

EMERGENCY LIGHTING UNIT

ELUNIT S

Emergency lighting unit for fluorescence applications in conjunction with an driver



Technical specifications

Mains voltage range	220 – 240 V
Mains frequency	50 / 60 Hz
Mains current 1 h	15 mA
Mains current 3 h	18 mA
Power consumption / power input standby	max. 8 W
Changing time mains – emergency	< 0,5 s
Max. case temperature tc	65 °C
Ambient temperature range ta	5 – 50 °C
Functionality test	weekly 2 min (random – see datasheet selftest)
Duration test	annually
Battery charging time	24 h
Protection class	I
Protection type	IP20
Weight	140 g
Dimensions F-Case	L 210 x B 31,5 x H 21,5 mm

Product description

The emergency lighting unit ELUNIT S is operating fluorescence-luminaires in emergency mode. The integrated selftest function corresponds the European guideline.

- Emergency lighting unit for fluorescence-luminaires
- For usage in fluorescence-luminaires from 6 to 80 W
- Metal case for luminaires of protection class I (L 210 x B 31,5 x H 21,5 mm)
- 24 months guarantee

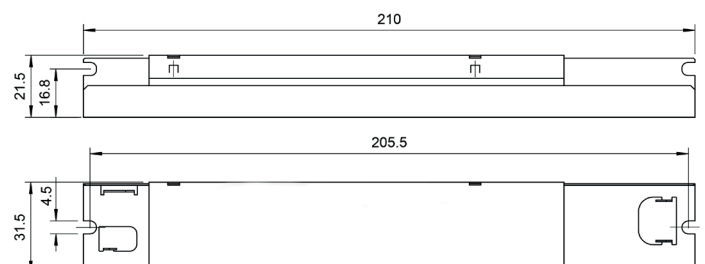
Properties

- Non-maintained mode
- Selftest as per IEC 62034
- 1 h or 3 h operating time (variant upon request)
- Bi-colour LED status display
- Constant power output in emergency mode
- Ambient temperature 5 – 50 °C
- Compatible with all non-dimmable drivers
- Shut-down of driver-phase in emergency mode
- 5-pole-technology: FL tube changeover and delayed power switching for the driver
- Preventing damage to the lamp due to permanent cathode heating in emergency mode
- Deep discharge protection
- Reverse polarity protection for battery
- Adapted charge condition for NiCd or NiMH batteries
- 30 % higher expected NiMH battery life duration by microprocessor controlled cycling charging

Compatibility

In emergency mode the lamp is fully separated from the electronic ballast (4-pole separation). Therefore the ballast phase is switched off by a relay contact. As the relay controls are operated with a microprocessor, ELUNIT can be used with all 1- to 4-lamp electronic ballast types. Due to the complete separation of mains phase and lamp (5-pole separation), the requirements of EMV standards are also fulfilled in emergency mode.

F-Case



Technical data

Type	Operating time	Power consumption in mains mode	Battery
ELUNIT S 6-80	1 h	ca. 2 W	4x1,2V/1,8Ah/SC
ELUNIT S 6-80	1 h	ca. 2 W	4x1,2V/1,8Ah/A
ELUNIT S 6-80	3 h	ca. 2,5 W	4x1,2V/4,5Ah/D
ELUNIT S 6-80	3 h	ca. 2,5 W	4x1,2V/4,5Ah/LA
ELUNIT FBS 6-80 (BUS)	3 h	ca. 2,5 W	4x1,2V/4,5Ah/D
ELUNIT FBS 6-80 (BUS)	3 h	ca. 2,5 W	4x1,2V/4,5Ah/LA

Usable lamp types

- PL-R 14 W
- PL-R 17 W
- T5 14 W – 80 W
- T5C 22 W – 40 W (except T5C 55 W)
- T8 18 W – 58 W
- TC-DEL 13 W – 26 W
- TC-F 18 W – 36 W
- TC-L 18 W- 40 W (except TC-L 55wW/80 W)
- TC-TEL 18 W – 32 W (except TC-TEL 42 W/57 W)

Usable lamp types for 4SC/1h, 4D/3h, 4A/1h, 4LA/180

T26/T8/FD: all types up to 70 W

T16/T5/FDH: all types up to 80 W

TC-SEL/FSD: all types from 7 W up to 11 W

TC-L/FSD: all types from 18 W up to 55 W – except TC-L 80 W

TC-DEL/FSQ: all types up to 26 W

TC-TEL/FSMH: all types from 32 W - 42 W expect 57 W

TC-DD/FSS: all types from 16 W up to 28 W

T16-R/FCH: all types from 22 W up to 55 W

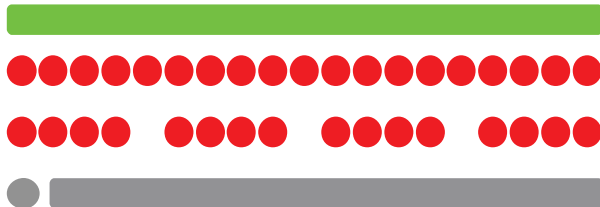
TC-TELI and TC-TI: upon request

Lamp power	Ballast Lumen Factor (25° C)
8 W	32,0 %
14 W	18,0 %
18 W	17,0 %
28 W	9,0 %
35 W	7,0 %
36 W	8,0 %
49 W	4,7 %
58 W	5,2 %
80 W	3,2 %

Selftest

- Selftest as per IEC 62034
- Bi-colour LED status display
- Status of battery
- Status of LED module
- Charging cycle

Visual status indication



permanent green	= no fault
continuously flashing red	= faulty battery
intermittently flashing red	= faulty lamp
dark	= faulty unit

Luminaires containing emergency lighting units with automatic selftest require a regular visual inspection of the status indicator (LED) and the fitting.

LED green: no fault / normal state

LED continuously flashing red: battery fault by either insufficient battery capacity of interrupted connection. The alarm is reset once the fault is cleared.

LED intermittently flashing red: lamp fault. Please note that the fault is not indicated (or reset) immediately when it occurs (or is cleared), but after the next selftest.

LED dark (LED off): if the LED is still off for more than 5 minutes after switching on the mains, then the mains or the unit is faulty.

Batteries

- High-temperature cells 5 – 50 °C
- NiCd / NiMH batteries
- D, SC / A, LA cells
- Charging time 24 h

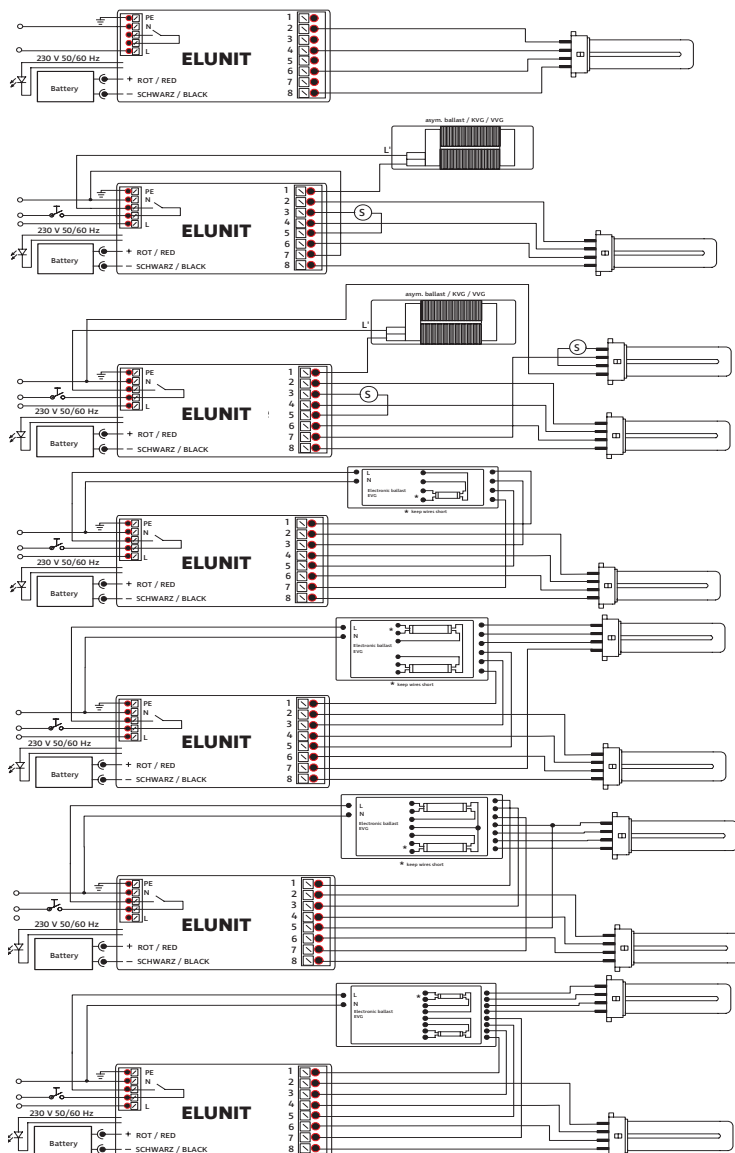
Safety

- Protection class I
- Protection type IP20

Order information

Article number	Article description	Sales unit	Customs tariff number	Battery	Sales unit	Customs tariff number
11'214'100	ELUNIT S 6-80/1h/4cd	72	8504.4053	31'411'211 ELUBAT NiCd 4x1.2V/SC/1.8Ah/JST-EH	36	8507.3020
11'214'200	ELUNIT S 6-80/1h/4mh	72	8504.4053	32'431'211 ELUBAT NiMH 4x1.2V/A/1.8Ah/JST-SEH	72	8507.8020
11'234'100	ELUNIT S 6-80/3h/4cd	72	8504.4053	31'421'411 ELUBAT NiCd 4x1.2V/D/4.5Ah/JST-EH	18	8507.3020
11'234'200	ELUNIT S 6-80/3h/4mh	72	8504.4053	32'441'411 ELUBAT NiMH 4x1.2V/LA/4.5Ah/JST-SEH	24	8507.8020
11'334'100	ELUNIT FBS 6-80/3h/4cd	72	8504.4053	31'421'411 ELUBAT NiCd 4x1.2V/D/4.5Ah/JST-EH	18	8507.3020
11'334'200	ELUNIT FBS 6-80/3h/4mh	72	8504.4053	32'441'411 ELUBAT NiMH 4x1.2V/LA/4.5Ah/JST-SEH	24	8507.8020

Connection diagram



Certification mark

- CENELEC Certificate no. ENEC 88-104095
- CE



Standards

- As per EN 60598-2-22
- EN 61347-2-7
- EN 61347-2-13
- EN 62386
- EN 62034
- EN 55015
- EN 61000-3-2
- EN 61000-3-3
- EN 61547
- Suitable for systems according to: VDE 0108 or EN 50172
- RoHs