

Emergency Luminaire with LED
 Series EXLUX 6009/1 Version IIB

www.stahl.de



18327E00

- > For use in hazardous areas with gas group IIB
- > Emergency luminaire for wall, ceiling, pendant or pole installation
- > Latest LED technology with a high luminous efficacy and a long service life
- > Central locking system
- > Weekly functional test
- > Annually rated operating time test

E2



The luminaires of the series **EXLUX 6009 LED** can be used for safety lighting

Zone	ATEX / IECEX					
	0	1	2	20	21	22
For use in		x	x		x	x

Explosion Protection

Global (IECEX)	
Gas and dust	IECEX IBE 16.0038 Ex db eb mb op is IIB T4 Gb Ex tb op is IIIC T100°C Db
Europe (ATEX)	
Gas and dust	IBExU16ATEX1199 ⊕ II 2 G Ex db eb mb op is IIB T4 Gb ⊕ II 2 G Ex tb op is IIIC T100°C Db
Certifications and certificates	
Certificates	IECEX, ATEX

WebCode 6009B

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Selection Table

Version	Power consumption	Cable entry	Order number	Art. no.	Weight kg
Notlichtleuchte mit LED Reihe EXLUX 6009/1 Gasgruppe IIB	28 W	3x M25 Plastic	6009/1281-171-7611-131-00	256335	6.700
		3x M20 Metal	6009/1281-171-7611-232-00	256331	6.750
	52 W	3x M25 Plastic	6009/1481-171-7611-131-00	256333	9.350
		3x M20 Metal	6009/1481-171-7611-232-00	256279	9.350

Order Number Supplement

Through wiring	with 6 conductors	6.09/.....-6.....
	without	6.09/.....0.....
Connection terminal	Spring clamp terminal type WAGO 0.75 ... 4 mm ²	6.09/.....1.....
	Screw-type terminal type STAHL 1.5 ... 6 mm ²	6.09/.....2.....
Cable glands	M25 hole	6.09/.....-1.....
	M20 hole	6.09/.....-2.....
	1/2" hole	6.09/.....-3.....
	3/4" hole	6.09/.....-4.....
	Number of holes = 1	6.09/.....-1.....
	Number of holes = 2	6.09/.....-2.....
	Number of holes = 3	6.09/.....-3.....
	Number of holes = 4	6.09/.....-4.....
	Insert made of plastic	6.09/.....-1.....
	Insert made of stainless steel	6.09/.....-2.....
	Insert made of stainless steel (seawater resistant)	6.09/.....-5.....
	Rated operating time test	with
without		6.09/.....-8.....

Note

The light fittings are delivered without mounting material.
These accessories must be ordered separately!

Technical Data

Electrical data	AC: 110 V ... 240 V ±10 %; 50 ... 60 Hz			
	6009/12..-1..-.....-.....		6009/14..-1..-.....-.....	
Ballast				
Power consumption [W]	28		52	
Voltage [V]	230	110	230	110
Frequency [Hz]	50	60	50	60
Power factor	≥ 0.90	≥ 0.98	≥ 0.95	≥ 0.99
THD [%]	≤ 12.5	≤ 12.5	≤ 7	≤ 8
Rated operational current [A]				
LEDs off, battery conservation mode	typ. 0.05	typ. 0.05	typ. 0.05	typ. 0.05
LEDs on, battery conservation mode	typ. 0.14	typ. 0.26	typ. 0.24	typ. 0.48
LEDs off, battery charging mode	typ. 0.06	typ. 0.08	typ. 0.06	typ. 0.08
LEDs on, battery charging mode	typ. 0.14	typ. 0.28	typ. 0.24	typ. 0.50

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Technical Data

Inrush current	$I_{peak} = 63 \text{ A}; \Delta t = 115 \mu\text{s}$				
	maximum number of luminaires per miniature circuit breaker at 230 V:				
	Type	10 A	16 A	20 A	25 A
	B	7	12	15	18
	C	12	20	25	31
	K	25	40	50	62

Luminous characteristics		
	6009/12...-...-...-00	6009/14...-...-...-00
Power consumption [W]	28	52
Colour rendering [CRI]	≥ 80	≥ 80
Colour temperature [K]	5,000	5,000
without diffuser		
Luminous flux [lm]	typ. 2,859	typ. 5,775
Luminaire efficiency [lm/W]	typ. 98	typ. 108
with diffuser		
Luminous flux [lm]	typ. 2,442	typ. 4,892
Luminaire efficiency [lm/W]	typ. 84	typ. 91
Values apply to $T_a = +25 \text{ }^\circ\text{C}$.		

Service life			
Service life	$T_a \leq 25 \text{ }^\circ\text{C}$	$T_a \leq 45 \text{ }^\circ\text{C}$	$T_a \leq 60 \text{ }^\circ\text{C}$
$L_{70}B_{10}C_{10}$	100,000 h	90,000 h	50,000 h
$L_xB_yC_z$ At the end of the Service Life: • Luminous flux decrease to "x" percent • max. "y" percent of all the light fittings fall below "x" • max. "z" percent of all the light fittings break down completely			

Ambient conditions	
Ambient temperature	- 30 ... + 60 °C without through wiring - 30 ... + 55 °C with through wiring; $I_N \leq 10 \text{ A}$ - 30 ... + 50 °C with through wiring; $I_N \leq 16 \text{ A}$ - 5 ... + 40 °C operationable

Mechanical data	
Degree of protection	IP66 / IP67 (IEC 60598)
Protection class	I (with internal PE connection)
Impact strength (IK code)	IK10 (IEC 62262)
Material	
Enclosure	
Enclosure	Polyester resin, glass fibre-reinforced
Colour	colour grey, similar to RAL 7035
Translucent cover	Polycarbonate
Seal	Silicone foam gasket in the lamp cover

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Technical Data

Luminaire locking	Central locking which can be opened/closed using a socket key M8 / wrench size 13, hinged lamp cover													
Mounting / Installation														
Cable glands	<p>Standard luminaire</p> <p>Plastic: 2 x M25 x 1.5 cable entries 8161 and 2 x M25 x 1.5 stopping plugs 8290 (enclosed)</p> <p>Metal: 2 x metal plates M20 x 1.5 connected by means of PE for metal cable entries Attention: cable entries must be ordered separately</p> <p>Special: max. 4 drilled holes for M20, M25, NPSM ½" max. 2 drilled holes for NPT ¾"</p> <p>Metal cable glands: M20 x 1.5, M25 x 1.5; earthing of the metal cable entries by means of metal plates</p>													
Connection	<p>Standard: Spring clamp terminals 6-pole: L1, L2, L3, L', N, PE Clamping range: 1 x 0.75 ... 4 mm² (solid / finely stranded) (2 free clamping units per pole available)</p> <p>Special: Terminal block with covering 6-pole: L1, L2, L3, L', N, PE Clamping range: 2 x 1.5 ... 6 mm² (solid); 2 x 1.5 ... 4 mm² (finely and extra finely stranded)</p>													
Through wiring	<p>Through wiring Standard luminaire Luminaires are equipped with internal through wiring. Ingoing and outgoing leads can be connected to the opposite sides. Terminals: see techn. data Wiring cross section: 2.5 mm² for max. 16 A.</p> <p>without Optional On the connection side, there are 2 cable entries M25 x 1.5 for ingoing and outgoing wiring of the connection line (ingoing and outgoing leads on one side).</p>													
Assembly	<p>Standard luminaire</p> <p>Standard: 2 x M8 insert nuts in the enclosure</p> <p>Special: Mounting grooves in the enclosure for the use of fastening and ceiling rails for variable luminaire mounting (variable mounting distances for luminaires L = 700 mm: 320 ... 480 mm; L = 1310 mm: 670 ... 930 mm)</p>													
Emergency light electronics														
Emergency light mode	In case of power failure the LEDs are supplied by the battery													
Emergency light service time	at optimal ambient temperature of the battery:													
	<table border="1"> <thead> <tr> <th rowspan="2">Battery capacity</th> <th rowspan="2">Operating time of emergency light</th> <th colspan="2">Emergency light output</th> </tr> <tr> <th>28 W</th> <th>52 W</th> </tr> </thead> <tbody> <tr> <td rowspan="2">7 Ah</td> <td>1.5 h</td> <td>58 %</td> <td>31 %</td> </tr> <tr> <td>3.0 h</td> <td>30 %</td> <td>21 %</td> </tr> </tbody> </table>	Battery capacity	Operating time of emergency light	Emergency light output		28 W	52 W	7 Ah	1.5 h	58 %	31 %	3.0 h	30 %	21 %
Battery capacity	Operating time of emergency light			Emergency light output										
		28 W	52 W											
7 Ah	1.5 h	58 %	31 %											
	3.0 h	30 %	21 %											
Switchover voltage	from mains to battery operation for $U < 0.83 \times U_N$ from battery to mains operation for $U > 0.88 \times U_N$													
Battery set														
Version	Gas-tight NiCd battery													
Operating voltage	6 V													
Capacity	7 Ah													
Replacing the battery set	When opening the battery enclosure, the connection between the battery and the emergency light electronics is disconnected by means of a switch. The battery set can be replaced after disconnecting the plug-in contacts.													

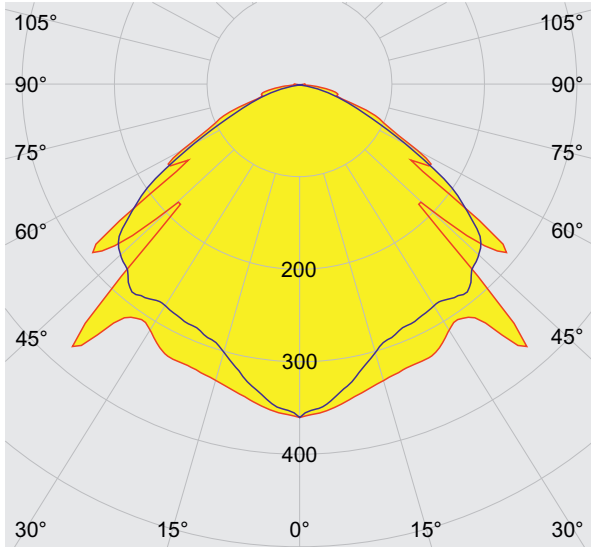
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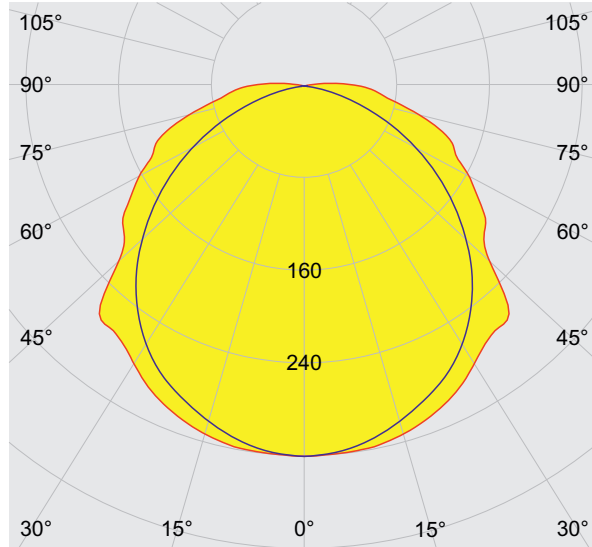
Light Distribution Curves



cd/klm $\eta = 100\%$
 — C0 - C180 — C90 - C270

18729E00

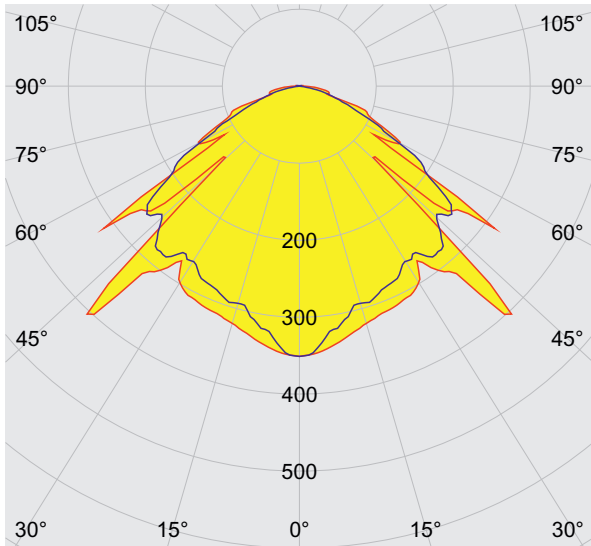
28 W without diffusor



cd/klm $\eta = 100\%$
 — C0 - C180 — C90 - C270

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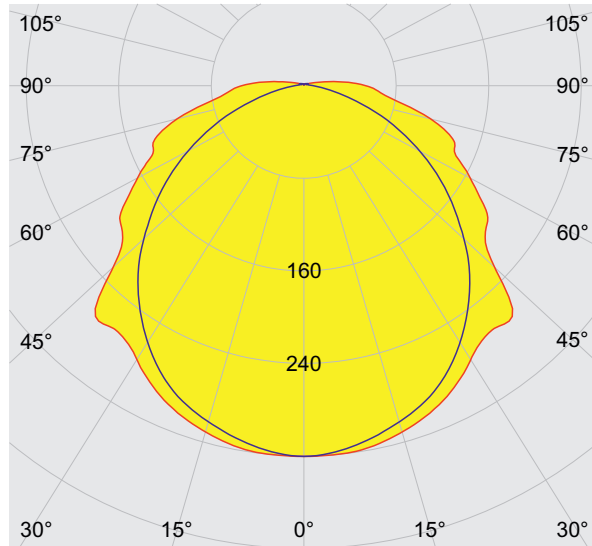
28 W with diffusor



cd/klm $\eta = 100\%$
 — C0 - C180 — C90 - C270

18731E00

52 W without diffusor



cd/klm $\eta = 100\%$
 — C0 - C180 — C90 - C270

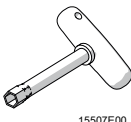
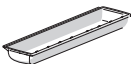
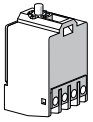


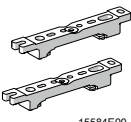
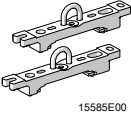
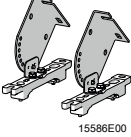
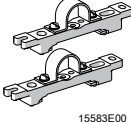

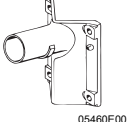

18730E00

52 W with diffusor

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Accessories and Spare Parts

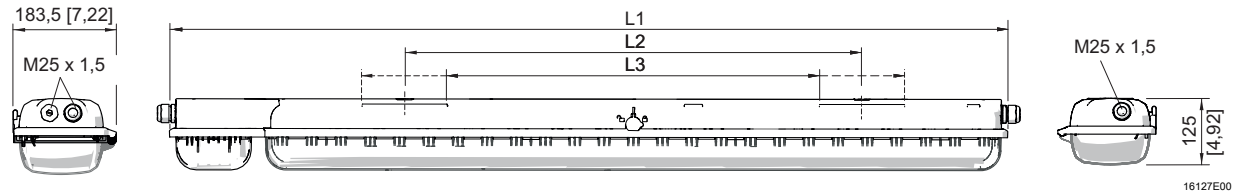
Designation	Figure	Description	Art. no.	Weight kg	
Socket key	 15507E00	M8 / wrench size 13; to open/close the central locking	222430	0.210	
Lamp cover		for luminaire L=700	222427	0.639	
Switch	 10809E00	Switching element 8080/1-3-L, 2 normally closed contacts	132527	0.026	
Breathing gland	 05703E00	M25 x 1.5 in order to avoid condensate formation	115738	0.017	
Ring bolt	 05378E00	M8, direct mounting in insert nuts, 1 pair	115736	0.112	
Mounting rail	 15584E00	for a variable mounting distance	1 pair	222826	0.300
Mounting bracket	 15585E00	mounting clamp mounted on a mounting rail for a variable mounting distance	1 pair	222456	0.400
Ceiling and wall-mounting bracket	 15586E00	mounted on a mounting rail for a variable mounting distance; Material: stainless steel Lamp can be swiveled in steps of 15°	1 pair	222827	1.200
Pipe clamp	 15583E00	R 1 1/2"		222459	1.200
		R 1 1/4"		222458	1.250
		R 2"		222460	1.300
		with mounting rail for a variable mounting distance; Material: stainless steel	1 pair		
Pole mounting sleeve	 16985E00	for the subsequent mounting on lights 18 W and 36 W, completely with assembly parts	227512	3.200	
Bracket for wall mounting with tube	 05460E00	for side entry lamp; with tube, length 400 mm, \varnothing 42 mm	108947	2.480	
Battery set for 6409	 16332E00	Battery cover with built-in battery. Gas-tight NiCd battery; 7 Ah / 6 V	223532	1.195	

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Dimensional Drawings (All dimensions in mm [inches]) - Subject to alterations

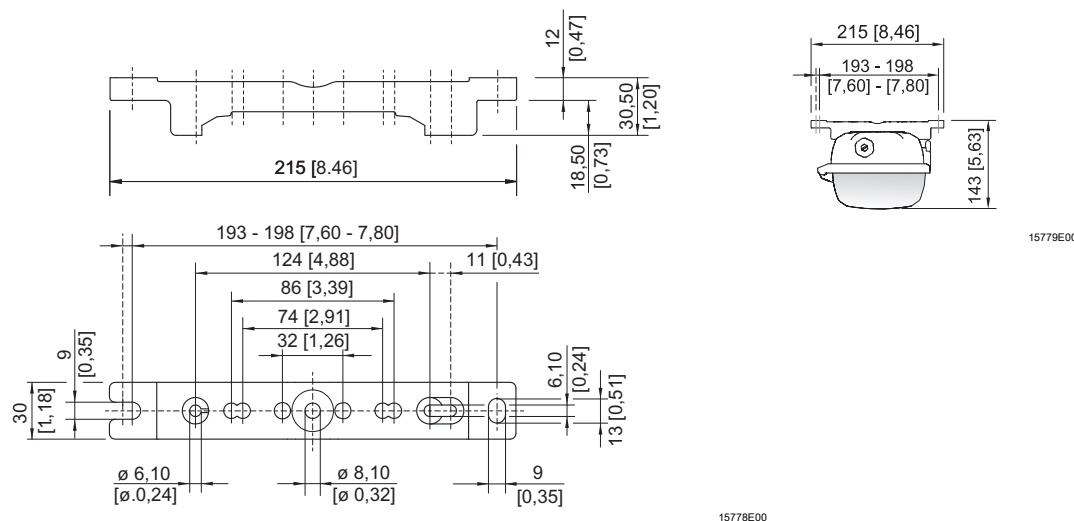


Dimensions	Luminaire	
	28 W	52 W
L1	857 [33.74]	1467 [57.76]
L2 ¹⁾	400 [15.75]	800 [31.50]
L3 ²⁾	320 ... 480 [12.60 ... 18.90]	670 ... 930 [26.38 ... 36.61]

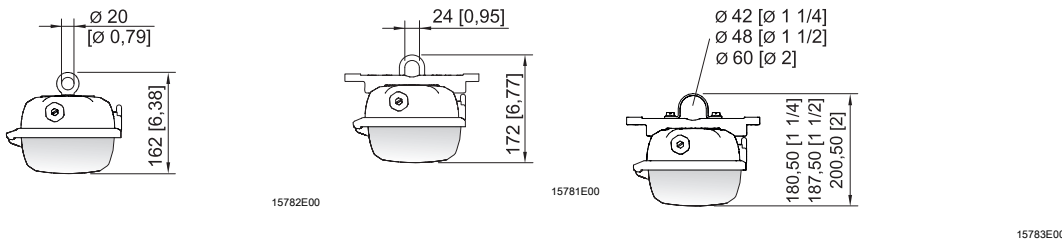
¹⁾ fixed mounting distance
²⁾ variable mounting distance

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Dimensional drawings for assembly parts and accessories (all dimensions in mm [inches]) Subject to alterations



Mounting rail



Ring bolt fitted in insert nut of the luminaire

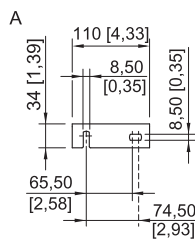
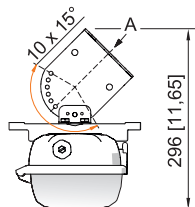
Mounting bracket fitted in mounting rail

Pipe clamp fitted in mounting rail

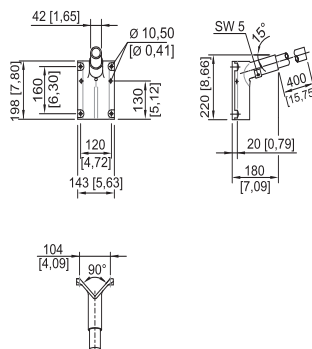
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Dimensional drawings for assembly parts and accessories (all dimensions in mm [inches]) ∅ Subject to alterations



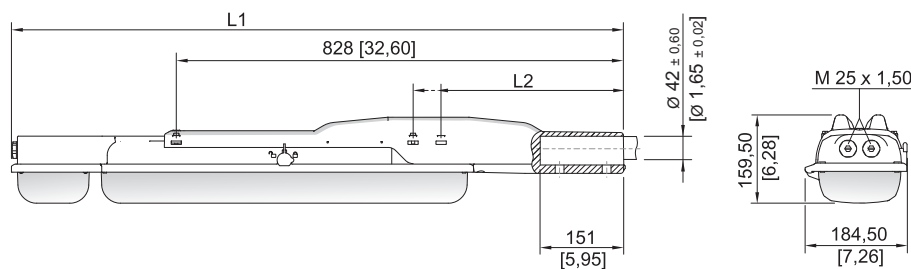
15780E00



03257E00

Wall mounting bracket fitted in mounting rail

Bracket for wall mounting with pipe section



17756E00

Dimensions	Luminaire	
	28 W	52 W
L1	1135 [44.69]	1744 [68.66]
L2	390 [15.35]	338 [13.31]

Linear luminaire EXLUX with pole mounting sleeve

We reserve the right to make alterations to the technical data, dimensions, weights, designs and products available without notice. The illustrations cannot be considered binding.