



Small LED-Emergency Light Fitting for Ex-Zone 1/21 Series e856 ...

Applications:

Hazardous areas in Zones 1/2 (gas) and 21/22 (dust) as safety illumination e.g. for workstations with special hazard, i.e. as information or escape route lighting with pictogram for identification of escape routes.

Mechanical design:

Housing: Glass fibre reinforced polyester resin. Version H with separate battery box at one small side of the housing.

Diffuser: Clear polycarbonate, frosted, detachable, silicone gasket.

Reflector: Sheet steel, painted white, detachable, carrying the encapsulated

LED-modules and protection cover.

Central locking system: Operated by a hexagonal box spanner 13 mm.

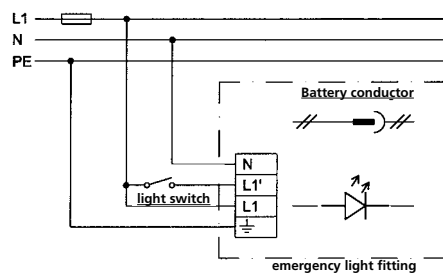
Connection: Prepared for looping the mains cable at one end 4 x 1 - 4 mm². Terminal L1 + L1' + N + PE, up to 2.5 mm².

Cable entries: 2 entries M25 x 1.5 at the front side of the light fitting (2 cable glands, 1 with blanking plug).

Mounting: Stainless steel side mounting brackets allow direct wall or ceiling mounting (Version without battery box). Mounting accessories see spare parts/accessories.

Note:

This light fitting is not suitable for application in areas with permanent high humidity in combination with only short periods of operation, such as sewage or stormwater retention tanks or water treatment plants.



Starting:

Connect battery conductor

Out-of-operation: separate battery conductor

Stand-by operation: Do not connect L1'

Technical Data:

LED: Line modules ca. 6,500 K, CRI > 80, service life $L_{80} > 100,000$ h at max. ambient temperature, $L_{90} > 95,000$ h at 25 °C ambient temperature

ECG with emergency light electronic

Incorporated NiMH battery, electronic charger, short circuit protected battery and reverse battery protection

Electronic deep discharge protection: acc. to EN 61347-2-7

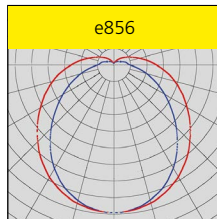
Re-charging time: 24 h, acc. to EN 60598-2-22

Automatic monitoring: of the emergency light fitting according to EN 62034, indication of the test results by 2-coloured LED (luminescence diode) at the luminaire

Mode of operation:

maintained operation = switching over to battery operation in case of mains failure, line modules will be operated with reduced luminous flux as emergency lighting.

stand-by operation = switching on in case of mains failure.

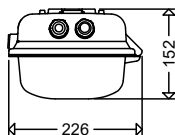
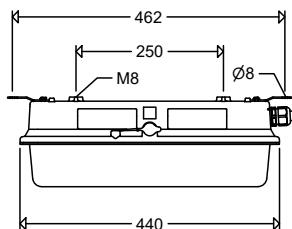


Options:

– in/out wiring, 6-pole

– remote switch-off device

e856F ... (without battery box)



Product highlights:

- extremely robust construction of housing and diffuser
- comfortable central locking mechanism for easy maintenance
- **innovative encapsulation** with high transmission rate
- homogeneous lighting distribution by frosted anti-glare modules-protecting the LEDs as well of ESD and mechanical damage. No individual light points visible, comfortable perception of light, brilliant glare limitation
- **high colour rendering index CRI > 80**, according to the workplace guide lines suitable for nearly all plant locations
- safety in case of an emergency, instant light with maximum light output
- operation in maintained, switched maintained or stand-by mode possible
- multifunctional LED with coded indication of the functions, states and potential faults of the electronic device and the battery
- automatic weekly function test
- automatic annual duration test
- manual actuation of duration test is possible
- easy battery replacement due to connector
- **sustainable**, control gear and reflector with LED-modules replaceable by qualified personnel on-site



Properties, limitations and details for controlling LED-light fittings:

See "Technical Supplement"

All data are correct at the time of printing. Actual technical data can be found under www.schuch.de.



Photo: BASF

Article no.	Type	Connected load [W]	Luminous flux [lm]	Luminous flux [lm] (emergency)	Luminous efficacy [lm/W]	Suitable for pictogram	Operating time 1 h	Operating time 3 h	Ta max [°C]	Substitute for *	Weight [kg] (without packing material)
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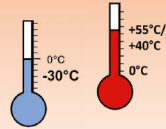
e856...



II 2 G Ex db eb
mb q IIC T4 Gb

II 2 D Ex tb IIIC
T80°C Db

IP66



EU-Type Examination Certificate:

IBExU 17 ATEX 1132X

Other approvals:

IECEX IBE 17.0037X

Type of protection: eb (increased safety)

Marking:

II 2 G Ex db eb mb q IIC T4 Gb (Zone 1)

II 2 D Ex tb IIIC T80°C Db (Zone 21)

Rated voltage: 220-240 V AC, 50/60 Hz.

Permissible ambient temperature:

-30 °C up to +55 °C

Nominal range acc. to EN 60598-2-22

0 °C up to 40 °C or 55 °C (H-Versions).

Reduced emergency light duration if operated below 0 °C.

85605 0017	e856F L05/1/2	6	510	510	85	•	•	55	1 x 8W	5,4
85605 0018	e856F L05/3/2	6	510	260	85	•	•	55	1 x 8W	5,4
85605 0003	e856F L10/1/2	11	1.060	560	96		•	40	2 x 8W	5,4
85605 0004	e856F L10/3/2	11	1.060	260	96		•	40	2 x 8W	5,4
85605 0001	e856F L20/1/2	19	2.050	560	108		•	40	2 x 18W	5,5
85605 0002	e856F L20/3/2	19	2.050	260	108		•	40	2 x 18W	5,6

for high temperatures up to +55 °C

Design: Same as standard version, but with separate battery box at one small side of the housing.

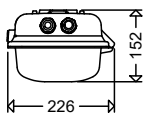
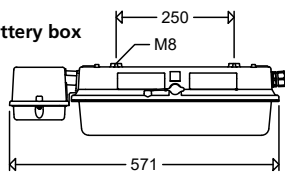
85605 0007	e856F L10/1/2 H	11	1.060	560	96		•	55	2 x 8W	6,3
85605 0008	e856F L10/3/2 H	11	1.060	260	96		•	55	2 x 8W	6,3
85605 0005	e856F L20/1/2 H	19	2.050	560	108		•	55	2 x 18W	6,4
85605 0006	e856F L20/3/2 H	19	2.050	260	108		•	55	2 x 18W	6,5



e856F ... H (with battery box)

light fitting

battery box



e856... DIMDI

LIMAS
Line



II 2 G Ex db eb
mb q IIC T4 Gb

II 2 D Ex tb IIIC
T80°C Db

IP66



with monitoring and dimming function via DALI

Design:

As standard version, but with DALI interface for dimming and centralised monitoring.

Compatible with LIMAS Line PRO Light Management

System.

Note:

The conducting wires to the control input must be mains voltage stable and can be integrated in the connection cable.

85605 0019	e856F L05/1/2 DIMDI	6	510	510	85	•	•	55	1 x 8W	5,4
85605 0020	e856F L05/3/2 DIMDI	6	510	260	85	•	•	55	1 x 8W	5,4
85605 0023	e856F L10/1/2 DIMDI	11	1.060	560	96		•	40	2 x 8W	5,4
85605 0024	e856F L10/3/2 DIMDI	11	1.060	260	96		•	40	2 x 8W	5,4
85605 0011	e856F L20/1/2 DIMDI	19	2.050	560	108		•	40	2 x 18W	5,5
85605 0022	e856F L20/3/2 DIMDI	19	2.050	260	108		•	40	2 x 18W	5,6

* The given information is for rough orientation only. In each individual case a lighting calculation is necessary.



121/33 W



.../34 W



.../35 W

Accessories / Spare Parts

Article No.	Type	
Spare batteries		
90222 9023	Akku NiCd 1,6Ah 6,0V Block 8020	NiCd accu, 1.6Ah 6.0V Block 8020 (pay attention to the correct part number)
90222 9024	Akku NiCd 2,5Ah 6,0V Block 8021	NiCd accu, 2.5Ah 6.0V Block 8021 (pay attention to the correct part number)
90222 9035	Akku NiMH 2,2Ah 6,0V Block 8022	NiMH accu, 2.2Ah 6.0V, Block for luminaire types ...H (pay attention to the correct part number)
Spare diffuser		
85501 9001	ABD 855	cover, diffuser PC frosted, silicone seal, for e855 ..., e856 ...
Cable entries/Glands/Breather		
90117 9006	2537 G	ex-protected plastic cable gland M25 x 1,5 with locknut
90118 9006	2538 G	ex-protected plastic plug M25 x 1,5 with locknut
90119 9001	2539 G	ex-protected plastic cable gland M25 x 1,5 with blanking plug and locknut
90259 9000	KS25 G EX	ex-breather M25 x 1,5
Mounting material		
90000 0002	DS 15A P	2 ceiling brackets, hot galvanized steel
90032 0002	DS 15AV P	2 ceiling brackets, stainless steel
90037 0004	RO84 112 A P	2 pipe clamps 1 1/2", stainless steel, with support
90038 0004	RO84 2 A P	2 pipe clamps 2", stainless steel, with support
26000 0008	WW 26 L P	2 wall mounting angles, hot galvanized steel
26000 0002	WW 26 30 P	2 wall mounting angles 30°, hot galvanized steel
26000 0003	WW 26 45 P	2 wall mounting angles 45°, hot galvanized steel
Self-adhesive pictograms		
12112 0006	121/33 W	emergency exit to the left
12112 0007	121/34 W	emergency exit to the right
12112 0008	121/35 W	emergency exit below