Explosion protected linear light fittings with self-contained battery

CROUSE-HINDS SERIES



Ex-Emergency light fittings with self-contained battery eLLK 92 NE/LED NE for fluorescent lamps and LED module





Ex-Emergency light fittings with self-contained battery for LED module and fluorescent lamps

eLLK 92 LED 400 NE / eLLK 92 LED 800 NE

eLLK 92018/18 NE / eLLK 92036/36 NE / eLLM 92018/18 NE / eLLS 08018/18 NE / eLLS 08036/36 NE (Zone 1, 2, 21, 22)

If you need a reliable and decentralized emergency lighting

Emergency light fittings with self-contained battery provide a decentralised solution for the mandatory emergency lighting, independent of central systems. In large plants, in particular, these luminaires offer significant cost benefits.

More safety due to sophisticated micro-electronics

Thanks to a new charging and monitoring technology with intelligent micro-electronics, the NE emergency lighting luminaires provide reliable safety and reduced maintenance costs. A function test lasting 5 minutes, that is carried out automatically on a weekly basis, even during mains operation, and a quarterly, partial duty-cycle test provide additional safety and drastically reduce the necessary amount of manual tests. The charging and discharging functions are monitored constantly by the micro-processor and are indicated via a diode display. Only the spent energy is recharged - therefore, overcharging is not possible. The so-called memory effect cannot occur - the service life of the battery is optimized. The need to replace a battery, a fault in the emergency lighting circuit or a faulty battery is indicated by the LED display. Due to a new type of battery connection, the battery can be replaced in the hazardous area. The emergency lighting cycle can be set locally for 1.5 or 3 hours. A remote switch inquiry is standard.

Automatic cycle test

An automatic cycle test optimises the battery life span. This process occurs when the light fitting is operated for the first time and when the emergency lighting duration is less than 60 minutes. During this process the battery is discharged and charged (=cycle test) up to three times in succession. Through this, the battery capacity is optimised and an emergency lighting function of one hour is ensured. The automatic cycle tests reduce manual testing efforts and provide more safety during operation.

Simple and cost-effective installation

In conjunction with the generously dimensioned terminal compartment, the standard single- ended through-wiring allows a cost-effective installation. The double-sided locking facility with 10 or 20 latch points allows the protective bowl to be hinged on both sides, meaning that the fitting can be mounted on either side.



Maintenance possible even in hazardous areas

The battery is installed in a separate, certified housing and Ex-d connectors link the battery unit and the luminaire. After loosening the locking screws, the battery can be taken away, whereby the Ex-d switching contact in the flameproof compartment is cut-off, thus disconnecting the battery circuit. As a result, the battery is cut off completely from the charging circuit of the luminaire and it can therefore, also be replaced in the hazardous area at every time. A detachable strap protects the insert from atng dropped inadvertently.



Features

- Standard dual channel ballast for LED module and fluorescent lamps
- Automatic weekly 5 minute function test and quarterly partial duty cycle test
- · Automatic cycle test, which optimises battery life span
- Simplified 2LED diode display for indication of the charging, operation or fault status
- Capacity-dependent charging of the battery
- Easy replacement of battery, even in Ex-area
- High efficient Light technology with LED module or fluorescent lamps
- LED module with special reflector design to prevent undue glare and multi-shadowing
- 20 % energy savings by use of the LED module
- Double-sided central locking facility
- Safety interlocking system due to an integrated forced isolating switch
- Housing consists of impact resistant polyester (eLLK...NE/NE LED) or optionally of seawater-resistant stainless steel (eLLS 08...NE)
- High degree of protection IP66

LED module or Fluorescent Lamps

Light technique, LED and Electronic Ballast (EVG)

light fittings with self-contained battery and LED module

As a leading manufacturer of explosion protected light fittings we now designed a revolutionary module with an LED light source to fit into eLLK/M 92 linear light fittings as well as in the emergency light fittings variants V-CG-S and NE/LED NE. The LED system design and certification allow the use in the well proven Ex-e technology of eLLK/M 92.

Combined with our electronic ballast EVG 09 as the driver, we can rely on more than 20 years of reliable and successful operation in harsh and hazardous environments.

A specially designed reflector system directs the light output of the high power LED module to the working area and there is no multi-shadowing and light pollution.

The advantages of the LED module:

- Environmentally friendly, no mercury
- Shock and vibration resistant, no filament or glass to break
- Immediate start, instant full illumination
- No life time reduction due to switching cycles
- Reduced disposal costs
- Energy and cost savings: 20% energy savings compared to fluorescent lamps
- Additional energy savings by operating on demand (night/ day and presence-mode)
- Reduced maintenance costs compared to standard fluorescent lamps
- Lower overall cost of ownership

Electronic ballast (EVG)

Nowadays it is not possible to imagine modern light fittings for fluorescent lamps without the EVG technology. Features such as immediate starting, the absence of flickering during operation or the minimal heat rise are only possible with this technology. With the CEAG EVG technology, fluorescent light fittings for use in hazardous areas also provide decisive advantages:

- Use with various mains voltages from 120 V up to 254 V ± 10 %
- Regulation of luminous flux with fluctuating mains voltage
- Safe lamp ignition at low and high ambient temperatures
- Longer service life for lamps
- AC/DC operation possible
- For use as driver for LED module or fluorescent lamps
- Standard dual channel ballast, that means on failure when one lamp or LED row fails the second lamp or LED row will continue in operation independent from the failed one.

Fluorescent lamps as light source

All light fittings of the eLLK 92...NE versions have been developed and certified for Ø 26 mm bi-pin fluorescent lamps with a G 13 lamp cap in accordance with IEC 60081. This means that the lamps, which are available all over the world, can be used for both hazardous and non-hazardous areas. Not only does this simplify stock-keeping, but the operator also benefits from all the technical advantages in conjunction with EVG operation.

Special thermo-lamps with 38 mm diameter can be used in all bi-pin lamp holders of CEAG fluorescent light fittings. This allows an economical use of fluorescent lamps even below ambient temperatures of 5 °C.







Electronic ballast VE 12



The power supply unit VE 12 of the eLLK 92 NE/LED NE with self-contained battery system series has the integrated controlling electronics separately from the battery pack. Therefore, only the battery pack has to be removed during replacement. The robust electronics remain in the light fitting, thus it saves costs and protects the environment.

Operating life

- The expected operating life of a CEAG LED module is 75,000 hours. This is a significant improvement compared to traditional light sources.
- Heat sinks are specifically engineered to remove heat from the LEDs to ensure a longer life, better lumen output and accurate colour temperature.

Versatile

 Unrestricted use with V-CG-S module for connection to a CEAG Central Battery Systems and with self-contained emergency light fittings eLLK 92 LED NE. CEAG products are constantly atng advanced and tested in the company's own lighting laboratory



Ordering details

With LED module: eLLK 92 LED 400 NE / eLLM 92 LED 400 NE / eLLK 92 LED 800 NE

Ordering details



Туре	Content	Connecting terminal	wiring single-ended	Through- wiring twin-ended	Cable gland/ thread	Threated plug	Blanking plug	Order No.
eLLK 92 LED 400	NE							
eLLK 92 LED 400 NE 4000K	1/6-1K	1 x 6	Х	-	2 x M25, plastic		1	1 2260 585 101
eLLK 92 LED 400 NE 5600K	1/6-1K	1 x 6	Х	-	2 x M25, plastic		1	1 2260 586 101
eLLK 92 LED 400 NE 4000K	2/6-2K	2 x 6	-	Х	2 x M25, plastic	2 x M25		1 2260 585 103
eLLK 92 LED 400 NE 5600K	2/6-2K	2 x 6	_	Х	2 x M25, plastic	2 x M25		1 2260 586 103
eLLK 92 LED 400 NE 4000K	1/6-1M ¹)	1 x 6	Х	-	2 x M20, metal thread	1 x M20		1 2260 585 109
eLLK 92 LED 400 NE 5600K	1/6-1M1)	1 x 6	Х	-	2 x M20, metal thread	1 x M20		1 2260 586 109
eLLK 92 LED 400 NE 4000K	2/6-2M1)	2 x 6	-	Х	4 x M20, metal thread	3 x M20		1 2260 585 111
eLLK 92 LED 400 NE 5600K	2/6-2M ¹)	2 x 6	-	Х	4 x M20, metal thread	3 x M20		1 2260 586 111
eLLK 92 LED 400 NE 4000K	1/6-1M ¹)	1 x 6	Х	_	2 x M25, metal thread	2 x M25		1 2260 585 609
eLLK 92 LED 400 NE 5600K	1/6-1M ¹)	1 x 6	Х	_	2 x M25, metal thread	2 x M25		1 2260 586 609
eLLK 92 LED 400 NE 4000K	2/6-2M1)	2 x 6	-	Х	4 x M25, metal thread	4 x M25		1 2260 585 611
eLLK 92 LED 400 NE 5600K	2/6-2M1)	2 x 6	-	Х	4 x M25, metal thread	4 x M25		1 2260 586 611
eLLM 92 LED 400) NE ²⁾							
eLLM 92 LED 400 NE 4000K	2/6-2K	1 x 8	Х	-	2 x M25, plastic		1	1 2273 585 101
eLLK 92 LED 800	NE							
eLLK 92 LED 800 NE 4000K	1/6-1K	1 x 6	х	-	2 x M25, plastic		1	1 2261 585 101
eLLK 92 LED 800 NE 5600K	1/6-1K	1 x 6	Х	_	2 x M25, plastic		1	1 2261 586 101
eLLK 92 LED 800 NE 4000K	2/6-2K	2 x 6	_	Х	2 x M25, plastic	2 x M25		1 2261 585 103
eLLK 92 LED 800 NE 5600K	2/6-2K	2 x 6	-	Х	2 x M25, plastic	2 x M25		1 2261 586 103
eLLK 92 LED 800 NE 4000K	1/6-1M ¹)	1 x 6	Х	-	2 x M20, metal thread	1 x M20		1 2261 585 109
eLLK 92 LED 800 NE 5600K	1/6-1M ¹)	1 x 6	Х	-	2 x M20, metal thread	1 x M20		1 2261 586 109
eLLK 92 LED 800 NE 4000K	2/6-2M1)	2 x 6	-	Х	4 x M20, metal thread	3 x M20		1 2261 585 111
eLLK 92 LED 800 NE 5600K	2/6-2M1)	2 x 6	-	Х	4 x M20, metal thread	3 x M20		1 2261 586 111
eLLK 92 LED 800 NE 4000K	1/6-1M ¹)	1 x 6	Х	_	2 x M25, metal thread	2 x M25		1 2261 585 609
eLLK 92 LED 800 NE 5600K	1/6-1M1)	1 x 6	х	-	2 x M25, metal thread	2 x M25		1 2261 586 609
eLLK 92 LED 800 NE 4000K	2/6-2M1)	2 x 6	-	х	4 x M25, metal thread	4 x M25		1 2261 585 611
eLLK 92 LED 800 NE 5600K	2/6-2M1)	2 x 6	_	Х	4 x M25, metal thread	4 x M25		1 2261 586 611

¹⁾ with metal thread, without cable gland

²⁾ Pole mounted light fitting

Scope of delivery including LED-Modul, without fixing material / Metal cable glands see catalogue part 2: 2.3.12 ff

Ordering details For fluorescent lamps: eLLK 92018/18 NE / eLLK 92036/36 NE / eLLM 92018/18 NE eLLS 08018/18 NE/ eLLS 08036/36 NE

Ordering details



Туре	Content	Connecting terminal	wiring single-ended	Through- wiring twin-ended	Cable gland/ thread	Threated plug	Blanking plug	Order No.
eLLK 92018/18 N	E							
eLLK 92018/18 NE (2 x 18 W)	1/6-1K	1 x 6	Х	-	2 x M25, plastic		1	1 2260 885 10
eLLK 92018/18 NE 2 x 18 W)	2/6-2K	2 x 6	-	Х	2 x M25, plastic	2 x M25		1 2260 885 10
eLLK 92018/18 NE (2 x 18 W)	1/6-1M ¹⁾	1 x 6	Х	-	2 x M20, metal thread	1 x M20		1 2260 885 10
eLLK 92018/18 NE (2 x 18 W)	2/6-2M 1)	2 x 6	-	Х	4 x M20, metal thread	3 x M20		1 2260 885 11
eLLK 92018/18 NE (2 x 18 W)	1/6-1M ¹⁾	1 x 6	Х	_	2 x M25, metal thread	2 x M25		1 2260 885 60
eLLK 92018/18 NE (2 x 18 W)	2/6-2M 1)	2 x 6	-	Х	4 x M25, metal thread	4 x M25		1 2260 885 61
eLLM 92018/18 N	IE ²⁾							
eLLM 92018/18 NE (2 x 18 W)	2/6-2K	1 x 8	-	_	2 x M25, plastic		1	1 2273 885 10
eLLK 92036/36 N	E (220 - 25	4 V AC)						
eLLK 92036/36 NE (2 x 36 W)	1/6-1K	1 x 6	Х	_	2 x M25, plastic		1	1 2261 885 10
eLLK 92036/36 NE (2 x 36 W)	2/6-2K	2 x 6	-	Х	2 x M25, plastic	2 x M25		1 2261 885 10
eLLK 92036/36 NE (2 x 36 W)	1/6-1M ¹⁾	1 x 6	х	-	2 x M20, metal thread	1 x M20		1 2261 885 10
eLLK 92036/36 NE (2 x 36 W)	2/6-2M 1)	2 x 6	-	х	4 x M20, metal thread	3 x M20		1 2261 885 1 1
eLLK 92036/36 NE (2 x 36 W)	1/6-1M ¹⁾	1 x 6	Х	_	2 x M25, metal thread	2 x M25		1 2261 885 60
eLLK 92036/36 NE (2 x 36 W)	2/6-2M 1)	2 x 6	-	Х	4 x M25, metal thread	4 x M25		1 2261 885 6
eLLS 08018/18 N	E							
eLLS 08018/18 NE (2 x 18 W)	1/6-1K	1 x 6	х	-	2 x M25, plastic	1 x M25	2	1 2225 885 10
eLLS 08018/18 NE (2 x 18 W)	2/6-2K	2 x 6	-	Х	2 x M25, plastic	2 x M25	2	1 2225 885 10
eLLS 08018/18 NE (2 x 18 W)	1/6-1M ¹⁾	1 x 6	Х	_	2 x M20, metal thread	1 x M20		1 2225 885 10
eLLS 08018/18 NE (2 x 18 W)	2/6-2M 1)	2 x 6	-	Х	4 x M20, metal thread	3 x M20		1 2225 885 11
eLLS 08036/36 N	E (220 - 25	4 V AC)						
eLLS 08036/36 NE (2 x 36 W)	1/6-1K	1 x 6	Х	-	2 x M25, plastic		1	1 2226 885 10
eLLS 08036/36 NE (2 x 36 W)	2/6-2K	2 x 6	-	Х	2 x M25, plastic	2 x M25	2	1 2226 885 10
eLLS 08036/36 NE (2 x 36 W)	1/6-1M ¹⁾	1 x 6	Х	_	2 x M20, metal thread	1 x M20		1 2226 885 10
eLLS 08036/36 NE (2 x 36 W)	2/6-2M 1)	2 x 6	-	Х	4 x M20, metal thread	3 x M20		1 2226 885 11

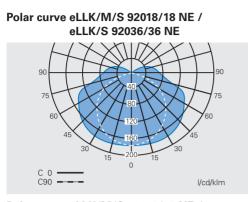
ith metai thr ²⁾ Pole mounted light fitting

Scope of delivery without lamp and fixing material /

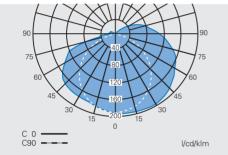
Metal cable glands see catalogue part 2: 2.3.12 ff

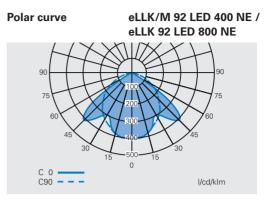
Dimension drawing / Polar curve

eLLK 92018/18 NE / eLLK 92036/36 NE /eLLS 08018/18 NE/ eLLS 08036/36 NE / eLLM 92018/18 NE / eLLK 92 LED 400 NE / eLLM 92 LED 400 NE / eLLK 92 LED 800 NE

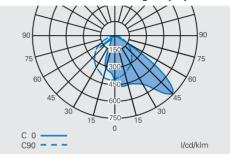


Polar curve eLLK/M/S 92018/18 NE / eLLK/S 92036/36 NE in emergency operation

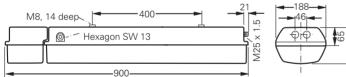




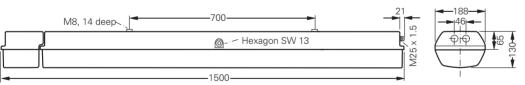
Polar curve eLLK/M 92 LED 400 NE / eLLK 92 LED 800 NE in emergency operation



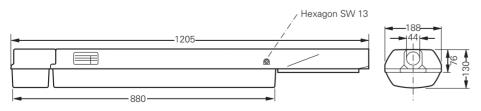
eLLK 92018/18 NE / eLLK 92 LED 400 NE



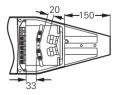
eLLK 92036/36 NE / eLLK 92 LED 800 NE



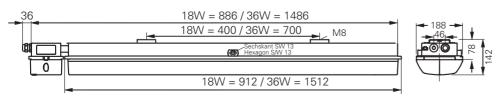
eLLM 92018/18 NE / eLLM 92 LED 400 NE







eLLS 08018/18 NE / eLLS 08036/36 NE



Dimensions in mm

eLLK 92 LED 400 NE / eLLK 92 800 LED NE





Technical data

	eLLK 92 LED 400 NE	eLLK 92 LED 800 NE		
EC-Type Examination Certificate	BVS 09 ATEX E 034	BVS 09 ATEX E 034		
IECEx Certificate of Conformity	IECEx BVS 09.0033	IECEx BVS 09.0033		
Marking to 94/9/EC	ll 2 G Ex de mb ib IIC T4 Gb ll 2 D Ex tb IIIC T80 °C Db IP66	ll 2 G Ex de mb ib IIC T4 Gb ll 2 D Ex tb IIIC T80 ℃ Db IP66		
Marking to IECEx	Ex de mb ib IIC T4 Gb Ex tb IIIC T80 °C Db	Ex de mb ib IIC T4 Gb Ex tb IIIC T80 °C Db		
Permissible ambient temperature	-25 °C up to +45 °C (specified data: -5 °C up to +35 °C)	-25 °C up to +45 °C (specified data: -5 °C up to +35 °C)		
IK-class according to EN 50102	IK 10 ≜ 20 J	IK 10 ≜ 20 J		
Battery	Battery set with 7 Ah-NC battery, with LED display and monitoring via microprocessor	Battery set with 7 Ah-NC battery, with LED display and monitoring via microprocessor		
Rated voltage	120 V - 254 V AC	120 V - 254 V AC		
Rated current	0.2 A	0.31 A		
Frequency	50 - 60 Hz	50 - 60 Hz		
Charging duration	≥ 14 h	≥ 14 h		
Lifetime LED module	L 70 = 75.000 h at ta=25 °C	L 70 = 75.000 h at ta=25 °C		
Power factor cos φ	≥ 0.95	≥ 0.95		
Circuit	EVG with emergency lighting supply	EVG with emergency lighting supply		
Insulation class	1	I		
Illuminance at measurement plane	equivalent to related fluorescent tubes	equivalent to related fluorescent tubes		
CRI	> 75	> 75		
Lamp/illuminant	LED module 400 - 2 x 13 W	LED module 800 - 2 x 26 W		
Light colour	4000 K / 5600 K	4000 K / 5600 K		
Rated luminous flux of the luminaire	1900 lm (4000 K), 2150 lm (5600 K)	3500 lm (4000 K), 4050 lm (5600 K)		
Rated emergency operating time	1.5 h or 3 h, can be set on site (one row)	1.5 h or 3 h, can be set on site (one row)		
Rated luminous flux of the luminaire in emergency operation (1,5 h, one LED row)	905 lm (4000 K), 1020 lm (5600 K)	1140 lm (4000 K), 1315 lm (5600 K)		
Rated luminous flux of the luminaire in emergency operation (3h, one LED row)	620 lm (4000 K), 700 lm (5600 K)	790 lm (4000 K), 910 lm (5600 K)		
Rated luminous flux in emergency operation (one LED row)	95 % (1,5 h) / 65 % (3 h)	65 % (1,5 h) / 45 % (3 h)		
Dimensions (L x W x H)	900 x 188 x 130 mm	1500 x 188 x 130 mm		
Connecting terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm² per terminal		
Enclosure colour	RAL 7035 light grey	RAL 7035 light grey		
Enclosure material	Glass fibre reinforced polyester	Glass fibre reinforced polyester		
Weight	10.5 kg	15.3 kg		
Cable glands / Gland plates / Enclosure drilling	Ex-e-cable glands M25 x 1,5 (plastic), Option: M20 x 1,5 metal thread ¹⁾	Ex-e-cable glands M25 x 1,5 (plastic), Option: M20 x 1,5 metal thread ¹⁾		
Degree of protection accd. EN 60529	IP66	IP66		
Protective cover / protective bowl	Polycarbonate	Polycarbonate		
1) With dust cover if entry/thread is not closed				

¹⁾ With dust cover if entry/thread is not closed

Technical data

eLLM 92 LED 400 NE



Technical data

	eLLM 92 LED 400 NE
EC-Type Examination Certificate	BVS 09 ATEX E 034
IECEx Certificate of Conformity	IECEx BVS 09.0033
Marking to 94/9/EC	ⓑ II 2 G Ex de mb ib IIC T4 Gb ⓑ II 2 D Ex tb IIIC T80 ℃ Db IP66
Marking to IECEx	Ex de mb ib IIC T4 Gb Ex tb IIIC T80 °C Db
Permissible ambient temperature	-25 °C up to +45 °C (specified data: -5 °C up to +35 °C)
IK-class according to EN 50102	IK 10 ≜ 20 J
Battery	Battery set with 7 Ah-NC battery, with LED display and monitoring via microprocessor
Rated voltage	120 V - 254 V AC
Rated current	0.2 A
Frequency	50 - 60 Hz
Charging duration	≥ 14 h
Lifetime LED module	L 70 = 75.000 h at ta=25 °C
Power factor $\cos \phi$	≥ 0.95
Circuit	EVG with emergency lighting supply
Insulation class	1
Illuminance at measurement plane	equivalent to related fluorescent tubes
CRI	> 75
Lamp/illuminant	LED module 400 - 2 x 13 W
Light colour	4000 K / 5600 K
Rated luminous flux of the luminaire	1900 lm (4000 K), 2150 lm (5600 K)
Rated emergency operating time	1.5 h or 3 h, can be set on site (one row)
Rated luminous flux of the luminaire in emergency operation (1,5 h, one LED row)	905 lm (4000 K), 1020 lm (5600 K)
Rated luminous flux of the luminaire in emergency operation (3h, one LED-row)	620 lm (4000 K), 700 lm (5600 K)
Rated luminous flux in emergency operation (one LED-row)	95 % (1.5 h) / 65 % (3 h)
Dimensions (L x W x H)	1205 x 188 x 130 mm
Dimensions pole socket	Ø 44 mm x 150 mm
Connecting terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal
Enclosure colour	RAL 7035 light grey
Enclosure material	Glass fibre reinforced polyester
Weight	12.3 kg
Cable glands / Gland plates / Enclosure drilling	Ex-e-cable glands M25 x 1,5 (plastic), Option: M20 x 1,5 metal thread ¹⁾
Degree of protection accd. EN 60529	IP66
Protective cover / protective bowl	Polycarbonate
1) With dust sover if entry/thread is not alread	

¹⁾ With dust cover if entry/thread is not closed

Technical data eLLK 92018/18 NE (2 x 18 W) / eLLK 92036/36 NE (2 x 36 W)



Technical data

	eLLK 92018/18 NE (2 x 18 W)	eLLK 92036/36 NE (2 x 36 W)		
EC-Type Examination Certificate	BVS 09 ATEX E 034	BVS 09 ATEX E 034		
IECEx Certificate of Conformity	IECEx BVS 09.0033	IECEx BVS 09.0033		
Marking to 94/9/EC	☺ II 2 G Ex de mb ib IIC T4 Gb ☺ II 2 D Ex tb IIIC T80 °C Db IP66	 II 2 G Ex de mb ib IIC T4 Gb II 2 D Ex tb IIIC T80 °C Db IP66 		
Marking to IECEx	Ex de mb ib IIC T4 Gb Ex tb IIIC T80 °C Db	Ex de mb ib IIC T4 Gb Ex tb IIIC T80 °C Db		
Permissible ambient temperature	-25 °C up to +55 °C (specified data: -5 °C up to +35 °C)	-25 °C up to +55 °C (specified data: -5 °C up to +35 °C)		
IK-class according to EN 50102	IK 10 ≜ 20 J	IK 10 ≜ 20 J		
Rated voltage	120 - 254 V AC	220 - 254 V AC / optional 120 V AC		
Rated current	0.23 A (230 V AC)	0.4 A (230 V AC)		
Frequency	50 - 60 Hz	50 - 60 Hz		
Charging duration	≥ 14 h	≥ 14 h		
Power factor cos φ	≥ 0.95	≥ 0.95		
Circuit	EVG with emergency lighting supply	EVG with emergency lighting supply		
Insulation class	I	1		
Lamp/illuminant	2 x T26 / 18 W (T8)	1 x T26 / 36 W (T8)		
Rated luminous flux of the luminaire	2700 lm ¹⁾	6700 lm ¹⁾		
Lamp cap	G13 accd. to IEC 60061-1	G13 accd. to IEC 60061-1		
Rated luminous flux of the luminaire	78 %	78 %		
Rated luminous flux of the luminaire in emergency operation (1.5 h, one lamp)	1215 lm (90 %)	1507 lm (45 %)		
Rated luminous flux of the luminaire in emergency operation (3 h, one lamp)	607 lm (45 %)	837 lm (25 %)		
Rated luminous flux in emergency operation	1.5 or 3 h; can be set on site (1-lamp)	1.5 or 3 h; can be set on site (1-lamp)		
Dimensions (L x W x H)	900 x 188 x 130 mm	1500 x 188 x 130 mm		
Connecting terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal		
Enclosure colour	RAL 7035 light grey	RAL 7035 light grey		
Enclosure material	Glass fibre reinforced polyester	Glass fibre reinforced polyester		
Weight	8.8 kg	12 kg		
Cable glands / Gland plates / Enclosure drill- ing	Ex-e-cable glands M25 x 1,5 (plastic) Option: M20 x 1,5 metal thread ²⁾	Ex-e-cable glands M25 x 1,5 (plastic) Option: M20 x 1,5 metal thread ²⁾		
Degree of protection accd. EN 60529	IP66	IP66		
Protective cover / protective bowl	Polycarbonate	Polycarbonate		

¹¹ Depends on lamp ²¹ With dust cover if entry/thread is not closed

Technical data

eLLM 92018/18 NE



Technical data

	eLLM 92018/18 NE (2 x 18 W) ²⁾			
EC-Type Examination Certificate	BVS 09 ATEX E 034			
IECEx Certificate of Conformity	IECEx BVS 09.0033			
Marking to 94/9/EC	ו 2 G Ex de mb ib IIC T4 וו 2 D Ex tb IIIC T80 °C Db IP66			
Marking to IECEx	Ex de mb ib IIC T4 Gb Ex tb IIIC T80 °C Db			
Permissible ambient temperature	25 °C µp to +55 °C specified data: −5 °C µp to +35 °C)			
IK-class according to EN 50102	IK 10 ≜ 20 J			
Rated voltage	120 - 254 V AC			
Rated current	0,23 A (230 V AC)			
Frequency	50 - 60 Hz			
Charging duration	≥ 14 h			
Power factor $\cos \phi$	≥ 0,95			
Circuit	EVG with emergency lighting supply			
Insulation class	I			
Lamp/illuminant	2 x T26 / 18 W (T8)			
Rated luminous flux of the luminaire	2700 lm ¹⁾			
Lamp cap	G13 accd. to IEC 60061-1			
Light output ratio	78 %			
Rated luminous flux of the luminaire in emer- gency operation (1.5 h, one lamp)	- 1215 lm (90 %)			
Rated luminous flux of the luminaire in emer- gency operation (3 h, one lamp)	- 607 lm (45 %)			
Rated emergency operating time	1.5 h or 3 h, can be set on site (1 lamp)			
Dimensions (L x W x H)	1205 x 188 x 130 mm			
Dimensions pole socket	Ø 44 mm x 150 mm			
Connecting terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal			
Enclosure colour	RAL 7035 light grey			
Enclosure material	Glass fibre reinforced polyester			
Weight	10.5 kg			
Cable glands / Gland plates / Enclosure drill- ing	Ex-e-cable glands M25 x 1,5 (plastic) Option: M20 x 1,5 metal thread ²⁾			
Degree of protection accd. EN 60529	IP66			
Protective cover / protective bowl	Polycarbonate			

¹⁾ Depends on lamp ²⁾ Pole mounted light fitting

Technical data

eLLS 08018/18 NE (2 x 18 W) / eLLS 08036/36 NE (2 x 36 W)





Technical data

	eLLS 08018/18 NE (2 x 18 W)	eLLS 08036/36 NE (2 x 36 W)		
EC-Type Examination Certificate	BVS 09 ATEX E 034	BVS 09 ATEX E 034		
IECEx Certificate of Conformity	IECEx BVS 09.0033	IECEx BVS 09.0033		
Marking to 94/9/EC	☺ II 2 G Ex de mb ib IIC T4 Gb ☺ II 2 D Ex tb IIIC T80 °C Db	 II 2 G Ex de mb ib IIC T4 Gb II 2 D Ex tb IIIC T80 °C Db 		
Marking to IECEx	Ex de mb ib IIC T4 Gb Ex tb IIIC T80 °C Db IP66	Ex de mb ib IIC T4 Gb Ex tb IIIC T80 °C Db IP66		
Permissible ambient temperature	-25 °C up to +55 °C	-25 °C up to +55 °C		
IK-class according to EN 50102	IK 10 ≙ 20 J	IK 10 ≜ 20 J		
Rated voltage	120 - 254 V AC	220 - 254 V AC / optional 120 V AC		
Rated current	0,23 A (230 V AC)	0,40 (230 V AC)		
Frequency	50 - 60 Hz	50 - 60 Hz		
Charging duration	≥ 14 h	≥ 14 h		
Power factor $\cos \phi$	≥ 0.95	≥ 0.95		
Circuit	EVG with emergency lighting supply	EVG with emergency lighting supply		
Insulation class	1	1		
Lamp/illuminant	2 x T26 / 18 W (T8)	2 x T26 / 36 W (T8)		
Rated luminous flux of the luminaire	2700 lm ¹⁾	6700 lm ¹⁾		
Lamp cap	G13 accd. to IEC 60061-1	G13 accd. to IEC 60061-1		
Light output ratio	78 %	78 %		
Rated luminous flux of the luminaire in emer gency operation (1.5 h, one lamp)	- 1215 lm (90 %)	1507 lm (45 %)		
Rated luminous flux of the luminaire in emer gency operation (3 h, one lamp)	- 607 lm (45 %)	837 lm (25 %)		
Rated luminous flux in emergency operation	1.5 or 3 h can be set on site (1-lampig)	1.5 or 3 h can be set on site (1-lampig)		
Dimensions (L x W x H)	900 x 188 x 130 mm	1500 x 188 x 130 mm		
Connecting terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal		
Enclosure material	Stainless steel 316 Ti (1.4571)	Stainless steel 316 Ti (1.4571)		
Weight	10.4 kg	14.0 kg		
Cable glands / Gland plates / Enclosure drilling	Ex-e-cable glands M25 x 1,5 (plastic) Option: M20 x 1.5 metal thread ²⁾	Ex-e-cable glands M25 x 1,5 (plastic) Option: M20 x 1.5 metal thread ²⁾		
Degree of protection accd. EN 60529	IP66	IP66		
Protective cover / protective bowl	Polycarbonate	Polycarbonate		

¹⁾ Depends on lamp ²⁾ With dust cover if entry/thread is not closed



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