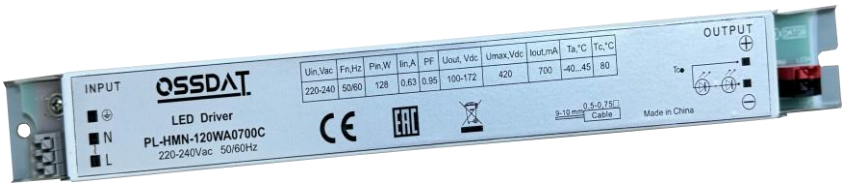
Non-isolated Metal housing

Model: PL-HMN-120WA0700C



Product Features

1, Constant current output
2, High Quality of light
3, High Reliability
3, Low Output Current Ripple
4, Non-isolated
5, Internal usage

1) Compliances and Approvals	
Approvals	CE EAC
Built-in/independent	Built in
Ingress protection	IP20
Suitable for fixture of protection Class	Class I
Output Safety Level	Non-isolated
Enviromental	Indoor
Features	Fixed

2) Electric Input Characteristics	Symbol	Remarks	Min.	Typical	Max.	Unit
Input Voltage						
Rated mains voltage	Vin	Nominal range	220	-	240	Vac
Mains voltage range	Vin.op	operational	195	-	264	Vac
Mains frequency nominal	fn	Nominal range	50		60	Hz
Rated mains voltage	Vin	Nominal range		NA		Vdc
Input Current						
Input current	Iin	@230Vac, full load		0.63		A
Input inrush current		@264Vac, 50% width		90.4A,232us		A, us
Power Factor	PF	@230Vac, full load	0.95			
Total Harmonic distortion	THD	@230Vac, full load			20	%
System Efficiency	η	@230Vac, full load		94		%
Input Power						
Input Power	Pin	@230Vac, full load			128	W
Input Power@ open load		rated input voltage			0.7	W
Input Power@ standby		rated input voltage		NA		
Dimming						
Dimming type				NA		

3) Electric Output Characteristics	Symbol	Remarks	Min.	Typical	Max.	Unit
Output Voltage						
Output voltage range	Vo	measured at end of wire	100		172	Vdc
Output voltage @no load	Vo.max	open load		420		Vdc
Output Current						
Output Current	Io			700		mA
Output Current tolerance			-5		5	%
Current Ripple		@230Vac (Imax-Imin)/(Imax+Imin)		1		%
Output Power	Po	output performance power			120	W
Isolation	In-Out	3000Vac. for 1min		NA		mA

4) Robustness	Symbol	Remarks	Min.	Typical	Max.	Unit
General						
Electric strength	Input-Output	50Hz/60Hz and be applied for 1 min		NA		Vrms
	Input-GND			1480		Vrms
Insulation Resistance Test		500Vd.c. for 1min, For SELV part is 100 Vd.c.	2			MΩ
Reliability						
Rated Life@Tc.max		10% failure			50K	Hrs
Rated Life@Tc.life		10% failure			100K	Hrs
Surge	L-N			1		kV
Surge	L/N-PE			2		kV
Environment Operation						
Ambient temperature	Ta		-40		45	℃
Maximum Tcase	Tc.max				80	℃
Tc life	Tc.life				70	℃
Operation Humidity	H.op		10		90	%
Environment Storage						
Storage temperature	T.st		-40		85	℃
Storage Humidity	Hst		10		90	%
Abnormal Condition						
Input Over Voltage		Protected, no damage to driver①		Without		Vac
Output Short Circuit		Protected, no damage to driver②		With		
Output Open load		Output voltage limited to Vo.max③		240		Vdc
Too High Ambient Temperature		Protected by built-in thermal protection in controller IC④		With		
Input Over Power		Input power should be limited and no damage to driver⑤			128	W

① If the LED driver connects to Input Voltage 380Vac, then the protection Turn On and the Led driver is switched off until its connect to Input voltage 220-240Vac.
In this protection mode, the led driver does not blink and can be not damage more than 48 hours

② Auto Recovery

③ Auto Recovery

④ The output current decreases

⑤ There is risk to damage the LED driver or decreses the life time.

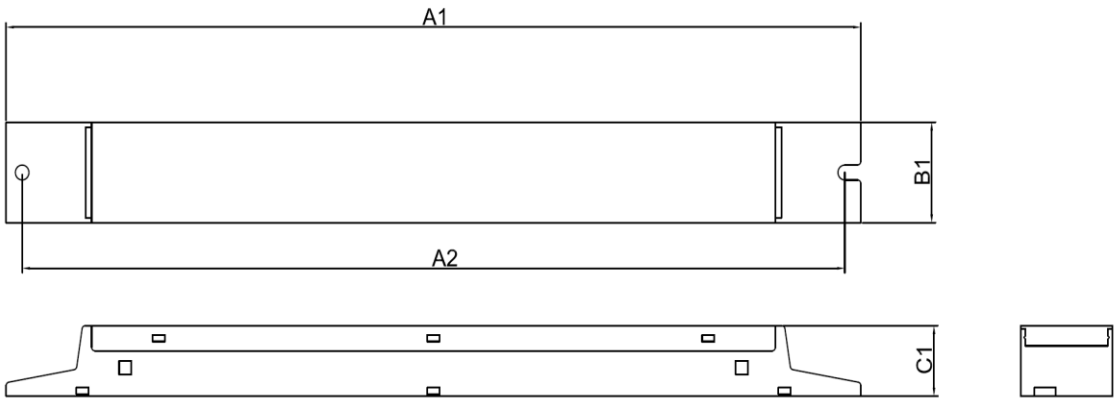
5) Warranty

- Warrenty 5 years
- Except for the following circumstance:
  1) Improper Installation or operation
  2) Misuse
  3) Abuse
  4) Unauthorized or improper repair alteration
  5) Accident or negligence in use, storage, transportation.
  6) Any natural destroy
  7) Exceed the specifiaction as per the product datasheet

Non-isolated Metal housing

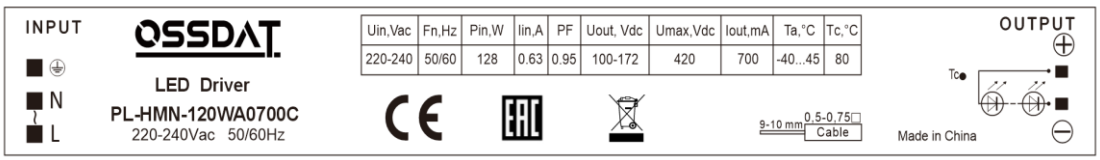
Model: PL-HMN-120WA0700C

6) Mechanical properties	Symbol	Remarks					Unit
Dimensions			L	W	H	M	
			280(A1)	30.5(B1)	21.5(C1)	269.5(A2)	mm
Housing Material				Metal			



7) Physical properties	Symbol	Remarks		Unit
Weight			223	gram
Qty to Carton			50	pcs
Carton Size:			32.5*29*14.5	cm
G.W:			11.5	kgs
Potting Raw materials			without	
Printing		printing can be changed by customer's email confirmation		

size:220*27mm



Connection		Signal	Cable Description	Remark
	Input	L	0.5-0.75mm^2	grey, push-in terminal
		N	0.5-0.75mm^2	grey, push-in terminal
		G	0.5-0.75mm^2	grey, push-in terminal
	Output	+	0.5-0.75mm^2	red, push-in terminal
		-	0.5-0.75mm^2	black, push-in terminal
Connection Marking				Yes

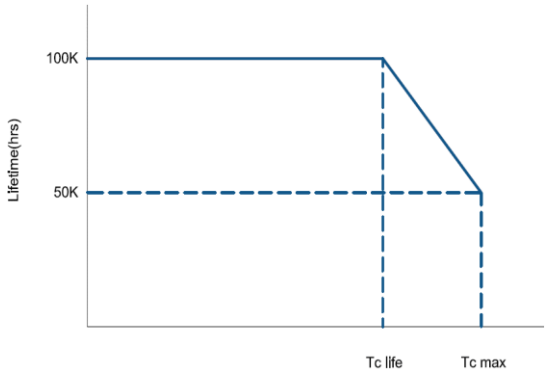
8) Directives / Test Standards	Directives / Test Standards
Safety	IEC61347-1、 IEC61347-2-13
EMC	EN55015、CISPR15、EN61000-3-2、EN61547、EN61000-4-2、EN61000-4-3、EN61000-4-4、EN61000-4-5、EN61000-4-6、EN61000-4-11

9) Addition Remarks

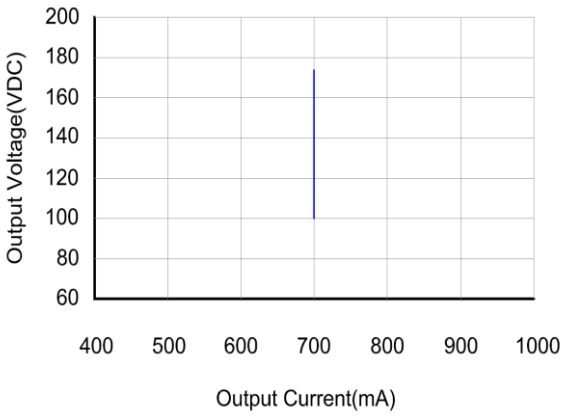
- The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. The manufacturer of LED light fixture should re-confirm the EMC of the whole light fixture before the whole light fixture is finished.
- The luminaire manufacturer is responsible for the correct choice and installation of the LED drivers according to the application and product datasheets. Operating conditions of the LED drivers may never exceed the specifications as per the product datasheet.
- All parameters, if not specified, are measured at 230Vac and 25°C ambient temperature

10) Performance

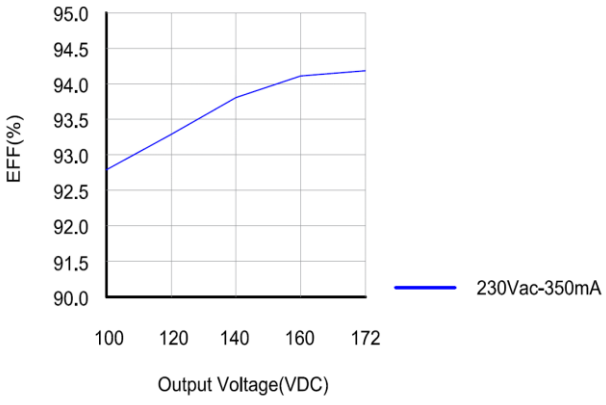
Lifetime vs. Temperature Curve



Operating window



Efficiency VS.Load



Power Factor Characteristics

