

FDES Series Self-Contained Emergency Lighting Units

Flameproof. Fluorescent

Zone 1 and 2 - 21 and 22
Gas (G) and Dust (D)

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 mm² 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

Certifications and Compliances

◆ ATEX/IECEx Certification

- **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
 - Ambient Temperature: -40 °C to +55 °C
 - 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 dm³- 2 liters



2 x 8 W Fluorescent Sustained

◆ EURASEC Certification

– EURASEC N° TC RU C-FR.Г505.B.00912

◆ Others Certification

– INMETRO Certificate: BVC11.0492 ^①

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

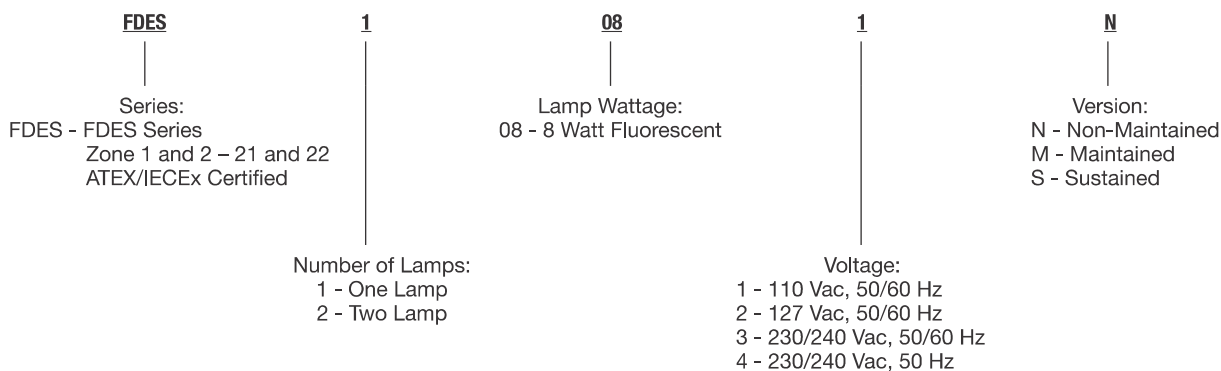
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Order using catalog numbering guide below or select catalog number from tables on following pages.

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	Volume dm ³	Catalog Number
1 x 8 W Fluorescent Non-Maintained	230 lm	230/240 Vac	50/60 Hz	7.8	36	FDES1083N
		127 Vac	50/60 Hz			FDES1082N
		110 Vac	50/60 Hz			FDES1081N
1 x 8 W Fluorescent Maintained	180 lm	230/240 Vac	50/60 Hz	7.8	36	FDES1084M
2 x 8 W Fluorescent Sustained	230 lm	230/240 Vac	50 Hz	7.8	36	FDES2084S

Shaded catalog numbers are normally stocked items. All other items are made to order.

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

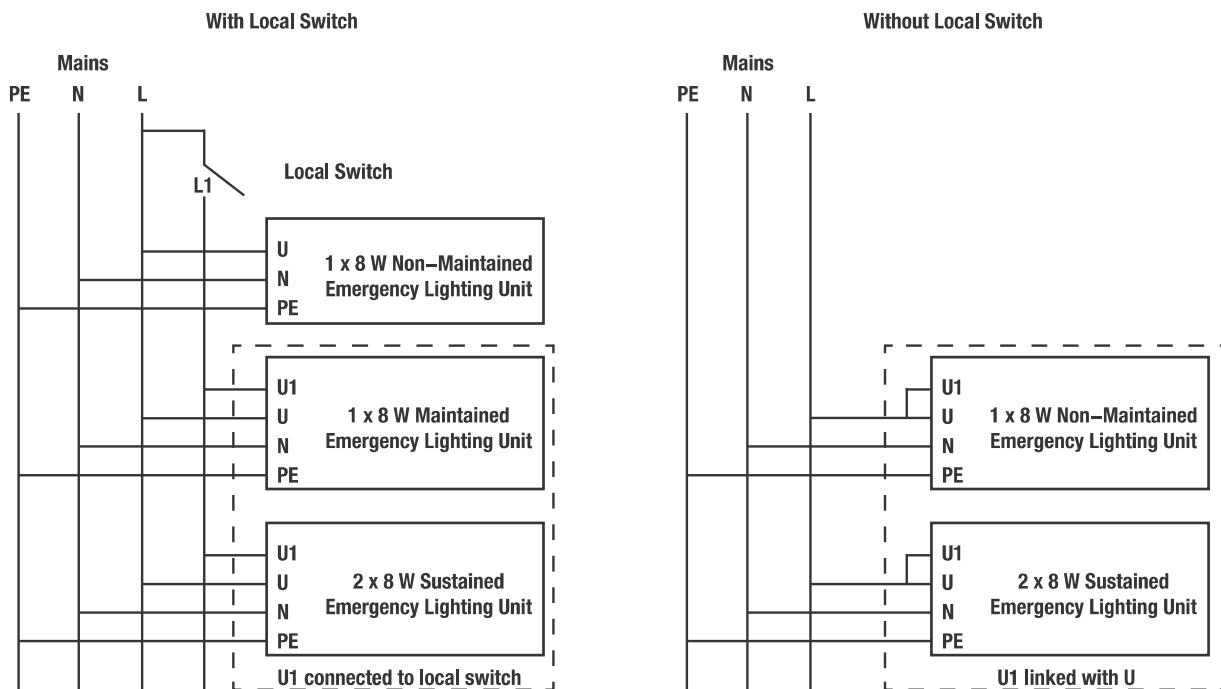
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Electrical Wiring Diagram



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)

