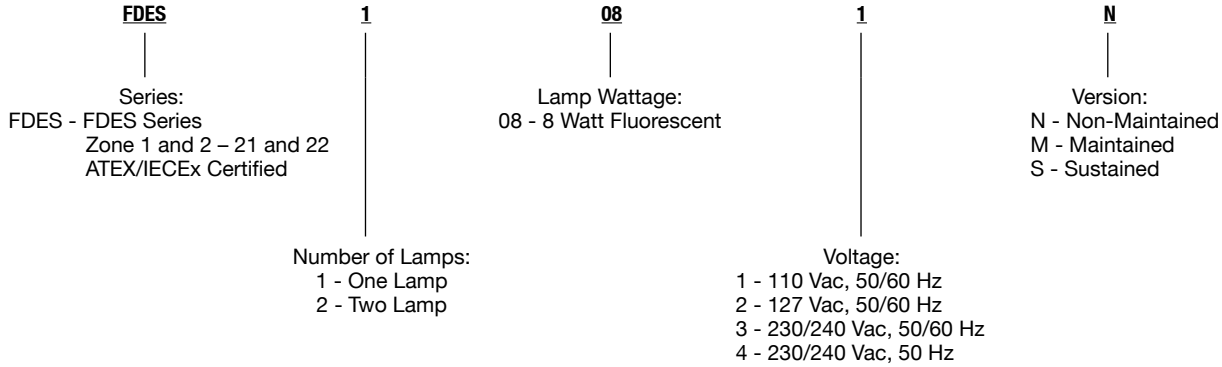
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Order using catalog numbering guide below or select catalog number from tables on following pages.

### Catalog Numbering Guide – FDES Series Self-Contained Emergency Units



### 3 Hour Duration – Two M20 Threaded Cable Entries With One M20 Blanking Plug

Type	Lumen Output	Voltage	Frequency	Weight kg (lb)	Volume dm <sup>3</sup> (in <sup>3</sup> )	Catalog Number
1 x 8 W Fluorescent Non-Maintained	230 lm	230/240 Vac	50/60 Hz	7.8 (17.20)	36 (2196.9)	<b>FDES1083N</b>
		127 Vac	50/60 Hz			<b>FDES1082N</b>
		110 Vac	50/60 Hz			<b>FDES1081N</b>
		220 Vac	60 Hz			—
1 x 8 W Fluorescent Maintained	180 lm	230/240 Vac	50/60 Hz	7.8 (17.20)	36 (2196.9)	<b>FDES1084M</b>
		127 Vac	50/60 Hz			<b>FDES1082M</b>
		110 Vac	50/60 Hz			<b>FDES1081M</b>
		220 Vac	60 Hz			—
2 x 8 W Fluorescent Sustained	230 lm	230/240 Vac	50 Hz	7.8 (17.20)	36 (2196.9)	<b>FDES2084S</b>
		220 Vac	60 Hz			—

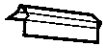





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Accessories and Replacement Parts		
	Description	Catalog Number
	<b>Reflector</b> White painted galvanized steel	<b>FDER1G</b>
	<b>Protective Guard</b> Zinc plated steel	<b>FDPG1Z</b>
	<b>Fixing Brackets: Set of two for ease of surface installation</b> Zinc plated steel 316 stainless steel	<b>FDFBZ</b> <b>FDFBS</b>
	<b>Surface Mounting Brackets: Set of two</b> Zinc plated steel 316 stainless steel	<b>FDSBZ</b> <b>FDSBS</b>
	<b>Half Clamps: Set of two</b> Zinc plated steel versions: Diameter for 1-1/4 to 1-1/2" pole: 42 mm (16.65 in) to 49 mm (1.93 in) Diameter for 2" pole: 60 mm (2.36 in) 316 stainless steel versions: Diameter for 1-1/4 to 1-1/2" pole: 42 mm (16.65 in) to 49 mm (1.93 in) Diameter for 2" pole: 60 mm (2.36 in)	<b>FDHC49Z</b> <b>FDHC60Z</b> <b>FDHC49S</b> <b>FDHC60S</b>
	<b>Spare Lamps</b> 8 W fluorescent G5	<b>LF008G5</b>
	<b>Fall Prevention Kit</b> 1.20 m (3.94 ft) stainless steel chain	<b>FDSCS</b>

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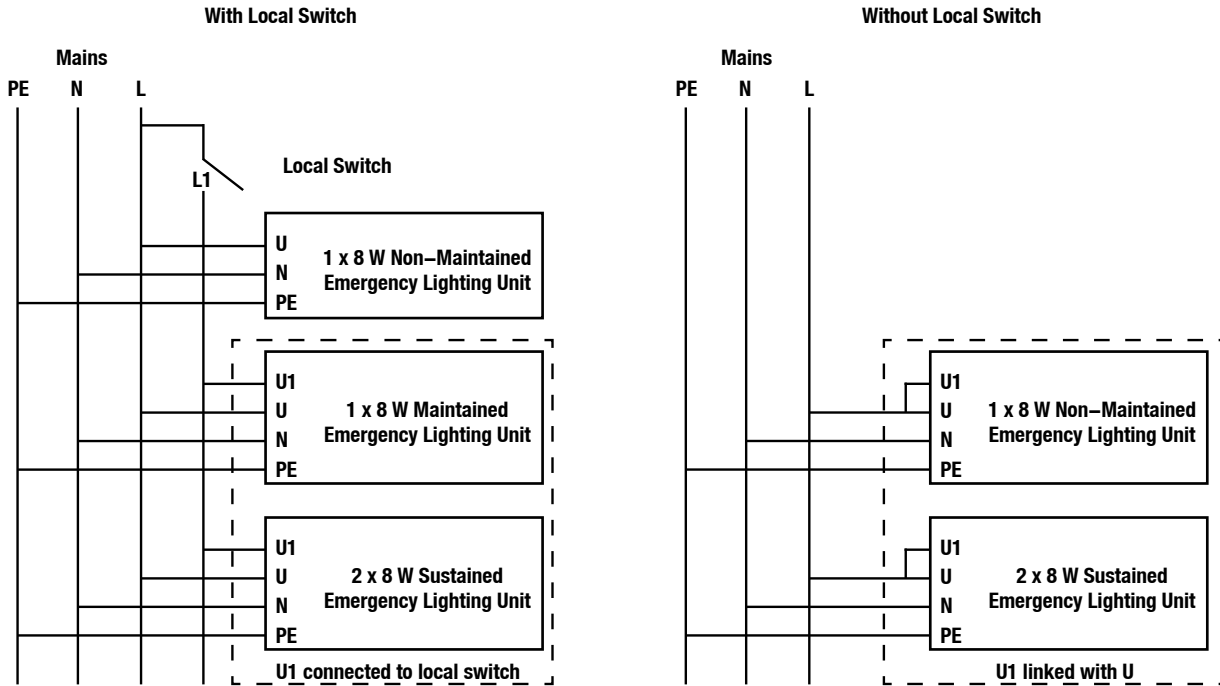
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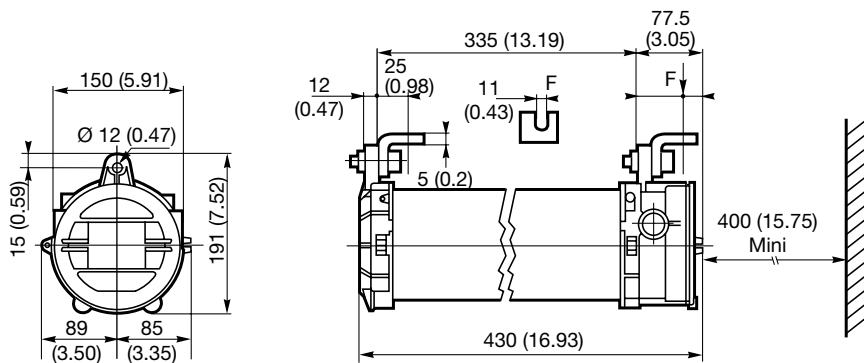
### Electrical Wiring Diagram



### Emergency Function Diagram

Mains	1 x 8 W Maintained			2 x 8 W Sustained	
	1 x 8 W Non-Maintained	Local Switch OFF or No Link	Local Switch ON or Link Present	Local Switch OFF or No Link	Local Switch ON or Link Present
Switched ON					
Switched OFF					

### Dimensions in Millimeters (Inches)



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