

LFED emergency lighting fixture

The explosion-proof LFED series emergency lighting fixtures are designed for lighting and identifying emergency exits or escape routes in the event of danger. The LFED series consists of low copper content aluminium alloy casing, a tempered glass window printed with a pictogram and a resin LED strip light positioned at the distance required to guarantee 'Ex op is' protection. The emergency versions are fitted with a high-brightness LED indicator light that monitors battery operation and notifies the user in the event of a fault. It switches on automatically if there is a power failure, and lasts between 3 and 5 hours depending on the capacity of the chosen batteries.

The red LED switches off to indicate that the batteries need replacing either because of a fault in the emergency circuit or because they are flat.

Sectors of application:

















Petroleum refineries

petrochemical facilities

unloading areas

Chemical and Tanker loading/Tanker loading/Passageways unloading areas

Emergency exits

Stair handrails

Perimeter zone lighting

CERTIFICATE DATA

Ambient temperature:

Classification: Group II Category 2GD Installation: EN 60079.14 zone 1 - zone 2 (Gas) zone 21 - zone 22 (Dust) CE 0722 (EX) II 2GD Ex db op is IIB+H, T6 Gb - Ex tb op is IIIC T72°C Db IP 66 Marking: Certificate: **EPT 18 ATEX 2969 X ATEX** For all IEC Ex certificate data, download the certificate from www.cortemgroup.com **IEC Ex SEV 18.0018X** CENELEC EN 60079-0: 2012+A11: 2013, EN 60079-1: 2014, EN 60079-28: 2015, EN 60079-31: 2014, and EUROPEAN DIRECTIVE 2014/34/EU IEC 60079-0: 2017, IEC 60079-1: 2014, IEC 60079-28: 2015, IEC 60079-31: 2013 Standards: European Directive 2004/108 Electromagnetic compatibility European Directive 2012/19/UE, 2002/96/CE, 2003/108/CE WEEE **European Directive 2011/65/UE RoHS** Temperature class: 72°C (T6)



Normal

60°C +60°C





MECHANICAL FEATURES

Body and lid: Low copper content aluminium alloy

Front glass: Tempered, resistant to high temperatures and shocks

Gasket: Silicone resistant to acids, hydrocarbons and high temperatures

Screws, bolts and nuts: Stainless steel

Fastening brackets: Electrogalvanized steel

2 entry points ISO 20. Fixture complete with a PLG1IB plug and NAV20SIB cable gland Entry points:

Coating: Polyester RAL 7035 (Light grey)

The STANDARD of the aluminium alloy used by Cortem has passed the tests required by Resistenza alla corrosione:

standards EN60068-2-30 (hot-humid cycles) and EN60068-2-11 (salt fog test).

ELECTRICAL FEATURES

Autonomy in emergency

mode: 2 Ah: 3 hours

2.5 Ah: 4 hours 3.1 Ah: 5 hours

Rated voltage: Normal operation only: 110-277 Vac / 156-277 Vdc

> Emergency operation only: 110-240 Vac / 110-240 Vdc Normal + emergency operation: 110-240 Vac /156-240 Vdc

Rated frequency: 50/60 Hz

Connection: Directly to the terminal board L, N, Pe cross sec. 4 mm², jumpered terminal board suitable for in-out **Emergency unit:** Electronic inverter 110/240 Vac 50/60 Hz, 110-270 Vdc. Batteries Ni/Cd or Ni/Mh

Cabling: Silicone rubber cables with braided fibreglass protection for high temperatures

Charge level: High-brightness LED indicator light, consumption 20 mA, showing the battery charge level for

emergency versions.

NOTE: the technical and electrical data may change without prior warning owing to continuous developments in LED technology.

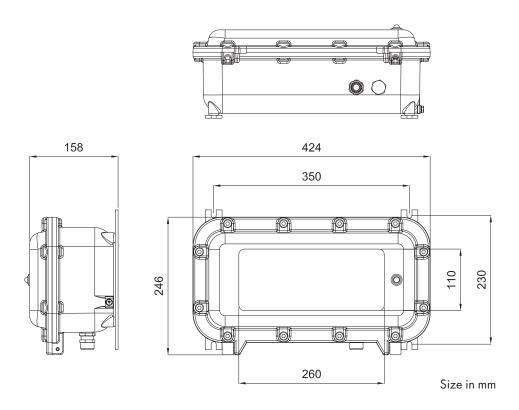
ACCESSORIES UPON REQUEST / SPECIAL REQUESTS

Additional cable gland for in-out connection.

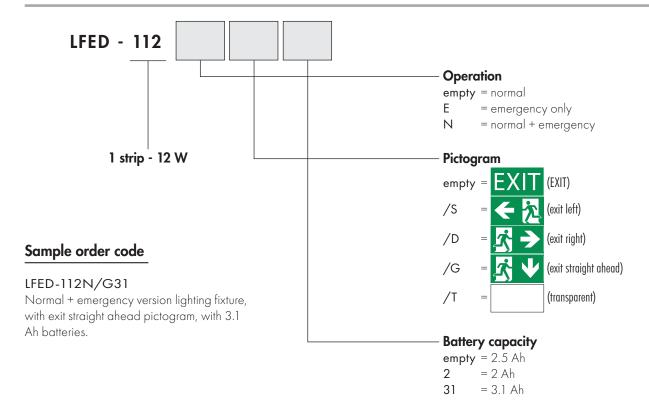
Pictogram on request.

External polyester coating in a different colour or internal anti-condensation coating.

DIMENSIONAL DRAWING



CODES



DO NOT FORGET TO ORDER THE ACCESSORIES

Example: Typ

Type of fixture LFED- 112N/S31

Cable gland (additional) NAV20SIB

Other (see legend)



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ILLUSTRATION	DESCRIPTION	MODEL	FEATURES	CODE	LEGEND
	LED strip light		LED module (not resined)	LTT8350	SARE PAIT
	Battery		Nickel-cadmium 2 Ah	BATT2AH/NC/BA	SPARE PART
			Nickel-cadmium 2.5 Ah	BATT2.5AH/NC/BA	
			Nickel-metal hydride 3.1 Ah	BATT3.1AH/NM/BA	
	Electronic power unit		110-295 Vac 156-277 Vdc	LEDDLFED-112	STARE PART
	LED inverter		110/240 Vac 50/60 Hz 110/270 Vdc	INVERTER/LED/1	SPARE PART
Q	Single LED		Colour: red	M-0487/920	SPARE PART
	Fastening bracket		Material: galvanized steel	K2-237	SPANE PART
	O-ring between body and lid		Material: red silicone	K2-131/1S	SPANE PART
	Cable gland	ISO M20	std. cable range: 6,3÷11,6	NAV20SIB	SPARE PART

