



ECG020HTEA500-C3XD	
Output Type	Constant Current
Description	20W 20-42Vdc
Input Voltage	200-240Vac
Input Frequency	50/60Hz
warranty	3 years

LED control device specification VI.0 version

Features

- 200-240Vac input voltage range;
- Built-in active PFC function;
- High power factor, PF>0.9;
- Primary side electrical safety isolation;
- DM 1.0kV Lightning surge protection;
- Constant Current Output;
- Flicker-free;
- High reliability and long lifetime;
- Traic dimming;
- Suitable for indoor application, IP20;
- Protections: Short circuit / Over load;
- 3 Years warranty;

Applications

- LED Ceiling Lighting;
- LED strip light;
- LED Pane Lighting;
- LED grille lamp;
- Other LED commercial Lighting;

Description

The ECG020HTEA500-C3XD series is a 10-20W, constant-current IP20 LED driver that operates from 200 to 240V ac input with excellent power factor and THD feature. It is created for LED ceiling lighting, LED grille lamp, LED Pane Lighting, LED strip light, and other LED commercial lighting. The high efficiency of these drivers and compact metal case enable them to run cooler, significantly improving reliability, SCR dimming, and extending product life. To ensure trouble-free operation, protection is provided against input surge, output over voltage, short circuit, and over load.



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Electrical Specifications

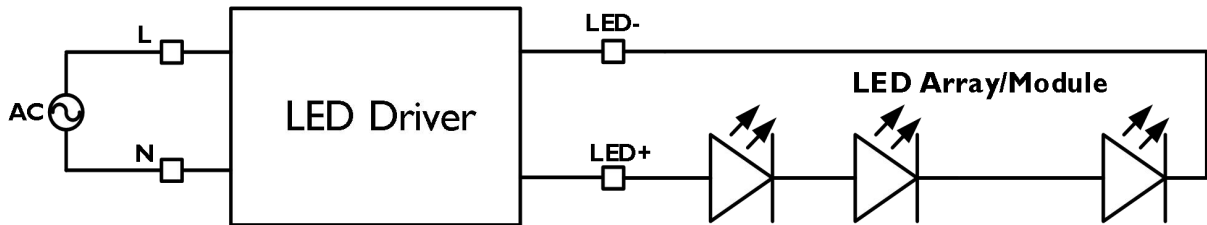
Model:		ECG020HTEA500-C3XD
Output	Output Power	20W Max.
	Output Terminal	CS200-00-350-03P/3Pin//300Vac/8A/ black black red , Black against the retaining wall /CQC、VDE、UL certification
	Output Voltage	20-42Vdc
	Open load Voltage	<55Vdc
	Output Current	500mA
	Output Current Accuracy	±6%
	Line Regulation	±3%
	Load Regulation	±3%
	Start-up Delay Time	<0.5S@176Vac
	Start-up Current Overshoot	<1.5 Iout
	Ripple & Noise Pk-Pk	<5%
	Eff.@(230Vac) & Po_max	>84%
Input	Nominal Input Voltage	0.1A Max. @176Vac
	Rated Input Voltage Range	200-240Vac
	AC Current Max	CS200-3.5-500-SL/2P/3.5±0.2/250V/3.5A/gray /PA66/UL/VDE/CE/CQC/CB
	Input Terminal	50/60Hz
	Frequency Range	PF>0.9@ 200-240Vac, 80-100% Load
	Power Factor(PF)	>0.9
	THD	<20A @240Vac Ta=25°C
	Inrush Current Max	<0.5mA @ 240Vac
Protection	Leakage Current	No damage, Hiccup Mode,Auto recovery when the fault condition is removed.
	Short Circuit	DM1.0KV
	Surge Protection (KV)	Auto recovery after fault removed
Environment	Over Temperature	Ta :-25~+40°C (Full load)
	Ambient Temperature	20~80% RH
	Operating Humidity	-40~+85°C, 5~80% RH
	Storage Temperature & Humidity	IP20
Safety & EMC	Environment Protection Rating	IEC/EN61347-1(GB19510-1-2009), IEC/EN61347-2-13(GB 19510.14-2009), IEC/EN60598-1; IEC/EN60598-2-6;
	Safety Standards	I/P-O/P: 3.75KVac@60S; Leakage current <5mA
	Withstand Voltage	Input-Output: >10MΩ @500Vdc
	EMI	EN55015;
	Harmonic Current	EN61000-3-2 Class C (≥50% Max load)
	EMS	EN61000-4-2,3,4,5,6,8,11; ENV50204, EN61547, EN55024 Industry standard
Others	Dimensions and Weight	98*38*28mm(L*W*H); 85g
	MTBF	>175KHours, 84%Load MIL-HDBK-217F (25°C)
	Lifetime	>60000 Hours, at 40°C



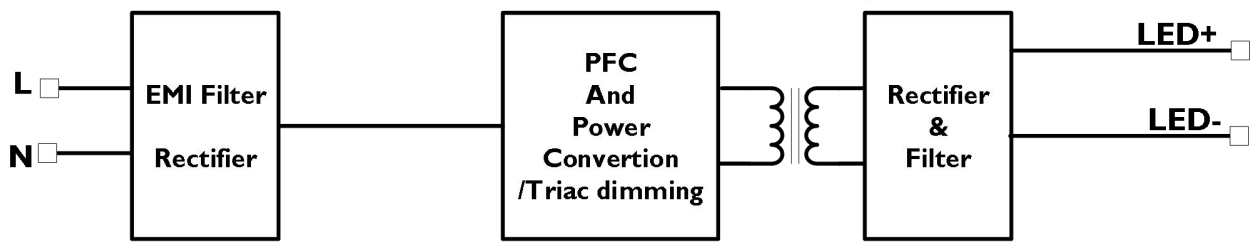
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Wiring Diagram

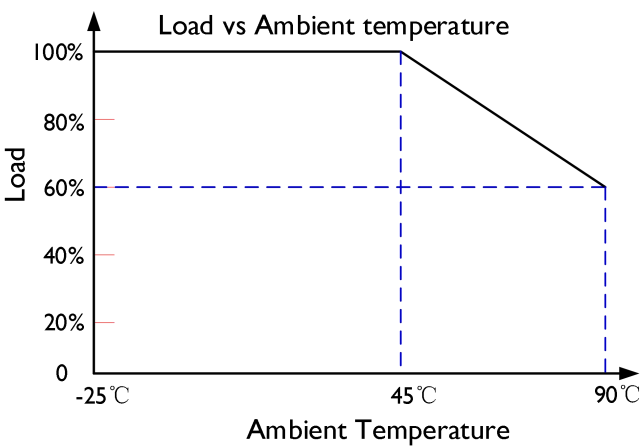
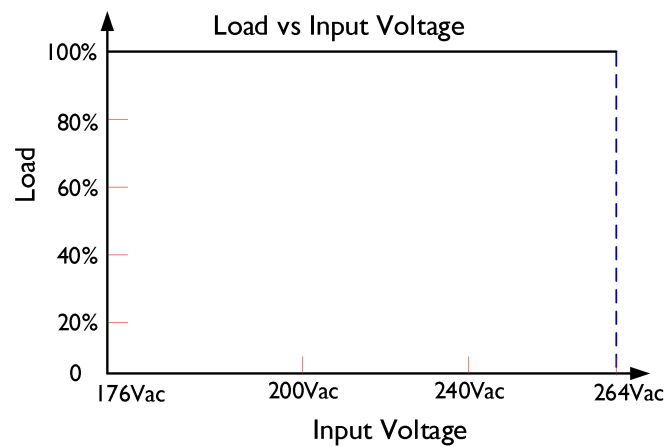


Wiring Diagram



LED Driver Circuit Block Diagram

Derating Curve





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Part Number Description

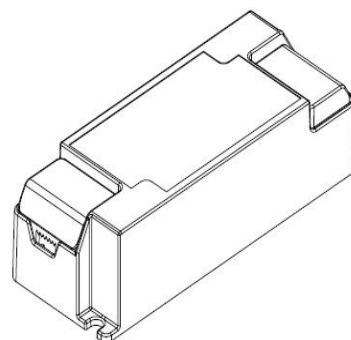
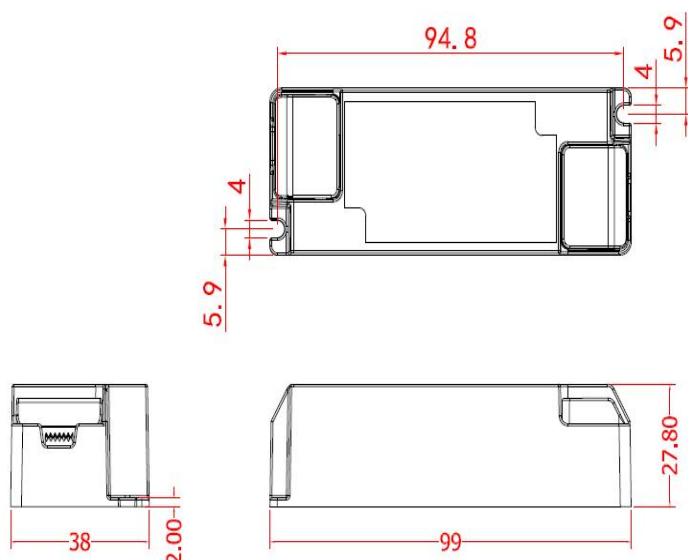
ECG	020	H	T	E	A500	-	C3XD
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)

- (1). The Name of the product series;
(2). The power of the product, 020 means 20W;
(3). Input Voltage range, H means 200-240Vac;
(4). Dimming Type: T means Traic dimming;
(5). Safety certification type: E means the product match European certificated;
(6). Output Current: A500 means 500mA;
(7): N/A;
(8). customer Code: can be form 0 to 9 and A to Z

Label

TBD

Enclosure (unit: mm)

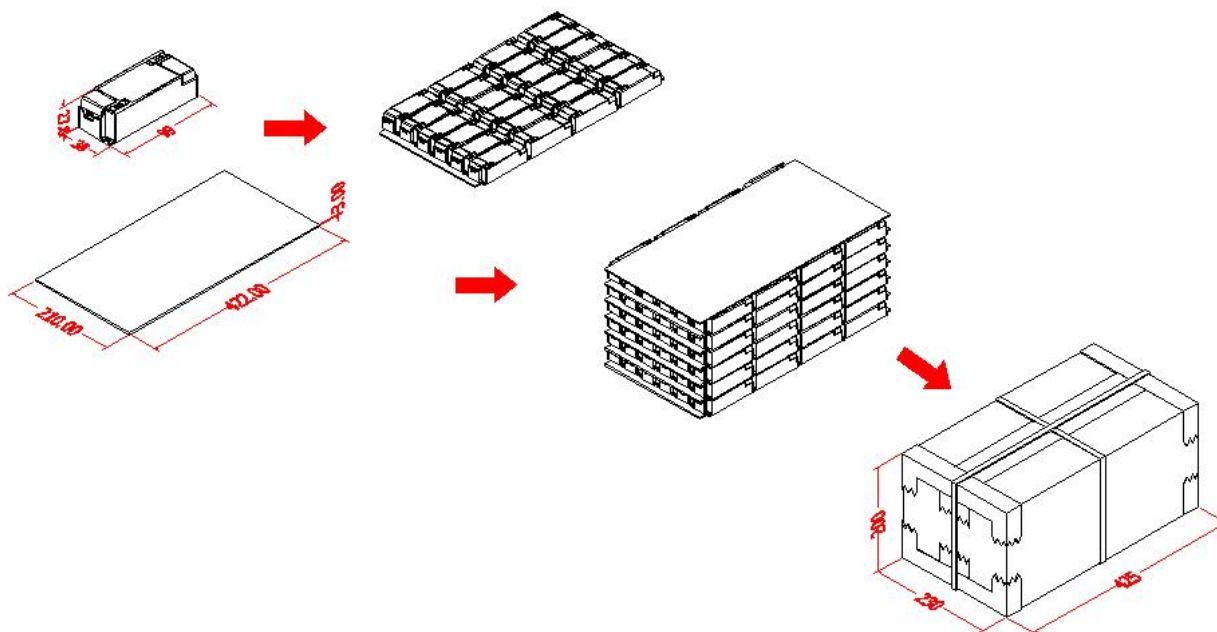




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Packaging information(unit: mm)



Installation & Application Notes

Section I –Cautions

- 1.1 Please make sure that the input and output terminals, the positive and negative polarities of output terminal are on the right position respectively before connecting this unit.
- 1.2 To avoid getting an electric shock, do remember not to touch the unit while it is working.
- 1.3 In order to avoid effecting the reliabilities of this unit, please do not use the power which is exceed what the unit marked. If any output parameters need to be changed, please inquire the technical staff of our company.
- 1.4 In order to ensure the safety and reduce the interference, please make sure the ground lead is connected with earth.
- 1.5 In order to extend the life time, you'd better install it in a position with good ventilation and heat dissipation conditions.
- 1.6 This power's mainly used on constant current load .If your load is capacitive, inductive or resistive, do communicate with our marketing department before placing the order.
- 1.7 Please contact with the customer service department of our company as soon as possible instead of repairing it by yourself when there's something wrong with it.

Section II – Package

- 2 The product name, model, manufacturer identifier, manufacture date and so on will be on the formal packing box. And an outgoing inspection report will be sent with the products together.

Section III-Delivery

- 3 It can be delivered on ship, plane, train and so on. Keep no basking or pouring during the transportation. Handle with care.

Section IV-Storage

- 4 It should be stored in packing box when not in use. Storage temperature and humidity should be fit to the requirement. And any mordant surroundings are forbidden. At the same time, strong mechanical vibration and magnetic field effect are also prohibited. Packing box is suggested to be at least 20cm high from the ground, 50cm away from the wall, heat source and window type air inlet. It needs to be reexamined before using it if the storage time is longer than six months.



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Safety and EMC Standards

EN 61347-1	Lamp control gear. Part 1 General and safety requirements
EN61347-2-13	Lamp control gear. Part 2-13, Particular requirements for DC or AC supplied electronic control gear for LED modules
EN60598-1	Luminaires-Part 1: General requirements and tests
EN60598-2-6	Luminaires - Part 2: Particular requirements; section 6: Luminaires with built-in transformers for filament lamps
EN55015	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
IEC61000-4	Electromagnetic compatibility(EMC)
IEC 61000-6-1	Electromagnetic compatibility(EMC)-Part 6-1: Generic standards-Immunity for residential, commercial and light-industrial environments
IEC 61000-6-2	Electromagnetic compatibility(EMC)-Part 6-2: Generic standards-Immunity for industrial environments
IEC60695-2-10	Fire hazard testing-Part 2-10: Glowing/hot-wire based test methods: Glow-wire apparatus and common test procedure
EN60950	Safety of information technology equipment
IEC61000-3-2	Electromagnetic compatibility-Limits-Limits for harmonic current emissions (equipment input current ≤ 16 A per phase)

Product Model List

Model	I/P Voltage	O/P Power	O/P Voltage	O/P Current	PF	Efficiency
ECG020HTEA500-C3HN	200-240Vac	20W	20-42Vdc	500mA	>0.9	84%

RoHS Compliance

Our products comply with the European Directive 2011/65/EC, calling for the elimination of lead and other hazardous substances from electronic products.

Revision History

DATE	REV	Description of change				
		Item	From		To	
	1.0	Release				
Prepared By		Checked By		Approved By		File Number
Date		Date		Date		

Specifications are subjected to change without notice.



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Contact Us



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