LED-Steep roof light fitting for Ex-Zone 1/21 Series e821...

Applications:
Hazardous areas of Zones 1 (gas) and 21 (dust), e.g. cleanrooms, paint shops and spray booths.

Design:
Housing: Sheet steel, powder coated in light grey (RAL 7035), silicone foam gasket.
Glass cover: Impact resistant safety glass pane, frameless / hinged.
Central locking system: Operated by a 5mm allen key, internal hinges on the opposite side.

Reflector: Hinged; white painted sheet steel; detachable, carrying the encapsulated LED-modules and glare limitation modules.
Connection: 3 poles up to 4mm².
Cable entries: 3 x M25 x 1,5 (2 glands - one of them is plugged and 1 screw plug).
Standard: Facing downwards or forwards.
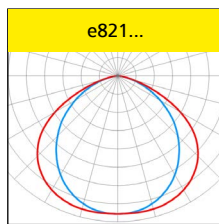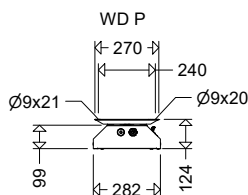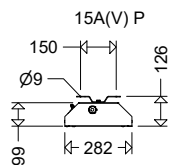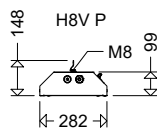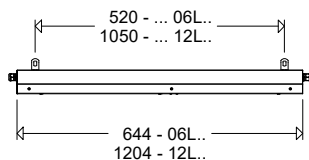Mechanical installation: Mounting accessories see spare parts/ accessories.

Technical Data:
LED: Line modules appr. 6,500K, CRI > 80, service life L_{80} > 100.000h at max. ambient temperature, L_{90} > 80.000h at 25°C ambient temperature
ECG: 220-240V AC/DC, 0 or 50/60Hz, overvoltage, overload and short circuit protection

Note:

This light fitting is not suitable for application in areas with permanent high humidity in combination with only short periods of operation, such as sewage or stormwater retention tanks or water treatment plants.

520 - ... 06L..
1050 - ... 12L..

644 - 06L..
1204 - 12L..

H8V P
148
99
M8
282

15A(V) P
150
126
Ø9
99
282

WD P
270
240
Ø9x21
Ø9x20
99
282
124

Looping the cable on one side:

All light fittings of series e821... have got 2 cable entries on one small side of the housing for cable looping instead of the through wiring system. (3-pole looping standard, 5-pole looping at additionel cost)

e821...

Options:
– 4,500K, light colour **845**
– for connection to group or central battery (light fittings of version ZB only) or emergency mains respectively
– with monitoring module for monitoring the individual light fitting
– housing made from stainless steel, painted
– prepared for 5-core cable looping system
– with through wiring system
– Installation in thermally insulated ceilings (acc. to EN60598)
– for higher ambient temperatures up to +65°C depending on version

STAINLESS STEEL corrosion resistant

+65°C
0°C

Product highlights:
• extremely flat and robust design
• **innovative LED encapsulation** with high transmission rate
• perfect protection of the LED from mechanical or electrostatic damages with at the same time homogeneous Illumination with glare limitation modules, no individual light points visible, comfortable perception of light, excellent glare limitation
• **high colour rendering index CRI > 80**, according to the workplace guide lines suitable for nearly all plant locations
• comfortable **central locking system** with internal hinges
• separate, **frame for recessed installation or a swivel arm mounting system** can easily be installed at a later stage, (frame for recessed installation not suitable for stainless steel version!)
• **sustainable,** control gear and reflector with LED-modules replaceable by qualified personnel on-site
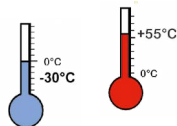• suitability for paint booths LABS-tested according to VDMA 24364-C2-L

Auf Open Ouvrir / Zu Close Fermer

Article no.	Type	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ta max [°C]	Substitute for *	Weight [kg] (without packing material)
e821...			〈Ex〉	II 2 G Ex eb mb q IIC T4 Gb	II 2 D Ex tb IIIC T80°C Db	IP65	

EU-Type Examination Certificate:
IBExU 20 **ATEX** 1017
Other approvals:
IECEx IBE 19.0032
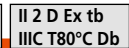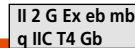Ignition protection: eb
Marking:
II 2 G Ex eb mb q IIC T4 Gb (Zone1)
II 2 D Ex tb IIIC T80°C Db (Zone 21)

Rated voltage: 220-240V AC/DC, 0 or 50/60Hz.
Permissible ambient temperature:
-30°C up to +55°C
The values given are for versions with through wiring.

+55°C
0°C
0°C
-30°C

Article no.	Type	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ta max [°C]	Substitute for *	Weight [kg]
82100 0001	**e821 06L22**	15	2.100	140	55	2 x 18W	7,7
82100 0002	**e821 06L42**	28	4.110	147	55	2 x 36W	7,9
82100 0003	**e821 06L60**	40	5.600	140	55	2 x 58W	7,9
82100 0050	**e821 12L42**	28	4.260	152	55	2 x 36W	13,6
82100 0051	**e821 12L60**	40	5.900	148	55	2 x 58W	14,0
82100 0052	**e821 12L85**	54	8.350	155	55	> 2 x 58W	14,0
82100 0053	**e821 12L120**	79	11.470	145	55	> 3 x 58W	14,0

! Properties, limitations and details for controlling LED-light fittings:
■ See "Technical Supplement"
All data are correct at the time of printing. Actual technical data can be found under www.schuch.de.

* The given information is for rough orientation only. In each individual case a lighting calculation is necessary.

Article no.	Type	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ta max [°C]	Substitute for *	Weight [kg] (without packing material)

e821... DIMD

LIMAS Line · Ex · II 2 G Ex eb mb q IIC T4 Gb · II 2 D Ex tb IIIC T80°C Db · IP65
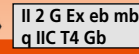
dimmable via DALI interface

Design:
Same as standard version, but with DALI2-compatible ECG and 2 additional clamping points, marked with DA; the polarity does not matter:
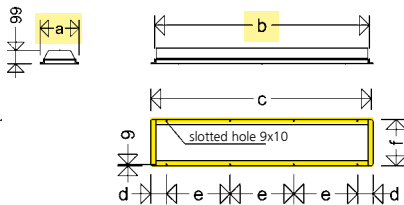Compatible with **LIMAS Line BASIC/PRO** Light Management System.

Note:
The conducting wires to the control input must be mains voltage stable and can be integrated in the connection cable.

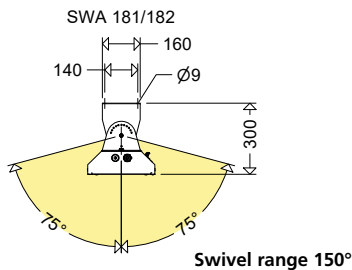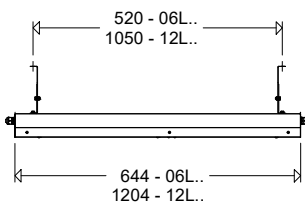| Article no.	Type	Connected load [W]	Luminous flux [lm]	Luminous efficacy [lm/W]	Ta max [°C]	Substitute for *	Weight [kg]
82100 0005	e821 06L42 DIMD	28	4.110	147	55	2 x 36W	7,9
82100 0006	e821 06L60 DIMD	40	5.600	140	55	2 x 58W	7,9
82100 0054	e821 12L42 DIMD	28	4.260	152	55	2 x 36W	13,6
82100 0055	e821 12L60 DIMD	40	5.900	148	55	2 x 58W	14,0
82100 0056	e821 12L85 DIMD	54	8.350	155	55	> 2 x 58W	14,0
82100 0057	e821 12L120 DIMD	79	11.470	145	55	> 3 x 58W	14,0

* The given information is for rough orientation only. In each individual case a lighting calculation is necessary.

Frame for Recessed Installation

retrofit possible!

Light fittings of series e821... can be fitted with a surrounding angled frame for ceiling and wall installation (also retro-fitted, except for stainless steel versions).

Mounting by means of M5 bolts to the long sides of the housing (see drawing).

Article No.	Type	
18091 0020	EB 82. 06L	frame for narrow housing, e821 06L, nD822 06L
18091 0021	EB 82. 12L	frame for narrow housing, e821 12L, nD822 12L

Installation dimensions

Type	a	b	c	d	e	f
EB 82. 06L	302	660	710	55	300	348
EB 82. 12L	302	1224	1270	125	340	348

Attention: When planning the opening for recess installation please allow additional clearance for the cable glands.

520 - 06L..
1050 - 12L..

644 - 06L..
1204 - 12L..

Swivel Arm Mounting System

retrofit possible!

Light fittings of series e821.. can be equipped with a swivel arm mounting system at any time.
The swivel arms are fixed to the suspension points at the upper side of the housing. Swivel range: ± 75° (see dimensions in diagram).

Article No.	Type	
18092 0001	SWA 181/182 P	for all wattages consisting of: 2 swivel arms with bolts M8

SWA 181/182

160
140
Ø9
300
75° 75°

Swivel range 150°

Accessories / Spare Parts

Article No.	Type	
Spare glasses		
82101 9001	ABD 821 06	cover, spare safety glass clear, for 185 06 ..., e821 06 ..., nD822 06 ...
82101 9002	ABD 821 12	cover, spare safety glass clear, for 185 12 ..., e821 12 ..., nD822 12 ...
Cable entries/cable glands		
90117 9006	2537 G	ex-protected gland of size M25 x 1,5 with nut
90119 9001	2539 G	ex-protected gland of size M25 x 1,5 with nut and plug
90118 9006	2538 G	ex-protected plug of size M25 x 1,5 with nut
Mounting material		
90001 0002	H8V P	2 suspension eyes, stainless steel
90000 0002	15A P	2 ceiling brackets, hot galvanized steel
90032 0002	15AV P	2 ceiling brackets, stainless steel
26000 0011	WD P	2 wall/ceiling angle, painted steel
26000 0005	WD 45 P	2 wall/ceiling angle 45°, painted steel

Further accessories as well as carrier rail systems and through wiring systems are available.