**RoHS** 



### 58W, 120-277Vac Input, Constant Current LED Driver

### ■ Features

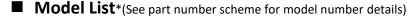
• Power Rating: 58W

• Input Voltage: 120-277Vac

- Constant current design
- Output current (500-1300mA)
- Output current selectable trough DIP Switch
- Efficiency up to 88%
- SCP, OCP
- 3 in 1 Dimming 0-10V/PWM/Timer dimming
- 0-100% dimming range, Dim-to-off
- Optional 12V/50mA Aux
- SELV output design
- IP20
- 5-year warranty

# **■** Application

• Indoor or Outdoor lights





\*Product images are for illustrative purposes only and may vary from actual design.

Model Number	Input	Output	Output	Output	Output	Efficiency	
woder wamber	<b>Voltage Range</b>	Power	Voltage	Current Min.	Current Max.	120/277Vac	Certification
LFWCD058S085ST-Lb	120-277Vac	58W	27-54V	850mA	850mA	87%/88%	UL/cUL
LFWCD058S105ST-Lb	120-277Vac	58W	27-54V	1050mA	1050mA	87%/88%	UL/cUL
LFWCD058S130ST-Lb	120-277Vac	58W	27-54V	1300mA	1300mA	87%/88%	UL/cUL
LFWCP058S130ST-Lb*	120-277Vac	58W	27-54V	500mA	1300mA	87%/88%	UL/cUL

<sup>\*</sup>DIP Switch Model with selectable output current

### ■ Technical Data

Input Voltage	120-277Vac						
Input Frequency	47-63Hz						
Input Current	800mA Max.@120-277Vac, 100% load						
Inrush current	60Amax. @230Vac, 25°C						
Power Factor	PF>0.9@120Vac/230Vac/277Vac, 100% load						
THD	<20%@115Vac/230Vac/277Vac, 100% load						
Voltage accuracy	5%						
No load voltage	2Wmax.						
Efficiency	87%@120-277Vac & 100% load						
Output Voltage	27-54V						
Ripple and Noise	500mVp-p						
Line regulation	5%lo						



# **■** Technical Data(cont.)

Load regulation	5%lo					
Turn On Delay Time	Under normal conditions, the maximum delay time is 1s					
Short-Circuit Protection	The Driver's input power will decrease to less than 5W, when short circuit occurs. The driver will auto-recover when the fault is removed  When the maximum output voltage is reached, will enter hiccup mode and will go into self-recovery after fault condition is removed.					
Open Circuit Protection						
Operating Temperature	-25°C to +50°C					
Relative Humidity	10%-90%					
Storage Temperature	-30°C to 70°C					
Storage Humidity	10%-90%, non-condensing (Sea level to 2,000m)					
Altitude	Sea level to 2000m					
Vibration	10 to 500HZ Sweep at constant acceleration of 1.0G (depth: 3.5mm) for 1 hour for each of the perpendicular axes X, Y,Z					
Leakage Current	<0.25mA					
Lifetime	≥ 5 Years@230Vac, 100% load					
MTBF	≥200,000 hours@25°C @230Vac, 80% load (MIL-HDBK-217F)					
Weight	290g					
Dimensions	306x30x20.1mm					
Packing	40pcs/carton; carton dimensions: 390x360x165mm					
Notes:						

- 1. The parameters above including the power factor, THD, efficiency are all tested under the ambient temperature 25C and humidity 50%, AC input 2330Vac and 90% output load.
- 2. lo is rated output current

# **■** Safety Compliance

Safety	GB19510.1, GB19510.14; EN61347-1, EN61347-2-13; UL8750, CSA C22.2No.250.13-12					
Insulation Resistance	Input to Output >50M Ohms/500Vdc/25°C/70%RH					
	Primary to Secondary: 3750; 5mA; 60S					
Dielectric Strength Hi-Pot	Primary to Earth: 1500; 5mA; 60S					
	Secondary to Earth: 500; 5mA; 60S					
EMI Compliance	GB17743, GB17625.1; EN55015, EN61000-3-2, EN61000-3-3					
EMS Compliance	EN61000-4-2,3,4,5,6,8,11, EN61547					
ESD	Severity Level 3/3 ±8KV, Severity Level 2/2 ±4KV					
RF	80-1000MHZ; Severity Level 2/2 3V/M					
NΓ	Performance Criterion A					
EFT	Severity Level 2/2 1KV					
Surge Immunity	Severity Level 2/2 1KV, Severity Level 3/3 2KV, Performance Criterion B					



#### **Disclaimer:**

Autec Power Systems' (Autec) LED Drivers are Hi-Pot tested during the manufacturing process. Autec assumes no responsibility for secondary Hi-Pot testing at customer location or designated production line(s). Should customer require further Hi-Pot testing, at their own production line, following assembly of the LED Driver into the customer's assembled fixture, Autec requests advance notice. This request must be communicated to Autec in a timely manner and is recommended to be requested at time of issuing each purchase order.

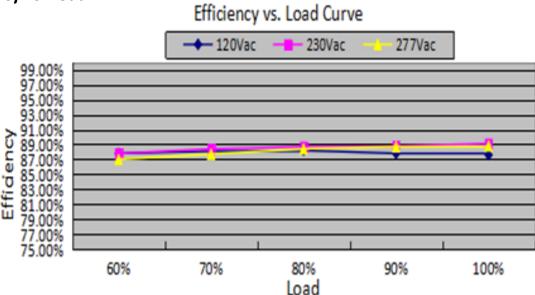
#### **■** Dimming Feature

Dimm	Dimming Function		0-10V			PWM			RX			
וווווווו			✓			<b>√</b>			$\checkmark$			
0-10V	0	1	2	3	4	5	6	7	8	9	10	open
Ir	0	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	open
PWM	0	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	open
Ir	0	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%	98.5%

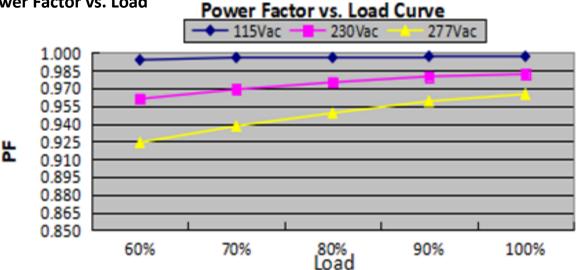
#### Notes:

- 1. Ir is the output current percentages.
- 2. Ir above is typical values.

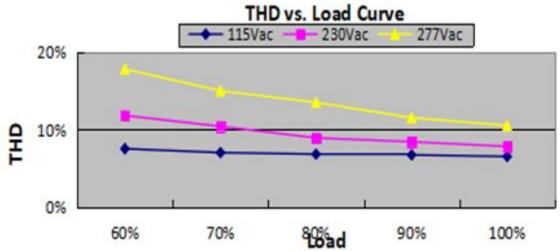
## **■** Efficiency vs. Load



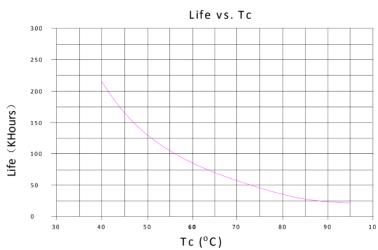
### Power Factor vs. Load



#### **■** THD vs. Load



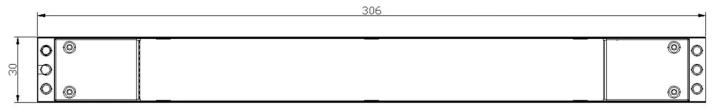
### ■ Lifetime vs Tc



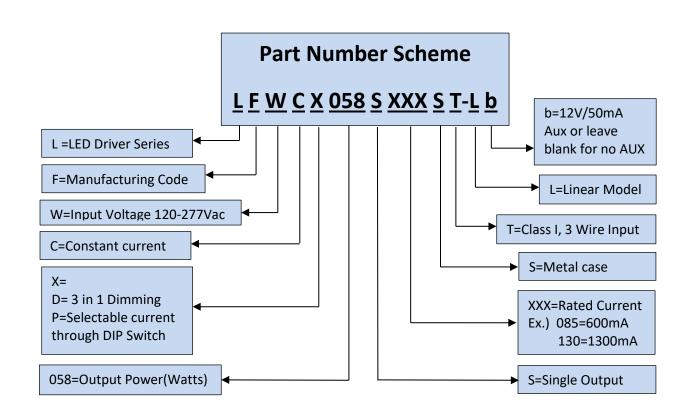
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# Mechanical Diagram







\*Product images are for illustrative purposes only and may vary from actual design.

\*Specifications are subject to change without notice. Autec is not responsible for issues arising from errors or omissions.