

IP66   

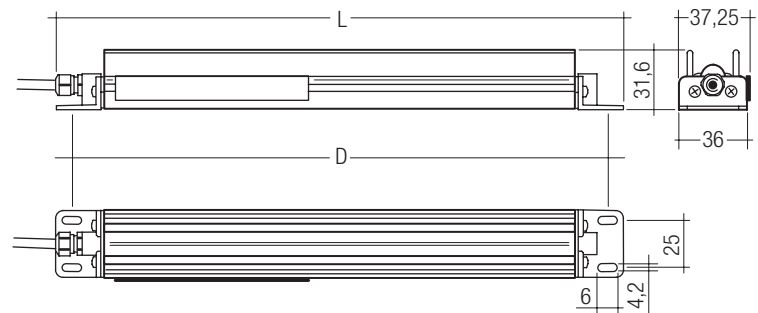
## TALEXengine IMAGE PREMIUM TALEXengine IMAGE 12 – 48 V

### Product description

- Complete solution with standard cable
- High efficiency thanks to directional lighting and integrated heat removal
- High quality of light thanks to a combination of COB LEDs and optics
- Dimmable via switch or potentiometer (designed for a 100 kΩ potentiometer)
- Dimming range 10 to 100 %
- Safety extra low voltage (SELV)
- Simple installation
- Connection: three-core, black, length 1 m
- Cross section connection: 3 x 0.34 mm<sup>2</sup>
- Cooling section made of anodised, extruded aluminium
- End caps made of metal
- Linear lenses made of PMMA
- Safety extra low voltage (SELV), protection class III

### Technical data

Ambient temperature $t_a$	-30 ... +45 °C
Max. surface temperature on profile	65 °C
Type of protection	IP66
Protection class	III



Standards, page 2

Colour temperatures and tolerances, page 5

### Ordering data

Colour temperature	Colour	Beam angle	Type	Article number
6,500 K	Daylight white	30°	LED IMA-PRE DL 12-48V 300 2 66 001	22185187
6,500 K	Daylight white	30°	LED IMA-PRE DL 24-48V 500 5 66 001	22185177
6,500 K	Daylight white	30°	LED IMA-PRE DL 48V 600 6 66 001	22185178
6,500 K	Daylight white	30°	LED IMA-PRE DL 48V 900 9 66 001	22185179
6,500 K	Daylight white	30°	LED IMA-PRE DL 48V 1200 12 66 001	22185180
6,500 K	Daylight white	30°	LED IMA-PRE DL 48V 1500 12 66 001	22185181

Packaging 300 mm length: 16 pieces/carton, 576 pieces/pallet

Packaging 500 mm length: 16 pieces/carton, 384 pieces/pallet

Packaging 600 mm length: 16 pieces/carton, 288 pieces/pallet

Packaging 900 – 1.500 mm length: 16 pieces/carton, 192 pieces/pallet

### Specific technical data

Type	Length L	Hole spacing D	Number of LEDs	Colour rendering index CRI	Typ. luminous flux <sup>①</sup>	Voltage <sup>②</sup>	Typ. power consumption <sup>③</sup>
LED IMA-PRE DL 12-48V 300 2 66 001	300 mm	283 mm	2	75	290 lm	12 – 48 V	6.2 W
LED IMA-PRE DL 24-48V 500 5 66 001	500 mm	483 mm	5	75	725 lm	24 – 48 V	13.4 W
LED IMA-PRE DL 48V 600 6 66 001	600 mm	583 mm	6	75	870 lm	48 V	15.8 W
LED IMA-PRE DL 48V 900 9 66 001	900 mm	883 mm	9	75	1,305 lm	48 V	23.0 W
LED IMA-PRE DL 48V 1200 12 66 001	1,200 mm	1,183 mm	12	75	1,740 lm	48 V	30.2 W
LED IMA-PRE DL 48V 1500 12 66 001	1,500 mm	1,483 mm	12	75	1,740 lm	48 V	30.2 W

<sup>①</sup> Tolerance range for optical data: ±15 %.

<sup>②</sup> Tolerance range for electrical data: ±15 %.

<sup>③</sup> At  $t_c = 45$  °C.

All values at  $t_a = 25$  °C.

**Standards**

- EN 60598-2-1
- EN 62031
- EN 62471

**Thermal behaviour**

operation temperature (operation, no defects)	ta	- 30 → + 45 °C
storage temperature	ts	- 30 → + 80 °C
max. temperature cooling profile	tc	- 30 → + 65 °C

The values apply to operation at 100% output, natural convection. If the maximum temperature limits are exceeded, the life of the TALEXengine IMAGE PREMIUM will be greatly reduced. The TALEXengine IMAGE PREMIUM can fail within a short time. The tc point temperature of the TALEXengine IMAGE PREMIUM has to be measured in the thermally stable state and under operating conditions. Measurement setup e.g. according to IEC/EN 60598-1.

**Installation of TALEXengine IMAGE PREMIUM**

- Mount with end caps.
- Screws ST3.9 and ST3.5 (according to EN ISO 15481) can be used for the mounting hole.

**Electrical supply/choice of converter**

TALEXengine IMAGE PREMIUM from Tridonic are not protected against overvoltages, overcurrents, overloads or short-circuit currents. Safe and reliable operation can only be guaranteed in conjunction with a converter which complies with the relevant standards. The use of TALEX converters from Tridonic in combination with TALEXengine IMAGE PREMIUM guarantees the necessary protection for safe and reliable operation.

If a converter other than Tridonic TALEXconverter is used, it must provide the following protection:

- Short-circuit protection
- Overtemperature protection

TALEXengine IMAGE PREMIUM must be supplied by a constant current converter. Operation with a constant voltage converter will lead to an irreversible damage. The TALEXengine IMAGE PREMIUM is equipped with reverse voltage protection up to 50V.



- There is no provision for chaining multiple in series TALEXengine IMAGE PREMIUM units
- The converter must be switched off before connecting the TALEXengine IMAGE PREMIUM. This can damage the TALEXengine IMAGE PREMIUM!

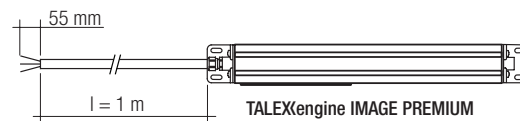
**Lifetime**

tc temperature in °C	luminous flux in %	life time in h
0	80	31.000
	70	50.000
	50	96.000
15	80	30.000
	70	48.000
	50	93.000
25	80	29.000
	70	47.000
	50	91.000
45	80	28.000
	70	45.000
	50	87.000
65	80	26.000
	70	42.000
	50	81.000

**Wiring**

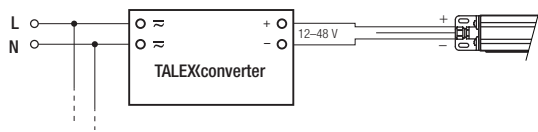
Cable: cross section 3 x 0,34 mm<sup>2</sup>, black, Length 1 m

Colour	red	black	grau
Function	+	-	dim



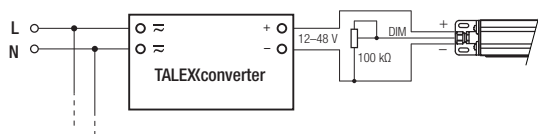
## Wiring examples TALEXengine IMAGE PREMIUM

### Without dimming



The „dim“ terminal of the TALEXengine IMAGE PREMIUM is not connected.

### Dimming with potentiometer



The potentiometer mode of the TALEXengine IMAGE PREMIUM is designed for a 100 kΩ potentiometer.

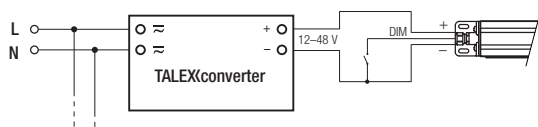
If a potentiometer with a value between approx. 32 kΩ and 80 kΩ is attached to the dim input, the TALEXengine IMAGE PREMIUM switches to the potentiometer mode. The potentiometer mode can be disabled by removing the potentiometer and leaving the dim input open. By leaving this mode, the last active mode will be activated (switch mode or step circuit).

If a potentiometer with a resistance below 9 kΩ gets connected in switch mode, a close switch will be detected and the TALEXengine IMAGE PREMIUM switches to step circuit after five minutes.

The potentiometer mode will be activated as soon as the resistance reaches about 20 kΩ. After removing the potentiometer, the step circuit needs to be disabled to switch back to switch mode.

The dim input is designed for the use of a 100 kΩ potentiometer. The use of the several TALEXengine IMAGE PREMIUM in parallel with a single potentiometer leads to a change of the input resistance. In this case the potentiometer value needs to be adapted.

### Dimming with switch

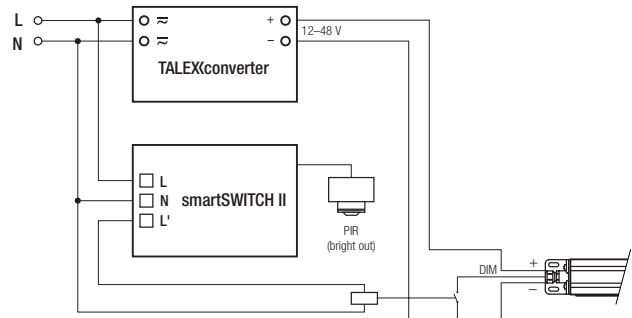


The switch mode allows a direct connection of a push to make switch for dimming and switching. Brief push (< 0.6 s) switches ballast ON and OFF. The ballasts switch-ON at light level set at switch-OFF.

When the push to make switch is held, the TALEXengine IMAGE PREMIUM is dimmed. After repush the TALEXengine IMAGE PREMIUM is dimmed in the opposite direction.

In installations with TALEXengine IMAGE PREMIUM with different dimming levels or opposite dimming directions (e.g. after a system extension), all TALEXengine IMAGE PREMIUM can be synchronized to 50% dimming level by a 10 s push. Use of TALEXengine IMAGE PREMIUM with indicator lamp is not permitted.

### Step circuit with motion sensor



Motion sensor smartSWITCH II (article number: 86458452)

Instead of a switch or potentiometer a switch can be used (e.g. motion sensor, time switch, switch)

The step circuit can be activated by applying a short circuit at the dim input for five minutes. If five short pushes are detected, (50–600 ms, time in between maximum 1 s) step circuit is deactivated and switch mode is active.

Due to no DALI communication is available, the step circuit has a fixed setting.

The step circuit is configured as follows:

Switch closed	= 100 %
Switch open	= 10 %
Fade time 100 %–10 %	= 32 s
Fade time 10 %–100 %	= 170 ms

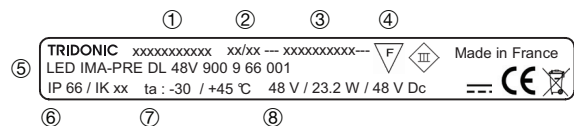
After a power-down there will be a restart with the last activated mode. On the first power-up it will be the switch mode.

last mode (before power-down)	connected resistor	mode after power-up
switch mode (first power-up)	< 9 kΩ	switch mode
	32–80 kΩ	potentiometer mode
	> 900 kΩ	switch mode
step circuit	< 9 kΩ	step circuit
	32–80 kΩ	potentiometer mode
	> 900 kΩ	step circuit
potentiometer mode	< 9 kΩ	potentiometer mode
	32–80 kΩ	potentiometer mode
	> 900 kΩ	switch mode

TALEXengine IMAGE PREMIUM can be used with following converter:

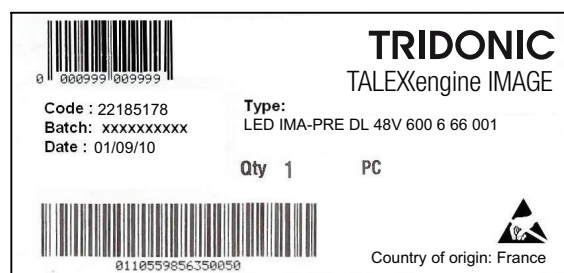
Type	Converter	Article number	U <sub>out</sub>	IP	Min. number of engines	Max. number of engines
LED IMA-PRE DL 12-48V 300 2 66 001	LCU 015/12 D010	24166316	12	IP67	1	2
	LCU 035/12 D010	24166318	12	IP67	1	5
	LCU 060/12 D010	24166322	12	IP67	2	9
	LCU 100/12 D010	24166326	12	IP67	3	16
	LCU 150/12 D010	24166331	12	IP67	5	24
	LCU 035/12 E020	24166319	12	IP20	1	5
	LCU 060/12 E020	24166323	12	IP20	2	9
	LCU 100/12 E020	24166327	12	IP20	3	16
LED IMA-PRE DL 24-48V 500 5 66 001	LCU 150/12 E020	24166332	12	IP20	5	24
	LCU 035/24 E020	24166320	24	IP20	1	2
	LCU 060/24 E020	24166324	24	IP20	1	4
	LCU 100/24 E020	24166328	24	IP20	1	7
LCU 150/24 E020	24166333	24	IP20	2	11	
LED IMA-PRE DL 48V 600 6 66 001	Please contact local sales representative					
LED IMA-PRE DL 48V 900 9 66 001	Please contact local sales representative					
LED IMA-PRE DL 48V 1200 12 66 001	Please contact local sales representative					
LED IMA-PRE DL 48V 1500 12 66 001	Please contact local sales representative					

Label product

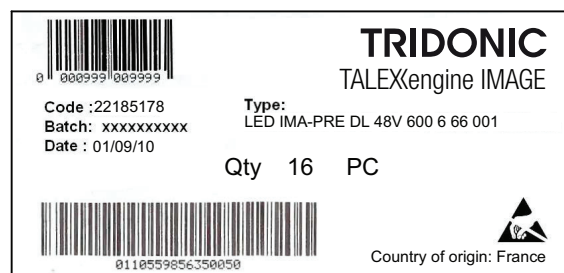


- ① Article number
- ② Production date MM/YY
- ③ Production batch
- ④ Normative symbols
- ⑤ Type of the engine
- ⑥ IP declaration
- ⑦ Ambient temperature limits
- ⑧ Electrical specification

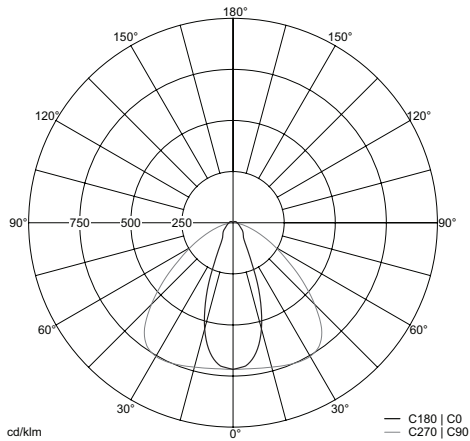
Label product packaging



Label carton



Luminous intensity distribution TALEXengine IMAGE PREMIUM:



Average illuminance		LED IMA-PRE DL 12-48V 300 2 66 001	LED IMA-PRE DL 24-48V 500 5 66 001	LED IMA-PRE DL 48V 600 6 66 001	LED IMA-PRE DL 48V 900 9 66 001	LED IMA-PRE DL 48V 1200 12 66 001	LED IMA-PRE DL 48V 1500 12 66 001
Mounting height	Beam diameter						
0.25 m	0.18 m	2,411 lx	6,027 lx	7,233 lx	10,849 lx	14,465 lx	14,465 lx
0.50 m	0.36 m	603 lx	1,507 lx	1,808 lx	2,712 lx	3,616 lx	3,616 lx
0.75 m	0.54 m	268 lx	670 lx	804 lx	1,205 lx	1,607 lx	1,607 lx
1.00 m	0.72 m	151 lx	377 lx	452 lx	678 lx	904 lx	904 lx

The evaluation to the eye safety is according to the EN 62471:2008  
(Photobiological safety of lamps and lamp systems)

Type	Article number	Colour	Actinic UV	near UV	blue light	retinal thermal	IR radiation, eye
			Es	E <sub>UVA</sub>	L <sub>B</sub>	L <sub>R</sub>	E <sub>R</sub>
			200–400 nm	315–400 nm	300–700 nm	380–1,400 nm	780–3,000 nm
LED IMA-PRE DL 12-48V 300 2 66 001	22185187	Daylight white	exempt	exempt	exempt	exempt	exempt
LED IMA-PRE DL 24-48V 500 5 66 001	22185177	Daylight white	exempt	exempt	exempt	exempt	exempt
LED IMA-PRE DL 48V 600 6 66 001	22185178	Daylight white	exempt	exempt	exempt	exempt	exempt
LED IMA-PRE DL 48V 900 9 66 001	22185179	Daylight white	exempt	exempt	exempt	exempt	exempt
LED IMA-PRE DL 48V 1200 12 66 001	22185180	Daylight white	exempt	exempt	exempt	exempt	exempt
LED IMA-PRE DL 48V 1500 12 66 001	22185181	Daylight white	exempt	exempt	exempt	exempt	exempt

**Exempt:**

The LED does not pose any photobiological hazard.

**Low risk:**

The LED does not pose a hazard due to normal behavioral limitations on exposure.

**Moderate risk:**

The LED does not pose a hazard due to the aversion response to very bright light sources or due to thermal discomfort.

**High risk:**

The LED may pose a hazard even for momentary or brief exposure.

Coordinates and tolerances according to CIE 1964

CIE coordinates

Daylight white 6,500 K

	x0	y0
Centre	0.3200	0.3270

MacAdam Ellipse: 5SDCM

Daylight white

