

Ex-Recessed, ceiling light fittings in metal design

eLLB 20...

(Zone 1, 2, 21, 22)

The explosion-protected lighting concept for clean rooms

The Ex-recessed ceiling light fittings of the series eLLB 20 are equipped with EVG 09 electronic ballasts and are suitable for two-pin fluorescent lamps.

These lamps are used for surface and flush mounting in ceilings, in particular in clean rooms where smooth, flush surfaces, are very important. They are often used in the pharmaceutical and chemical industries, and experimental facilities, as well as in paint shops and spraying cabinets.

Designed for easy installation

The housing is made of white-painted steel sheet with an integrally moulded cover frame or, optionally, of polished stainless steel. It is installed securely in the ceiling by means of special fixing elements that allow a universal and simple mounting in recessed clean room ceilings that are 25 to 90 mm thick. In addition, it can also be fixed by means of two M8 drilled holes in the top of the housing. The hinged, frameless pane made of 6 mm thick safety glass is fixed with cap-

tive screws and has inside hinges. The sealing material is guaranteed silicone-leak-proof. Together with the generously dimensioned terminal compartment, the standard, twin-ended through-wiring allows a cost-saving installation.

Long-term safety

The luminaires of this robust lighting series with plastic enclosure are equipped with a highly-efficient electronic ballast that features a reliable EOL circuit. Thus, the lamps are checked for proper operation and shut down safely in the event of a malfunction at the

end of the service life. In addition, the dual-channel structure of the electronic ballasts allows the safe operation of the second lamp if one lamp fails.

Versatile

The wide input voltage range and important national and international approvals allow the global use of this successful series of light fittings.

Special versions according to the NEC standards are available for use on the American market. CSA certification for the types of luminaires eLLB 202217 (2 x 17 W) and eLLB 204232 (2 x 32 W) allows their use there.



Features

- Standard dual channel ballast with EOL monitoring
- Flush installation, specially for clean rooms
- Available in painted sheet steel or stainless steel
- Safety interlocking due to integral automatic disconnect
- Suitable for B15 fire-resistant ceilings
- High degree of protection IP66

Ordering details

	Type	Content	Terminals	Through-wiring single-ended	Through-wiring twin-ended	Cable gland/thread	Threaded plug	Blanking plug	Order No.
	eLLB 20018/18								
	eLLB 20018/18 (2 x 18 W)	2/6-2K ¹⁾ painted	2 x 6	—	x	2 x M25, plastic	2 x M25		1 2190 218 001
	eLLB 20018/18 (2 x 18 W)	2/6-2M ¹⁾ painted	2 x 6	—	x	4 x M20, metal thread	2 x M20		1 2190 218 101
	eLLB 20036/36								
	eLLB 20036/36 (2 x 36 W)	2/6-2K ¹⁾ painted	2 x 6	—	x	2 x M25, plastic	2 x M25	1	1 2190 236 001
	eLLB 20036/36 (2 x 36 W)	2/6-2M ¹⁾ painted	2 x 6	—	x	4 x M20, metal thread	2 x M20		1 2190 236 101
	eLLB 20058/58								
	eLLB 20058/58 (2 x 36 W)	2/6-2K ¹⁾ painted	2 x 6	—	x	2 x M25, plastic	2 x M25	1	1 2190 258 001
	eLLB 20058/58 (2 x 36 W)	2/6-2M ¹⁾ painted	2 x 6	—	x	4 x M20, metal thread	2 x M20		1 2190 258 101
	eLLB 20418								
	eLLB 20418 (4 x 18 W)	2/6-2K ¹⁾ painted	2 x 6	—	x	2 x M25, plastic	2 x M25	1	1 2190 418 001
	eLLB 20418 (4 x 18 W)	2/6-2M ¹⁾ painted	2 x 6	—	x	4 x M20, metal thread	2 x M20		1 2190 418 101
	eLLB 20436								
	eLLB 20436 (4 x 36 W)	2/6-2K ¹⁾ painted	2 x 6	—	x	2 x M25, plastic	2 x M25	1	1 2190 436 001
	eLLB 20436 (4 x 36 W)	2/6-2M ¹⁾ painted	2 x 6	—	x	4 x M20, metal thread	2 x M20		1 2190 436 101
	eLLB 202217								
	eLLB 202217/U240 (2 x 17 W) ²⁾	2/6-2M ¹⁾ NPT - painted	2 x 6	—	x	2 x 3/4" NPT Myers Hub Adapter, 2 x metal thread	2 x M25		1 2190 217 101
	eLLB 204232								
	eLLB 204232/U240 (2 x 32 W) ²⁾	2/6-2M ¹⁾ NPT - painted	2 x 6	—	x	2 x 3/4" NPT Myers Hub Adapter, 2 x metal thread	2 x M25		1 2190 232 101

¹⁾ with metal thread, without cable gland / ²⁾ 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

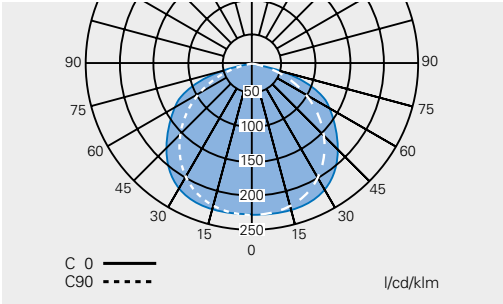
Stainless steel enclosure on request

2.5

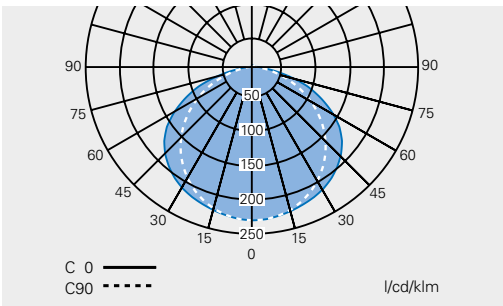
Dimension drawing / Polar curve

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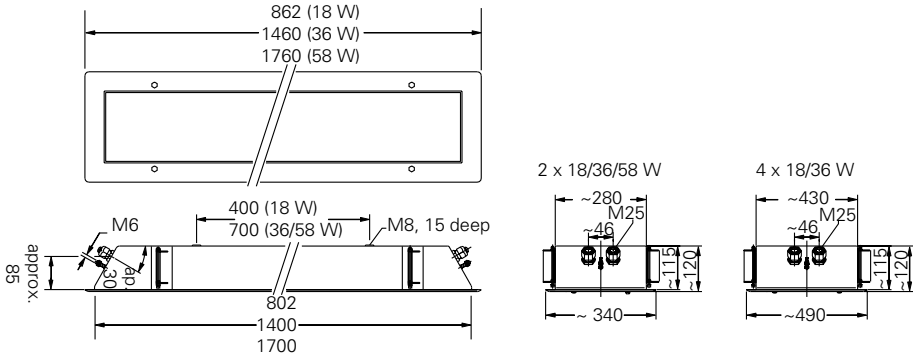
Polar curve eLLB 20018/18 /
eLLB 20036/36 /
eLLB 20058/58



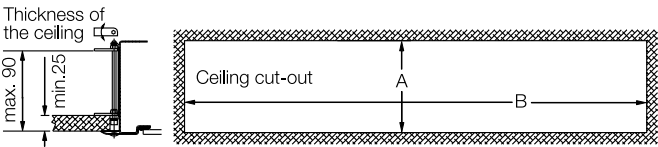
Polar curve eLLB 20418
eLLB 20436



eLLB ...



eLLB ...



	A	B
eLLB 20018/18	315+3	832+5
eLLB 20036/36	315+3	1432+5
eLLB 20058/58	315+3	1732+5
eLLB 20418	465+3	832+5
eLLB 20436	465+3	1432+5

Dimensions in mm



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Technical data

	eLLB 20018/18	eLLB 20036/36
EC-Type Examination Certificate	DMT 02 ATEX E 069	DMT 02 ATEX E 069
IECEX Certificate of Conformity	IECEX-BVS14.0091	IECEX-BVS14.0091
Marking accd. to 2014/34/EU	Ⓜ II 2 G Ex d e mb IIC T4 Gb Ⓜ II 2 D tb IIIC T80 °C Db	Ⓜ II 2 G Ex d e mb IIC T4 Gb Ⓜ II 2 D tb IIIC T80 °C Db
Marking accd. to IECEx	Ex d e mb IIC T 4 Gb Ex tb IIIC T 80 °C Db	Ex d e mb IIC T 4 Gb Ex tb IIIC T 80 °C Db
Permissible ambient temperature	-25 °C up to +50 °C	-25 °C up to +50 °C
IK-class according to IEC/EN 62262	IK 10 Δ 20 J	IK 10 Δ 20 J
Rated voltage	110 - 254 V AC 110 - 250 V DC	110 - 254 V AC 110 - 250 V DC
Rated current	0.18 A	0.34 A
Frequency	50 - 60 Hz	50 - 60 Hz
Power factor cos φ	≥ 0.95	≥ 0.95
Circuit	EVG	EVG
Protection class	I	I
Lamp / Illuminant	2 x T26 / 18 W (T8)	2 x T26 / 36 W (T8)
Rated luminous flux	2700 lm ¹⁾	6700 lm ¹⁾
Lamp cap	G13 accd. to IEC 60061-1	G13 accd. to IEC 60061-1
Light output ratio	70%	70%
Dimensions (L x W x H)	862 x 340 x 120 mm	1460 x 340 x 120 mm
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal, through-wiring twin-ended	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal, through-wiring twin-ended
Enclosure colour	white RAL 9010	white RAL 9010
Enclosure material	painted steel sheet, white, optional polished stainless steel	painted steel sheet, white, optional polished stainless steel
Weight	15 kg	22 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. to EN 60529	IP66	IP66
Protective cover / protective bowl	single-safety glass pane of 6 mm thick	single-safety glass pane of 6 mm thick
Permissible ceiling tickness for fixing accessories	min. 25 mm to max. 90 mm	min. 25 mm to max. 90 mm

¹⁾ depends on used lamps

²⁾ with dustcover if entry/thread is not closed



Technical data

	eLLB 20058/58	eLLB 20418
EC-Type Examination Certificate	DMT 02 ATEX E 069	DMT 02 ATEX E 069
IECEX Certificate of Conformity	IECEX-BVS14.0091	IECEX-BVS14.0091
Marking accd. to 2014/34/EU	Ⓜ II 2 G Ex d e mb IIC T4 Gb Ⓜ II 2 D tb IIIC T80 °C Db	Ⓜ II 2 G Ex d e mb IIC T4 Gb Ⓜ II 2 D tb IIIC T80 °C Db
Marking accd. to IECEx	Ex d e mb IIC T 4 Gb Ex tb IIIC T 80 °C Db	Ex d e mb IIC T 4 Gb Ex tb IIIC T 80 °C Db
Permissible ambient temperature	-25 °C up to +40 °C	-25 °C up to +50 °C
IK-class according to IEC/EN 62262	IK 10 Δ 20 J	IK 10 Δ 20 J
Rated voltage	220 - 254 V AC 195 - 250 V DC	110 - 254 V AC 110 - 250 V DC
Rated current	0.53 A	0.36 A
Frequency	50 - 60 Hz	50 - 60 Hz
Power factor cos φ	≥ 0.95	≥ 0.95
Circuit	EVG	EVG
Protection class	I	I
Lamp / Illuminant	2 x T26 / 58 W (T8)	4 x T26 / 18 W (T8)
Rated luminous flux	10400 lm ¹⁾	5400 lm ¹⁾
Lamp cap	G13 accd. to IEC 60061-1	G13 accd. to IEC 60061-1
Light output ratio	68%	69%
Dimensions (L x W x H)	1760 x 340 x 120 mm	862 x 430 x 120 mm
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal, through-wiring twin-ended	L1, L2, L3, L, N, PE; max. 2 x 6 mm ² per terminal, through-wiring twin-ended
Enclosure colour	white RAL 9010	white RAL 9010
Enclosure material	Painted steel sheet, white, optional polished stainless steel	Painted steel sheet, white, optional polished stainless steel
Weight	26 kg	25 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. to EN 60529	IP66	IP66
Protective cover / protective bowl	single-safety glass pane of 6 mm thick	single-safety glass pane of 6 mm thick
Permissible ceiling tickness for fixing accessories	min. 25 mm to max. 90 mm	min. 25 mm to max. 90 mm

¹⁾ depends on used lamps

²⁾ with dustcover if entry/thread is not closed



Technical data

eLLB 20436	
EC-Type Examination Certificate	DMT 02 ATEX E 069
IECEX Certificate of Conformity	IECEX-BVS14.0091
Marking accd. to 2014/34/EU	II 2 G Ex d e mb IIC T4 Gb II 2 D tb IIIC T80 °C Db
Marking accd. to IECEx	Ex d e mb IIC T 4 Gb Ex tb IIIC T 80 °C Db
Permissible ambient temperature	-25 °C up to +50 °C
IK-class according to IEC/EN 62262	IK 10 $\pm$ 20 J
Rated voltage	110 - 254 V AC 110 - 250 V DC
Rated current	0.68 A
Frequency	50 - 60 Hz
Power factor cos φ	≥ 0.95
Circuit	EVG
Protection class	I
Lamp / Illuminant	4 x T26 / 36 W (T8)
Rated luminous flux	13400 lm ¹⁾
Lamp cap	G13 accd. to IEC 60061-1
Light output ratio	69%
Dimensions (L x W x H)	1460 x 430 x 120 mm
Connecting terminals	L1, L2, L3, L, N, PE; max. 2 x 6 mm ²⁾ per terminal, through-wiring twin-ended
Enclosure colour	white RAL 9010
Enclosure material	Painted steel sheet, white, optional polished stainless steel
Weight	34 kg
Cable glands / gland plates / enclosure drilling	Ex-e cable glands M25 x 1.5 (plastic), option: M20 x 1.5 metal thread ²⁾
Degree of protection accd. to EN 60529	IP66
Protective cover / protective bowl	single-safety glass pane of 6 mm thick
Permissible ceiling tickness for fixing accessories	min. 25 mm to max. 90 mm

¹⁾ depends on used lamps

²⁾ with dustcover if entry/thread is not closed



Technical data

	eLLB 202217/U 240 (2 x 17 W)	eLLB 204232/U 240 (2 x 32 W)
Marking accd. to CEC 018	Ex d e i b m IIC T4 Class I Div. 2 Gr. A, B, C, D Class II Div. 1 Gr. E, F and G	Ex d e i b m IIC T4 Class I Div. 2 Gr. A, B, C, D Class II Div. 1 Gr. E, F and G
Marking accd. to NEC 500/505	Class I Zone 1 AEx de 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 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	-25 °C up to +50 °C	-25 °C up to +50 °C
Rated voltage	120 - 240 V	120 - 240 V
Rated current	0.38/0.18 A	0.70/0.34 A
Frequency	50 - 60 Hz	50 - 60 Hz
Power factor cos φ	≥ 0.95	≥ 0.95
Circuit	EVG	EVG
Protection class	I	I
Lamp / Illuminant	2 x F17 T8	2 x F32 T8
Rated luminous flux	2600 lm ¹⁾	6600 lm ¹⁾
Lamp cap	G13 accd. to IEC 60061-1	G13 accd. to IEC 60061-1
Dimensions (L x W x H)	862 x 340 x 120 mm	1460 x 340 x 120 mm
Enclosure colour	white RAL 9010	white RAL 9010
Enclosure material	Painted steel sheet, white, optional polished stainless steel	Painted steel sheet, white, optional polished stainless steel
Weight	15.2 kg	22.2 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	single-safety glass pane of 6 mm thick	single-safety glass pane of 6 mm thick
Permissible ceiling tickness for fixing accessories	min. 25 mm to max. 90 mm	min. 25 mm to max. 90 mm

¹⁾ depends on used lamps

