

Product Features

- 1, Constant current output
- 2, High Quality of light
- 3, High Reliability
- 3, Low Output Current Ripple
- 4, Isolated
- 5, Internal usage
- 6, DIP Switch 250/300/350/400mA
- 7, Input voltage 380Vac protection

Customer Item No. _____ Customer Signature: _____ IC. 830 Version V1

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	Isolated
Enviromental	Indoor
Features	Fixed

2) Electric Input Characteristics

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
Input Current						
Input current	Iin	@230Vac, full load		0.22		A
Input inrush current		@264Vac, 50% width		24.4A,164us		A, us
Power Factor	PF	@230Vac, full load	0.95			
Total Harmonic distortion	THD	@230Vac, full load			10	%
System Efficiency	η	@230Vac, full load		89		%
Input Power						
Input Power	Pin	@230Vac, full load			45	W
Input Power@ open load		rated input voltage			0.5	W
Input Power@ standby		rated input voltage		NA		
Dimming						
Dimming type					DIP SWITCH	

3) Electric Output Characteristics

Output Voltage																									
Output voltage range	Vo	measured at end of wire	65	140	Vdc																				
Output voltage @no load	Vo.max	open load	160		Vdc																				
Output Current																									
Output Current	Io		250/300/350/400		mA																				
Default Setting Current	Io		400		mA																				
<table><tr><td>PIN1</td><td>PIN2</td><td>U out</td><td>Iout</td></tr><tr><td>OFF</td><td>OFF</td><td>80-140V</td><td>250mA</td></tr><tr><td>ON</td><td>OFF</td><td>65-133V</td><td>300mA</td></tr><tr><td>OFF</td><td>ON</td><td>65-114V</td><td>350mA</td></tr><tr><td>ON</td><td>ON</td><td>65-100V</td><td>400mA</td></tr></table>						PIN1	PIN2	U out	Iout	OFF	OFF	80-140V	250mA	ON	OFF	65-133V	300mA	OFF	ON	65-114V	350mA	ON	ON	65-100V	400mA
						PIN1	PIN2	U out	Iout																
						OFF	OFF	80-140V	250mA																
						ON	OFF	65-133V	300mA																
						OFF	ON	65-114V	350mA																
						ON	ON	65-100V	400mA																
Output Current tolerance		-7.5	7.5	%																					
Current Ripple		@230Vac (Imax-Imin)/(Imax+Imin)	1	%																					
Output Power																									
Po	output performance power			40	W																				
Isolation																									
In-Out	3000Vac. for 1min			10	mA																				

4) Robustness	Symbol	Remarks	Min.	Typical	Max.	Unit
General						
Electric strength	Input-Output	50Hz/60Hz and be applied for 1 min		3000		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				85	℃
Tc life	Tc.life				75	℃
Operation Humidity	H.op		10		90	%
Environment Storage						
Storage temperature	T.st		-25		85	℃
Storage Humidity	H.st		10		90	%
Abnormal Condition						
Input Over Voltage		Protected, no damage to driver ^①		380		Vac
Output Short Circuit		Protected, no damage to driver ^②		With		
Output Open load		Output voltage limited to Vo.max ^③		160		Vdc
Too High Ambient Temperature		Protected by built-in thermal protection in controller IC ^④		With		
Input Over Power		Input power should be limited and no damage to driver ^⑤			45	W

① If the LED driver connects to Three-phase electricity (380Vac), then the protection Turn On and the Led driver is switched off until its connect to two-phase electricity(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 and decreases the life time.

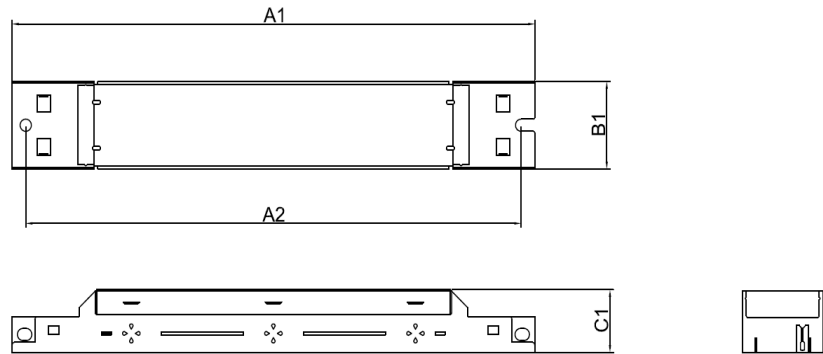
5) Warranty

- 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 specifiacion as per the product datasheet

6) Mechanical properties	Symbol	Remarks	Unit
Dimensions		L W H M	
		195(A1) 30(B1) 21.5(C1) 184.8(A2)	mm
Housing Material		Metal	



7) Physical properties	Symbol	Remarks	Unit
Weight		130	gram
Qty to Carton		100	pcs
Carton Size:		31*20.5*23.5	cm
G.W:		13.5	kgs
Potting		NA	
Printing		printing can be changed by customer's email confirmation	

INPUT

L

N

LED Driver

PL-HMI-040WA0400C-380V

220-240Vac 50/60Hz

Pin	45W	lin	0.22A
PF	0.95	Umax	160V
Iout	400mA	Uout	65-100V
Ta	-15...45°C	Tc	85°C

9-10mm 0.5-0.75 Cable

Tc

PIN1	PIN2	U out	I out
OFF	OFF	80-140V	250mA
ON	OFF	65-133V	300mA
OFF	ON	65-114V	350mA
ON	ON	65-100V	400mA

OUTPUT

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

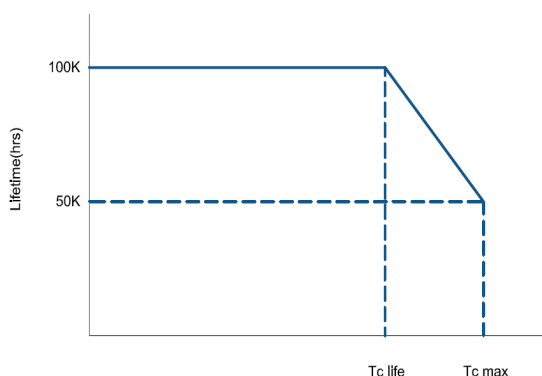
- The LED driver used in combination with the end device is one of the accessories of the whole light fixture, and the EMC of the whole light fixture is not only susceptible to the driver itself, but to the LED light fixture and the whole light fixture's wiring. The manufacturer of LED light fixture 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.

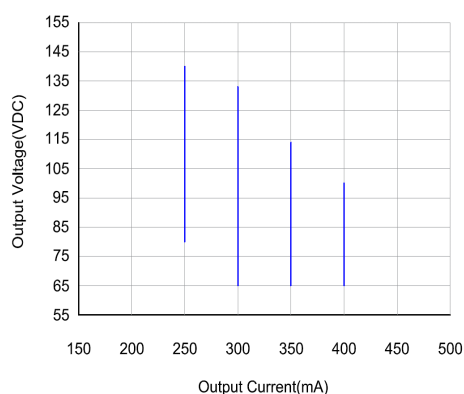
- All parameters, if not specified, are measured at 230Vac and 25°C ambient temperature

10) Performance

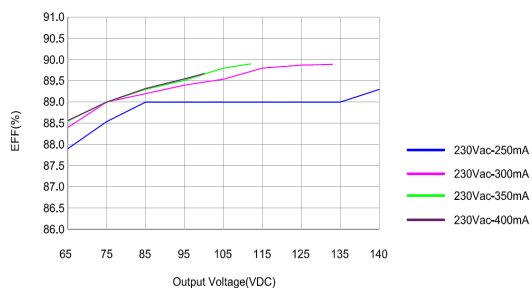
Lifetime vs. Temperature Curve



Operating window



Efficiency VS. Load



Power Factor Characteristics

