

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: white, detachable, carrying

the encapsulated LED-modules and protection cover.

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

Connection: Prepared for looping the mains cable at one end 4 x 2.5mm². 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: Side fixing brackets allow direct mounting on to walls or ceilings (Version without battery box). Mounting accessories see spare parts/ accessories.

Technical Data:

LED: Line modules ca. 6,500K, CRI > 80, service life L₈₀ > 100.000h at max. ambient temperature, L₉₀ > 95.000h at 25°C ambient temperature

ECG with emergency light electronic

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

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

Re-charging time: 24h, 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.

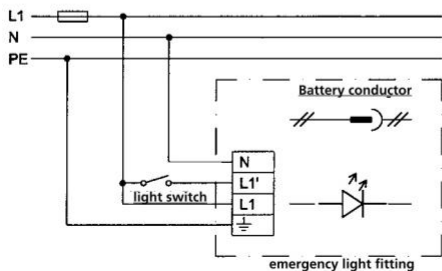
stand-by operation = switching on in case of mains failure.

Options:

- Emergency lighting unit with DALI interface for dimming and central monitoring, compatible with LIMAS Line (DIMDI) Light Management System
- remote switch
- preparation for a 6-core looping at one end

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.

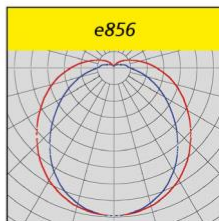


Starting:

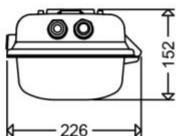
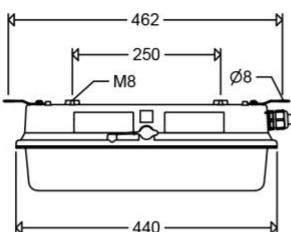
Connect battery conductor.

Out-of-operation: separate battery conductor.

Stand-by operation: Do not connect L1'.



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
- ECG and reflector with LED-modules replacable 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 pictogramm	1h operation time	3h operation time	Ta max [°C]	Substitute for *	Weight [kg] (without packing material)
-------------	------	--------------------	--------------------	--------------------------------	--------------------------	-------------------------	-------------------	-------------------	-------------	------------------	--

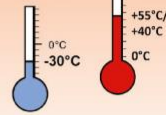
e856...



II 2 G Ex db eb [ib] mb
op is q IIC T4 Gb

II 2 D Ex op is tb
IIIC T80°C Db

IP66



EU-Type Examination Certificate:

IBExU 17 ATEX 1132

Other approvals:

IECEX IBE 17.0037

Type of protection: eb (increased safety)

Marking:

II 2 G Ex db eb [ib]mb op is q IIC T4 Gb
(Zone 1)

II 2 D Ex op is tb IIIC T80°C Db (Zone 21)

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

Permissible ambient temperature:

-30°C up to +55°C

Normal range acc. to EN 60598-2-22

0°C up to 40° or 55°C (H-Versions).

Reduced emergency light duration if operated below 0°C.

85600 0017	e856F L05/1/1,6	6	510	510	85	•	•	•	55	1 x 8W	5,4
85600 0018	e856F L05/3/2,5	6	510	260	85	•	•	•	55	1 x 8W	5,4
85600 0003	e856F L10/1/1,6	11	1.060	560	96	•	•	•	40	2 x 8W	5,4
85600 0004	e856F L10/3/2,5	11	1.060	260	96	•	•	•	40	2 x 8W	5,4
85600 0001	e856F L20/1/1,6	19	2.050	560	108	•	•	•	40	2 x 18W	5,5
85600 0002	e856F L20/3/2,5	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.

85600 0007	e856F L10/1/1,6 H	11	1.060	560	96	•	•	•	55	2 x 8W	6,3
85600 0008	e856F L10/3/2,5 H	11	1.060	260	96	•	•	•	55	2 x 8W	6,3
85600 0005	e856F L20/1/1,6 H	19	2.050	560	108	•	•	•	55	2 x 18W	6,4
85600 0006	e856F L20/3/2,5 H	19	2.050	260	108	•	•	•	55	2 x 18W	6,5

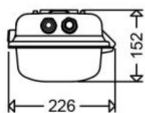
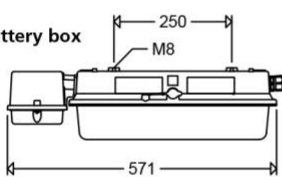
* The given information is for rough orientation only. In each individual case a lighting calculation is necessary.



e856F ... H (with battery box)

light fitting

battery box



NEW

e856... DIMDI



II 2 G Ex db eb [ib] mb
op is q IIC T4 Gb

II 2 D Ex op is 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.

85600 0019	e856F L05/1/1,6 DIMDI	6	510	510	85	•	•	•	55	1 x 8W	5,4
85600 0020	e856F L05/3/2,5 DIMDI	6	510	260	85	•	•	•	55	1 x 8W	5,4
85600 0023	e856F L10/1/1,6 DIMDI	11	1.060	560	96	•	•	•	40	2 x 8W	5,4
85600 0024	e856F L10/3/2,5 DIMDI	11	1.060	260	96	•	•	•	40	2 x 8W	5,4
85600 0011	e856F L20/1/1,6 DIMDI	19	2.050	560	108	•	•	•	40	2 x 18W	5,5
85600 0022	e856F L20/3/2,5 DIMDI	19	2.050	260	108	•	•	•	40	2 x 18W	5,6

Accessories / Spare Parts

Article No.	Type	
Spare batteries		
90222 9024	AKKU 8021	Spare battery 2.5Ah
Spare diffuser		
85501 9001	ABD 855	PC frosted
Cable entries/Glands/Breather		
90117 9000	2537	ex-protected plastic cable gland M25 x 1,5
90118 9000	2538	ex-protected plastic plug M25 x 1,5
90119 9000	2539	ex-protected plastic plug M25 x 1,5 with blanking plug
90259 9000	KS25 EX	M25 x 1,5 breather
Mounting material		
90000 0002	15A P	2 ceiling brackets, hot galvanized steel
90032 0002	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	W 26 L P	2 wall mounting angles, hot galvanized steel
26000 0002	W 26/30 P	2 wall mounting angles 30°, hot galvanized steel
26000 0003	W 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



121/33 W

.../34 W

.../35 W