

## HYL Series

### 1. General Information

1.1 LED Driver identification	HYL-020R0500G088-I
1.2 LED control gear type	Independent
1.3 LED configuration	500mA 1 channel
1.4 Type of LED's	500mA LED or LED module
1.5 Type of protection	IP20
1.6 Suit for Luminaires	Class II

### 2. Input (Mains) Specifications

2.1 Nominal voltage	220...240 V <sub>AC</sub>
2.2 Nominal frequency	50/60 Hz
2.3 Min. AC voltage for starting	198V <sub>AC</sub> start-up with operating temperature
2.4 AC operation on	198...264 V <sub>AC</sub>
2.5 Min. DC voltage for starting	/
2.6 DC operation on	/
2.7 Surge current	/
2.8 Rated input power	≤25 W, @230V <sub>AC</sub>
2.9 Input current	<0.10 A, @230V <sub>AC</sub>
2.10 Power factor	>0.95, @230V <sub>AC</sub>
2.11 Input current harmonics	IEC 61000-3-2
2.12 Total harmonic distortion	≤10 %, @230 V <sub>AC</sub> Full-load
2.13 Full-load efficiency	≥85 % (typical 86 %)
2.14 No load power consumption	≤1 W
2.15 Leakage current	/
2.16 Number of mains fuses	1

### 3. Output (Mains) Specifications

3.1 Number of channels	1
3.2 Rated output power	12...20 W
3.3 Min. output voltage	24 V <sub>DC</sub>
3.4 Max. output voltage	40 V <sub>DC</sub>
3.5 Max. declared output voltage	50 V <sub>DC</sub>
3.6 Average nominal output current	500 mA
3.7 Output current tolerance (max)	±5 %
3.8 Dimming	/
3.9 Way of dimming	/
3.10 Dimming range	/
3.11 Open circuit proof	Yes
3.12 Overvoltage output protection	Yes
3.13 Short circuit protection	Yes
3.14 Max. cable length without LED module	≤1.5 m
3.15 Max. ripple current	≤10 %

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3.16 Type of output	Constant Current
3.17 Turn-on Time	≤1.0 s

### 4. Temperatures and Life expectation

4.1 Min. allowed ambient Temp.	-20 °C
4.2 Max. allowed ambient Temp.	+50 °C
4.3 Allowed operating humidity range	5 %...90 %
4.4 Max. allowed T <sub>C</sub> Temp.	80 °C
4.5 Over temperature protection	/
4.6 Average life time (the max. ta=50°C, the max.failure rate per 1000 hours is 0.3%)	Up to 50,000 hours
4.7 switching cycles during life time	Up to 100,000 cycles(25°C)

### 5. Immunity

5.1 Immunity against static discharge	IEC 61547
5.2 Immunity against radio frequency electric and Magnetic fields	IEC 61547
5.3 Immunity against power frequency electric and magnetic fields	IEC 61547
5.4 Immunity against transient voltage fluctuation	IEC 61547
5.5 Immunity against injected currents on AC line	IEC 61547
5.6 Immunity against surge voltage and currents (AC)	IEC 61547
5.7 Immunity against voltage dips (AC)	IEC 61547
5.8 Immunity against voltage interruptions	IEC 61547
5.9 Magnetic shielding	

### 6. RFI Requirements

6.1 Disturbance voltages at mains terminals according to luminaries of class II (or I)	EN 55015
6.2 Radiated disturbance voltages	EN 55015

### 7. Safety Requirements

7.1 Cree page distance and clearances	IEC 61347-2-13
7.2 Protection against contact with live parts	IEC 61347-2-13
7.3 Voltage at ballast terminal after 1 min	IEC 61347-2-13
7.4 Max. working voltage	IEC 61347-2-13
7.5 Humidity / insulation resistance test	IEC 61347-2-13
7.6 Humidity / high voltage test	IEC 61347-2-13
7.7 Strength against mechanical damage	/

### 8. Installation and Wiring

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8.1 Terminals	Screw/insert type
8.2 Number of mains terminals	1 with 2 ports
8.3 Number of LED terminals	1 with 2 ports
8.4 Max. diameter of test contacts	1.2 mm
8.5 Cross section of wires (any lead)	0.75...1.5 mm <sup>2</sup> massive leads
8.6 Max. allowed cable capacitance	100 pF
8.7 Max. allowed cable length	1.5 m
8.8 Min. distance between LED drivers	5 cm

### 9. LED Driver Case

9.1 Case material and identification	PC Plastic, L88D-I
9.2 Case drawing Number	refer to the attached drawing
9.3 Approx. dimension	L88×W38×H21 mm
9.4 Mounting hole distance	L82×W31 mm
9.5 Mounting screws	Max. M3
9.6 Ground connection via	/
9.7 Terminal covers	Yes
9.8 Class of protection	IP20
9.9 Labelling	/
9.10 Barcode identification	/

### 10. Environmental Requirements

10.1 Noise produced by driver during start	/
10.2 Noise produced by driver during operation	<30 dB at distance 1 m
10.3 Labelling of plastic case	Silkscreen
10.4 Absence of dangerous materials	Yes
10.5 After end of life to be treated as	/

### 11. Approvals

11.1 Approval according to	CE,SAA,CB
11.2 EMV approval according to	EN 55015

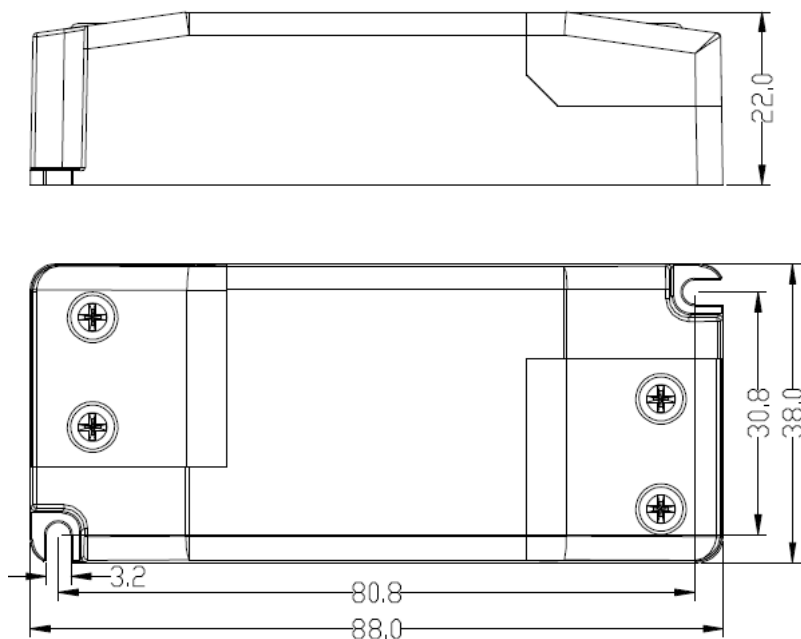
### 12. Packaging and Transport

12.1 Immunity against vibration and shock	/
12.2 Weight (g)	/
12.3 Packing unit	24pcs/carton
12.4 Labelling of package	according to 3AAA standards
12.5 Barcode identification of package	according to 3AAA standards

### 13. Dimension, Drawing Diagram and Label

13.1 Dimension	
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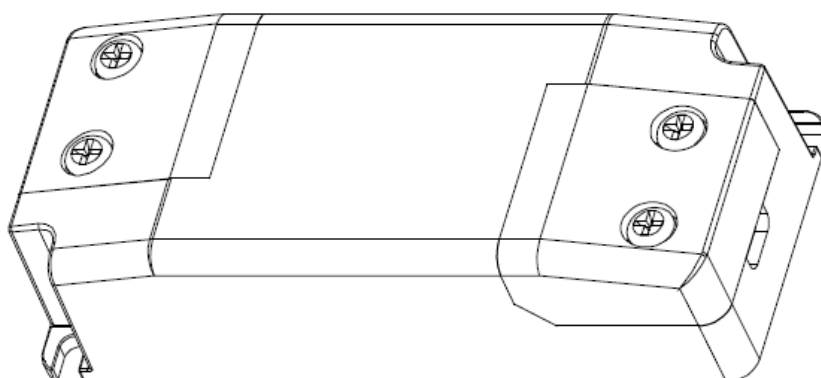
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Unit: mm

Tolerance:  $\pm 1.0\text{mm}$

### 13.2 Drawing Diagram



### 13.3 Label

