

# 2.4

## Ex-Emergency light fittings with a self-contained battery system for fluorescent lamps

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

### If you need a reliable and decentralized emergency lighting

Emergency lighting luminaires with a self-contained battery system 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.

### 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 being dropped inadvertently.

### 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.

### International certification

Special versions according to the NEC standards are available for use on the American market. CSA certification for the types of luminaires eLLK 92 NE 2217 (2 x 17W) and eLLK 92 NE 4232 (2 x 32W) allows their use there.






Other country-specific approvals, such as for Brazil or the new Eurasian Conformity (EAC) for placing them on the market in Russia, Belarus and Kazakhstan, are available.



### Features

- Standard dual channel ballast with EOL monitoring
- Automatic weekly 5 minute function test
- Automatic quarterly partial duty cycle test
- LED display for indication of the charging, operation or fault status
- Capacity-dependent charging of the battery
- Easy replacement of battery, even in Ex-area
- Double-sided central locking facility
- Safety interlocking system due to an integrated forced isolating switch
- Safety standard IP66

## Ordering details

Type	Content	Terminals	Through-wiring single-ended	Through-wiring twin-ended	Cable gland/thread	Threaded plug	Blanking plug	Order No.	Order No.	
<b>eLLK 92018/18 NE</b>									for 120 - 254 V	
 eLLK 92018/18 NE (2 x 18 W)	1/6-1K	1 x 6	x	–	2 x M25, plastic		1	<b>1 2260 885 101</b>		
eLLK 92018/18 NE (2 x 18 W)	2/6-2K	2 x 6	–	x	2 x M25, plastic	2 x M25		<b>1 2260 885 103</b>		
eLLK 92018/18 NE (2 x 18 W)	1/6-1M <sup>1)</sup>	1 x 6	x	–	2 x M20, metal thread	1 x M20		<b>1 2260 885 109</b>		
eLLK 92018/18 NE (2 x 18 W)	2/6-2M <sup>1)</sup>	2 x 6	–	x	4 x M20, metal thread	3 x M20		<b>1 2260 885 111</b>		
eLLK 92018/18 NE (2 x 18 W)	1/6-1M <sup>1)</sup>	1 x 6	x	–	2 x M25, metal thread	2 x M25		<b>1 2260 885 609</b>		
eLLK 92018/18 NE (2 x 18 W)	2/6-2M <sup>1)</sup>	2 x 6	–	x	4 x M25, metal thread	4 x M25		<b>1 2260 885 611</b>		
<b>eLLM 92018/18 NE <sup>2)</sup></b>									for 120 - 254 V	
 eLLM 92018/18 NE (2 x 18 W)	2/6-2K	1 x 8	–	–	2 x M25, plastic		1	<b>1 2273 885 101</b>		
<b>eLLK 92036/36 NE</b>									for 120 V	for 220 - 254 V
 eLLK 92036/36 NE (2 x 36 W)	1/6-1K	1 x 6	x	–	2 x M25, plastic		1	<b>1 2261 885 401</b>	<b>1 2261 885 101</b>	
eLLK 92036/36 NE (2 x 36 W)	2/6-2K	2 x 6	–	x	2 x M25, plastic	2 x M25		<b>1 2261 885 403</b>	<b>1 2261 885 103</b>	
eLLK 92036/36 NE (2 x 36 W)	1/6-1M <sup>1)</sup>	1 x 6	x	–	2 x M20, metal thread	1 x M20		<b>1 2261 885 409</b>	<b>1 2261 885 109</b>	
eLLK 92036/36 NE (2 x 36 W)	2/6-2M <sup>1)</sup>	2 x 6	–	x	4 x M20, metal thread	3 x M20		<b>1 2261 885 411</b>	<b>1 2261 885 111</b>	
eLLK 92036/36 NE (2 x 36 W)	1/6-1M <sup>1)</sup>	1 x 6	x	–	2 x M25, metal thread	2 x M25		<b>1 2261 885 609</b>		
eLLK 92036/36 NE (2 x 36 W)	2/6-2M <sup>1)</sup>	2 x 6	–	x	4 x M25, metal thread	4 x M25		<b>1 2261 885 611</b>		
<b>eLLK 92 NIB 2217 <sup>3)</sup></b>									for 120 V	for 220 - 254 V
 eLLK 92 NIB 2217/U240 (2 x 17 W)	2/6-2M	2 x 6	–	x	2 x 3/4" NPT Myers Hub Adapter, 2 x metal thread	2 x M25		<b>1 2260 879 311</b>		
eLLK 92 NIB 2217/U120 (2 x 17 W)	2/6-2M	2 x 6	–	x	2 x 3/4" NPT Myers Hub Adapter, 2 x M25 metal thread	2 x M25		<b>1 2260 879 333</b>		
<b>eLLK 92 NIB 4232 <sup>3)</sup></b>									for 120 V	for 220 - 254 V
 eLLK 92 NIB 4232/U240 (2 x 32 W)	2/6-2M	2 x 6	–	x	2 x 3/4" NPT Myers Hub Adapter, 2 x M25 metal thread	2 x M25		<b>1 2261 879 311</b>		
eLLK 92 NIB 2432/U120 (2 x 32 W)	2/6-2M	2 x 6	–	x	2 x 3/4" NPT Myers Hub Adapter, 2 x M25 metal thread	2 x M25		<b>1 2261 879 333</b>		

<sup>1)</sup> with metal thread, without cable gland; <sup>2)</sup> Pole mounting light fitting; <sup>3)</sup> for use according to NEC-standards  
 Scope of delivery without lamp and fixing accessories  
 Metal cable glands see catalogue part 2: 2.3.12 ff

## Accessories

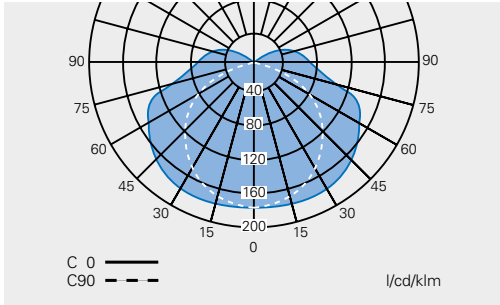
Type	Application	Order No.
Single sided through wiring 2/6 with 2 entries M25, incl. terminals and mounting material	for eLLM 92 018/18 NIB	<b>2 2218 602 000</b>

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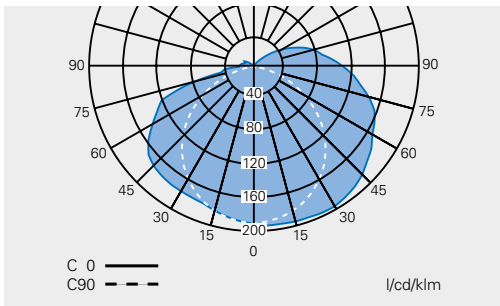
## Dimension drawing / Polar curve

eLLK 92018/18 NE / eLLK 92036/36 NE / eLLM 92018/18 NE / eLLK 92 NIB 2217/ eLLK 92 NIB 4232

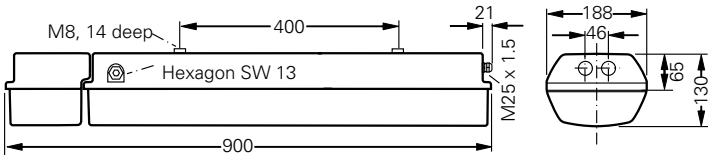
### Polar curve eLLK 92018/18 NE / eLLK 92 NIB 2217 eLLK 92036/36 NE/ eLLK 92 NIB 4232



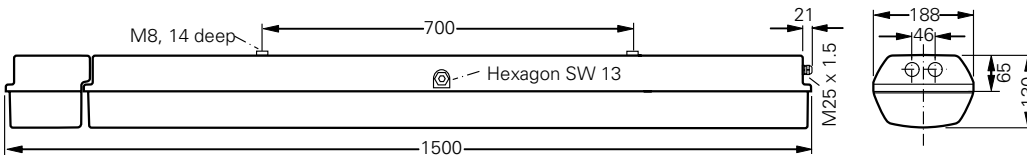
### Polar curve eLLK/eLLM 920... NE / NIB in emergency operation



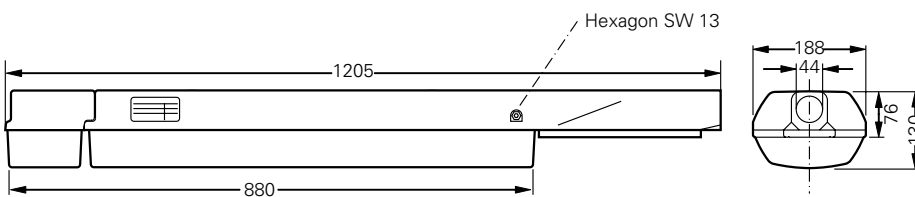
### eLLK 92018/18 NE / eLLK 92 NIB 2217



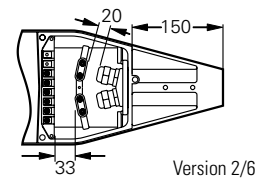
### eLLK 92036/36 NE / eLLK 92 NIB 4232



### eLLM 92018/18 NE



### eLLM 92...



Dimensions in mm

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



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## 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 accd. 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 accd. 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	-20 °C up to +50 °C (specified data: -5 °C up to +35 °C)	-20 °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	0.4 A
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
Protection class	I	I
Lamp / Illuminant	2 x T26 / 18 W (T8)	1 x T26 / 36 W (T8)
Rated luminous flux	2700 lm <sup>1)</sup>	6700 lm <sup>1)</sup>
Lamp cap	G13 accd. to IEC 60061-1	G13 accd. to IEC 60061-1
Light output ratio	78 %	78 %
Luminous flux in emergency operation (1.5 h, one lamp)	1215 lm (90 %)	1507 lm (45 %)
Luminous flux in emergency operation (3 h, one lamp)	607 lm (45 %)	837 lm (25 %)
Rated emergency lighting duration	Lamps can be set on site for an emergency lighting duration of 1.5 or 3 hours (single lamp)	Lamps can be set on site for an emergency lighting duration of 1.5 or 3 hours (single lamp)
Dimensions (L x W x H)	900 x 188 x 130 mm	1500 x 188 x 130 mm
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm <sup>2</sup> per terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm <sup>2</sup> 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 drilling	Ex-e cable glands M25 x 1.5 (plastic), option: M20 x 1.5 metal thread <sup>2)</sup>	Ex-e cable glands M25 x 1.5 (plastic), option: M20 x 1.5 metal thread <sup>2)</sup>
Degree of protection accd. to EN 60529	IP66	IP66
Protective cover / protective bowl	Polycarbonate	Polycarbonate

<sup>1)</sup> depends on used lamps

<sup>2)</sup> with dustcover if entry/thread is not closed



## Technical data

**eLLM 92018/18 NE (2 x 18 W)**

EC-Type Examination Certificate	BVS 09 ATEX E 034
IECEX Certificate of Conformity	IECEX BVS 09.0033
Marking accd. to 94/9/EC	⊕ II 2 G Ex de mb IIC T4 ⊕ II 2 D Ex tb IIIC T80 °C Db IP66
Marking accd. to IECEX	Ex de mb ib IIC T4 Gb Ex tb IIIC T80 °C Db
Permissible ambient temperature	-20 °C up to +50 °C (specified data: -5 °C up to +35 °C)
IK-class according to EN 50102	IK 10 $\Delta$ 20 J
Rated voltage	120 - 254 V AC
Rated current	0.23 A
Frequency	50 - 60 Hz
Charging duration	$\geq$ 14 h
Power factor cos $\phi$	$\geq$ 0.95
Circuit	EVG with emergency lighting supply
Protection class	I
Lamp / Illuminant	2 x T26 / 18 W (T8)
Rated luminous flux	2700 lm <sup>1)</sup>
Lamp cap	G13 accd. to IEC 60061-1
Light output ratio	78 %
Luminous flux in emergency operation (1.5 h, one lamp)	1215 lm (90 %)
Luminous flux in emergency operation (3 h, one lamp)	607 lm (45 %)
Rated emergency lighting duration	Lamps can be set on site for an emergency lighting duration of 1.5 or 3 hours (single lamp)
Dimensions (L x W x H)	1205 x 188 x 130 mm
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm <sup>2</sup> per terminal
Enclosure colour	RAL 7035 light grey
Enclosure material	glass-fibre reinforced polyester
Weight	10.5 kg
Pole socket	$\emptyset$ 44 x 150 mm
Cable glands / gland plates / enclosure drilling	Ex-e cable glands M25 x 1.5 (plastic), option: M20 x 1.5 metal thread <sup>2)</sup>
Degree of protection accd. to EN 60529	IP66
Protective cover / protective bowl	Polycarbonate

<sup>1)</sup> depends on used lamps



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## Technical data

	eLLK 92 NIB 2217/U120/240 (2 x 17 W)	eLLK 92 NIB 4232/U120/240 (2 x 32 W)
Marking accd. to CEC 018	Ex d e ib m IIC T4 Class II Div. 1 Gr. E, F and G	Ex d e ib m IIC T4 Class II Div. 1 Gr. E, F and G
Marking accd. to NEC 500/505	Class I Zone 1 AEx de ib m IIC T4 Class I Div. 2 Gr. A, B, C, D Class II Div. 2 Gr. F and G	Class I Zone 1 AEx de ib m IIC T4 Class I Div. 2 Gr. A, B, C, D Class II Div. 2 Gr. F and G
Certificate of Compliance	CSA 10.2325079	CSA 10.2325079
Permissible ambient temperature	-20 °C up to +50 °C (specified data: -5 °C up to +35 °C)	-20 °C up to +50 °C (specified data: -5 °C up to +35 °C)
IK-class according to EN 50102	IK 10 $\pm$ 20 J	IK 10 $\pm$ 20 J
Rated voltage	120 V / 240 V AC	120 V / 240 V AC
Rated current	0.38 A / 0.18 A	0.70 A / 0.34 A
Frequency	50 - 60 Hz	50 - 60 Hz
Charging duration	$\geq$ 14 h	$\geq$ 14 h
Power factor cos $\phi$	$\geq$ 0.95	$\geq$ 0.95
Circuit	EVG with emergency lighting supply	EVG with emergency lighting supply
Protection class	I	I
Lamp / Illuminant	2 x F17 T8	2 x F32 T8
Rated luminous flux	2600 lm <sup>1)</sup>	6600 lm <sup>1)</sup>
Lamp cap	G13 accd. to IEC 60061-1	G13 accd. to IEC 60061-1
Light output ratio	78 %	78 %
Luminous flux in emergency operation (1.5 h, one lamp)	1170 lm (90 %)	1485 lm (45 %)
Luminous flux in emergency operation (3 h, one lamp)	585 lm (45 %)	825 lm (25 %)
Rated emergency lighting duration	Lamps can be set on site for an emergency lighting duration of 1.5 or 3 hours	Lamps can be set on site for an emergency lighting duration of 1.5 or 3 hours
Dimensions (L x W x H)	900 x 188 x 130 mm	1500 x 188 x 130 mm
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm <sup>2</sup> per terminal	L1, L2, L3, L, N, PE; max. 2 x 6 mm <sup>2</sup> per terminal
Enclosure colour	RAL 7035 light grey	RAL 7035 light grey
Enclosure material	glass-fibre reinforced polyester	glass-fibre reinforced polyester
Weight	10.2 kg	12.2 kg
Cable glands / gland plates / enclosure drilling	3/4" NPT metal thread with dustcover	3/4" NPT metal thread with dustcover
Degree of protection accd. to EN 60529	IP66	IP66
Protective cover / protective bowl	Polycarbonate	Polycarbonate

<sup>1)</sup> depends on used lamps

