



Data sheet

Constant current LED control gear
12 W, Multiple Output Series, DALI
SELV output

Kompakt II LED

Luxtronic®

Kompakt II LED control gear

More than 25 years of experience in the design and development of electronic lighting products, the close cooperation with test authorities and the joint research in the sector of explosion protection enable the company Hadler to develop products in accordance with market trends which will exactly meet the requirements. Function and, above all, safety will take priority over other requirements.

Furthermore, in accordance with the company philosophy, Luxtronic ballasts also reflect the "second idea": Features offering an additional benefit and using the full competence of the company Hadler to allow for a unique position in the market. Both large-scale and small-scale series of the Luxtronic ballasts can be produced in a cost-effective way. The proximity to the market allows for short delivery times.

Michael Lamkowski
Head of Research & Development

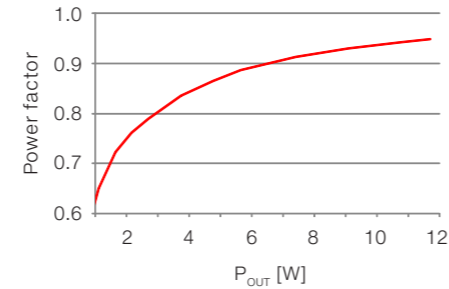


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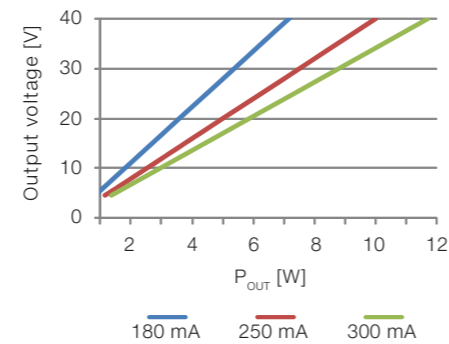
Input

Rated supply voltage	220 – 240 V
Mains frequency	0 / 50 – 60 Hz
Input voltage range a.c.	198 – 264 V
Input voltage range d.c.	176 – 275 V
Rated supply current	0.07 A at full load
Power factor	0.95 at full load (see graph)
Total Harmonic Distortion	≈ 15 % at full load



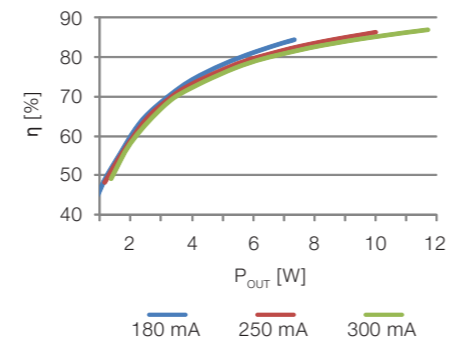
Output

Output characteristic	Constant current, SELV
Output voltage	5 – 40 V (see graph)
Output current	180 / 250 / 300 mA, selectable
Output power	1 – 12 W
No. of output channels	1
Output current accuracy	+/- 5 %
Output current ripple	< 5 % at 100 Hz
Output dimming	AM, PWM (1.2 kHz) @ ≤ 20 %
Dimming range	1 - 100 %



Efficiency

Stand-By Power consumption	≤ 0.5 W
No-load Power consumption	≤ 0.5 W
Electrical efficiency	0.87 at full load (see graph)



Interface

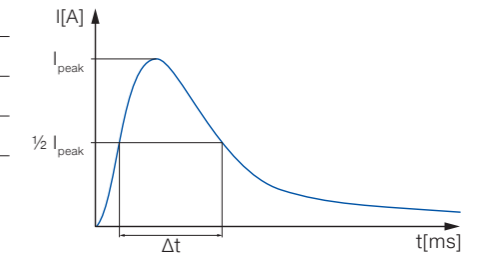
Dimming Interface	DALI, Basic insulation
Interface control current	≤ 2 mA
Dimming curve	log. / linear

Temperature, Lifetime

Ambient temperature range (T _a)	-25 – 60 °C		
Max. case temperature (T _c)	75 °C		
T _a	50 °C	55 °C	60 °C
T _c	65 °C	70 °C	75 °C
lifetime	100,000 h	75,000 h	50,000 h

Inrush current

Input voltage	230 V
I _{peak}	4.2 A
Δt	≈ 30 μs
(measured with network impedance = 850 mΩ)	

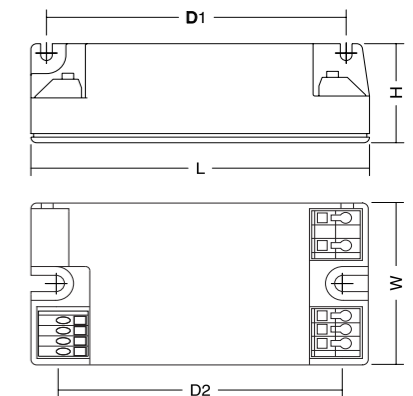


Max. No. of ECG per circuit breaker

Type	B10	50 pcs.
	C10	50 pcs.
	B16	50 pcs.
	C16	50 pcs.

Dimensions

Length x Width x Height	80 x 40 x 22 mm
Mounting hole distances D1 / D2	71 / 68 – 75 mm
Mounting screws	M4 max.
(see schematic view on the right)	



Ordering data

Weight	0.056 kg
Packaging unit	144 pcs.
Order No.	3 C 112 07 6

ECG 12 W, 180 / 250 / 300 mA, 220 – 240 V, DALI

Emergency lighting, performance during DC power supply

The LED driver is equipped with an integrated supply voltage detection, which enables a specific behavior with DC power supply.

For example, DALI commands that affect light intensity can be ignored during DC power supply.

Please contact your sales partner for the appropriate pre-programming.

By default, the LED driver works equal regardless of supply current form.

The following values are factory-adjusted:

EOF ₁	100 %	selectable from 1 % to 100 %
“Time to light” in DC mode	< 0.5 s	suitable for high-risk task area lighting

Temperature protection

The LED driver is temperature protected to 110 °C according to EN 61347-1 C5 e. It has a built-in temperature overload protection that reduces output power down to 50% in case of too high ambient temperatures.

By default, there is no protective shutdown to ensure a reliable lighting level even in emergency lighting applications.

Please contact your sales partner for other pre-programming.

The current temperature of the electronic assembly (T_{board}), which represents the basis of the whole valuation process, can be retrieved via DALI from memory bank 0x02, address 0x0A.

Earthing

Operation without earthing is permitted. For EMI reasons and to reduce leakage current induced glow effects of the LEDs earthing is recommended.

Standards

- EN 61347-1
- EN 61347-2-13
- EN 62384
- EN 55015
- EN 61547
- EN 61000-3-2
- EN 62386

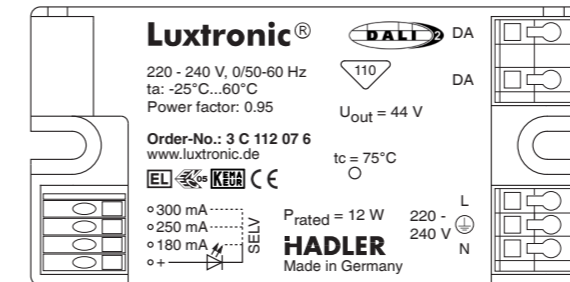
Suited for use in class I and class II luminaires

Wiring

Max. output cable length	200 cm
Input and DALI wire cross-section	0.5 – 1.5 mm ²
Output wire cross-section	0.2 – 0.5 mm ²

The wiring should be short and without crossings for best EMC results.

Wiring diagram



Input

Rated supply voltage	220 – 240 V
Mains frequency	0 / 50 – 60 Hz
Input voltage range a.c.	198 – 264 V
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Rated supply current	0.07 A at full load
Power factor	0.95 at full load (see graph)
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Output

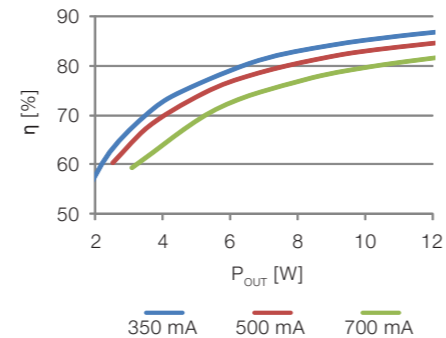
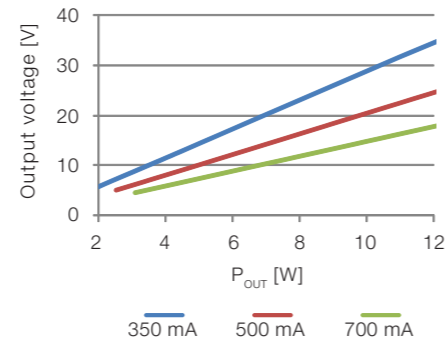
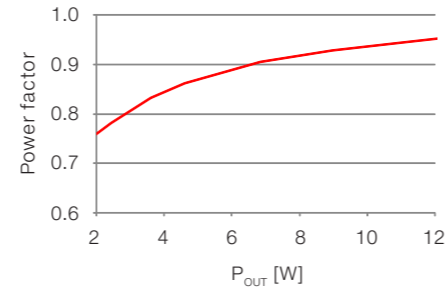
Output characteristic	Constant current, SELV
Output voltage	5 – 40 V (see graph)
Output current	350 / 500 / 700 mA, selectable
Output power	2 – 12 W
No. of output channels	1
Output current accuracy	+/- 5 %
Output current ripple	< 5 % at 100 Hz
Output dimming	AM, PWM (1.2 kHz) @ ≤ 20 %
Dimming range	1 - 100 %

Efficiency

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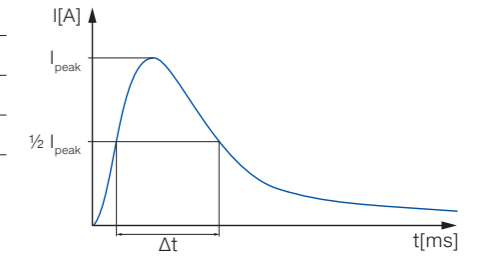


Temperature, Lifetime

Ambient temperature range (T _a)	-25 – 60 °C				
Max. case temperature (T _c)	75 °C (350, 500 mA), 70 °C (700 mA)				
	75 °C (350, 500 mA)		70 °C (700 mA)		
T _a	50 °C	55 °C	60 °C	50 °C	55 °C
T _c	65 °C	70 °C	75 °C	65 °C	70 °C
lifetime	100,000 h	75,000 h	50,000 h	70,000 h	50,000 h

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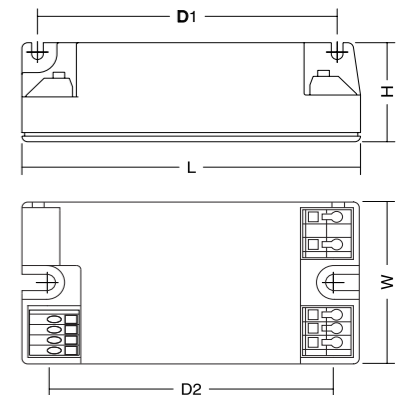
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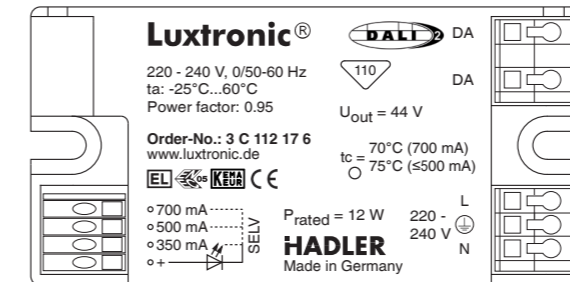
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Wiring diagram





<http://www.hadler-gmbh.de/en/luxtronic/all-products/>

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