

HYL Series

1. General Information

1.1 LED Driver identification	HYL-045Q1050G150 I
1.2 LED control gear type	Independent
1.3 LED configuration	1050 mA
1.4 Type of LED's	1050 mA LEDs or LED module
1.5 Type of protection	IP20
1.6 Suit for Luminaries	Class II

2. Input (Mains) Specifications

2.1 Nominal voltage	220...240 V _{AC}
2.2 Nominal frequency	50/60 Hz
2.3 Min. AC voltage for starting	190 V _{AC}
2.4 AC operation on	198...264 V _{AC}
2.5 Min. DC voltage for starting	/
2.6 DC operation on	/
2.7 Inrush current	≤ 10A (250us)
2.8 Rated input power	≤ 56W, @230 V _{AC}
2.9 Input current	≤ 0.24A, @230 V _{AC}
2.10 Power factor	0.95, @230 V _{AC}
2.11 Input current harmonics	IEC 61000-3-2
2.12 Total harmonic distortion	≤ 20%
2.13 Full-load efficiency	87 % Typical
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	32...45W
3.3 Min. output voltage	30 V _{DC}
3.4 Max. output voltage	43 V _{DC}
3.5 Max. declared output voltage	60 V _{DC}
3.6 Average nominal output current	1050 mA
3.7 Output current tolerance (max)	±10% (from the range of 30V-43V)
3.8 Dimming	Yes
3.9 Way of dimming	Phase cut
3.10 Dimming range	10%...100%
3.11 Open circuit proof	Yes
3.12 Overload protection	Yes
3.13 Short circuit protection	Yes
3.14 Max. cable length without LED module	≤ 1.5 m
3.15 Max. ripple current	≤ 5%

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3.16	Type of output	Constant Current
3.17	Overvoltage output protection	Yes
3.18	Number of output channels	1
3.19	Turn-on Time	≤ 0.5 s

4. Temperatures and Life expectation

4.1	Min. allowed ambient Temp.	-20 °C
4.2	Max. allowed ambient Temp.	+45 °C
4.3	Allowed operating humidity range	5...85 %
4.4	Max. allowed T _C Temp.	85 °C
4.5	Over temperature protection	/
4.6	Average lifetime	50,000 hours
	(The max. T _a =45°C, the max. failure rate per 1000 hours is 0.3%)	
4.7	Switching cycles during lifetime	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

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	/

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8. Installation and Wiring

8.1	Terminals	Push 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, input side ¹⁾	0.75...1.5 mm ²
8.6	Cross section of wires, output side ¹⁾	0.5...1.5 mm ²
8.7	Max. allowed cable capacitance	100 pF
8.8	Max. allowed cable length	2.0 m
8.9	Min. distance between LED drivers	5 cm

¹⁾Solid or flexible leads

9. LED Driver Case

9.1	Case material and identification	PC Plastic, L150D-A
9.2	Case drawing Number	refer to the attached drawing
9.3	Approx. dimension	L198×W43×H30 mm
9.4	Mounting hole distance	L141 mm
9.5	Mounting screws	Max. M4
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	<25 dBA at distance 0.5 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, CB, SAA, RoHS
11.2	EMC approval according to	EN 55015

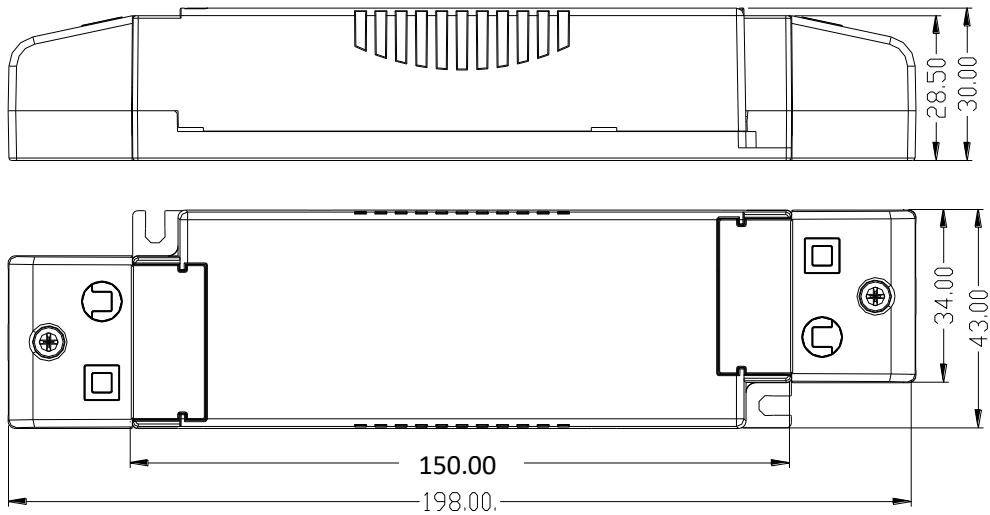
12. Packaging and Transport

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

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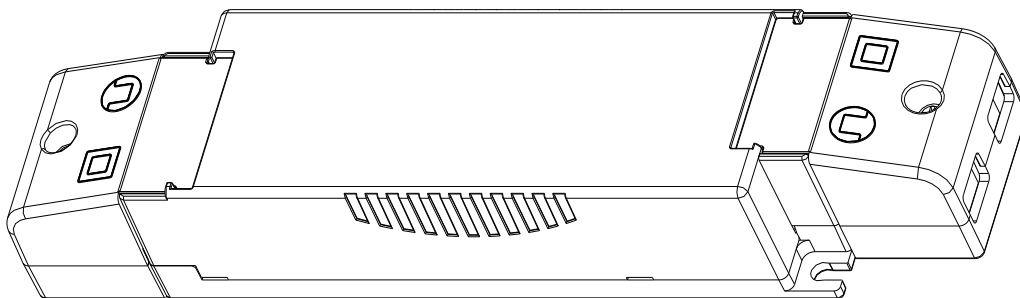
13. Dimension, Drawing Diagram and Label

13.1 Dimension



Unit: mm

Tolerance: ±1.0mm



13.2 Label

HYL-045Q1050G150
Constant Current LED Driver / LED控制装置
leading & trailing Edge

P _{rated} [W]	U _N [V]	f _N [Hz]	I _N [A]	U _{rated} [V]	I _{rated} [mA]	t _a [°C]	t _c [°C]	λ
45	220-240	50/60	0.24	30-43	1050	-20...+45	85	0.95

PRI~

● L

● N

SEC ~

- ●

+ ●

LED Only

U_{Out}=60V

PR10.75-1.5

8mm SEC 0.5-1.5

SELV

中国制造

Made in China