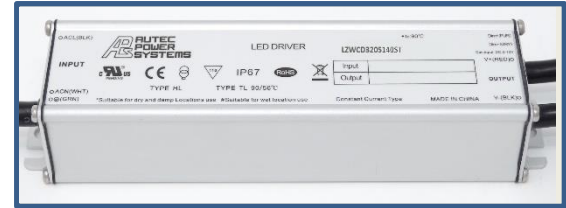


Not Recommended for New Design (NRND)

RoHS
Compliant

■ Features

- Power Rating: 320W
- Input Voltage: 100-277Vac
- Constant current design
- Fixed output current(1400mA-2800mA)
- Dimmable 0-10V, PWM, and resistor (optional)
- Efficiency to 93%
- UL Recognized
- OTP, SCP, OVP, and lightning protection
- IP67



IP67     **CB CE**

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

■ Application

- Outdoor applications: Street lights, and high bays.

■ Model List*(See part number scheme for model number details)

Model Number	Input Voltage Range	Output Power	Output Voltage	Output Current Min.	Output Current Max.	Efficiency	Certification
LZWCD320S140ST	100-277Vac	320W	137-229V	1400mA	1400mA	93%	CE FCC UL
LZWC-320S140ST	100-277Vac	320W	137-229V	1400mA	1400mA	93%	CE FCC UL
LZWCD320S210ST	100-277Vac	320W	91-152V	2100mA	2100mA	93%	CE FCC UL
LZWC-320S210ST	100-277Vac	320W	91-152V	2100mA	2100mA	93%	CE FCC UL
LZWCD320S280ST	100-277Vac	320W	69-114V	2800mA	2800mA	92%	CE FCC UL
LZWC-320S280ST	100-277Vac	320W	69-114V	2800mA	2800mA	92%	CE FCC UL

Note: “-“ = Non-Dimming, D=Dimming

■ Technical Data

Input voltage range	100-277Vac
Frequency	47~63Hz
Power factor	>0.9@60-100% load, refer to PF vs Load curve
Max input current	1.8A max. @110Vac & full load; 0.9A max. @220Vac & full load
THD	<15%@60-100% load, refer to THD vs Load curve
Inrush current	65A peak, 1.2ms duration@230Vac 25°C 70A peak, 1.3ms duration@277Vac 25°C
Leakage current	1mA max. @277Vac 60Hz 0.75mA max @240Vac 50Hz
Current Accuracy	±5%
Ripple current	Ip-p: 5% LED 60%-100% load
Turn-on Delay time	1.2s
Overshoot	10%Io
Over voltage protection	120%vomax

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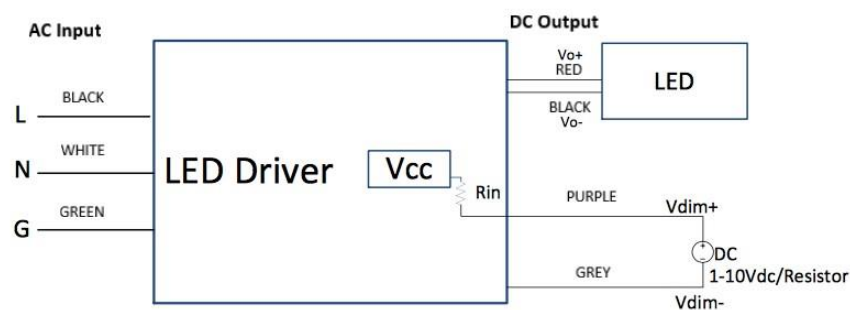
■ Technical Data(cont.)

Input Under Voltage	Shut Down When $V_{mains} \leq 85 \pm 5V_{ac}$; Auto Recovery When $V_{mains} \geq 90 \pm 5V_{ac}$
Over temperature protection	Decrease output current until over temperature state is removed
Short circuit protection	Protection type: hiccup mode, recovers automatically after fault condition is removed
Operating temperature	-40 ~ 70°C;
Storage temperature	-40 ~ 85°C
Humidity operational	10% ~ 100%RH
Humidity storage	5% to 100%RH
MTBF	>280,000 hours @110Vac & 80% Load
Life rating	>50,000 hours
Maximum case Temperature	90°C
Length (L)	9.92" (224mm)
Width (W)	3.54" (90mm)
Height (H)	1.65" (42mm)
Weight	1000g

Notes:

1. Unless specified, all the test results are measured in the 25°C ambient temperature.
2. The results vary according to different LED load characteristics.
3. Please confirm working conditions according to the derating curve of output power vs. input voltage and temperature. LED driver recommended for its intended use only, do not exceed data sheet specifications.
4. Refer to lifetime vs. Tc curve.
5. Contact Autech Sales for Tc location.

■ Wiring Diagram



■ Safety Compliance

Safety Category	Standard
UL 8750	Light Emitting Diode(LED) Equipment for Use in lighting Products
UL 1012	Power Unit Other Than Class 2
IEC 61347-1	Lamp Control Gear Part 1: General and Safety Requirements
IEC 61347-2-13	Lamp Control Gear Part 2-13: Particular Requirements for DC or AC Supplied Electronic Control Gear for LED Modules
EMI Standards	Notes
IEC 55015	Conducted emission test & Radiated emission test
IEC 61000-3-2	Harmonic current emissions; Class ($\geq 75\%$ load)
IEC61000-3-3	Voltage fluctuations & flicker
FCC Part 15	Class B
EMS Standards	Notes
IEC 61000-4-2	Electrostatic discharge (ESD)
IEC 61000-4-3	Radio frequency electromagnetic field susceptibility test (RS)
IEC 61000-4-4	Electrical fast transient (EFT)
IEC 61000-4-5	Surge immunity test L-N:2kV; LN-PE;4kV
IEC 61000-4-6	Conducted radio frequency disturbances test (CS)
IEC 61000-4-8	Power frequency magnetic field test
IEC 61000-4-11	Voltage dips
IEC 61547	Electromagnetic immunity requirements applies to lighting equipment

■ Dimming

Parameter	Min.	Typ.	Max.
Vcc	-	12V	-
12V Auxiliary Output source current	-	200mA	300mA
Rin	-	51kOhm	-
Absolute maximum voltage range on the 0-10V input pin	-20V	-	20V
Dimming range	10%	-	100%
Vdim+ pull up resistor rin	-	51kOhm	-
Dim off threshold	-	0.5V	-
Dim off Hysteresis	-	0.2V	-
0-10V Dimming range	10%(Vdim=1V)	-	100%(Vdim=8~10V)
PWM Dimming range	10%(Duty=10%)	-	100%(Duty=80-100%)
PWM high	3V	-	10V
PWM low	0V	-	0.6V
PWM frequency	300Hz	-	2kHz
External PWM controller current sinking capability	300uA	-	-

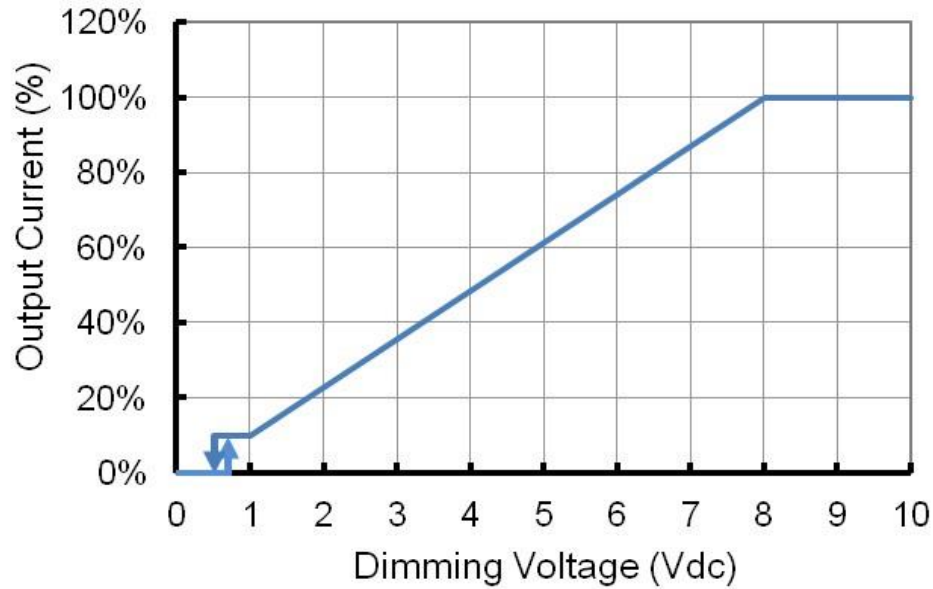
The dimmer control is operated from an input signal of 0-10Vdc. Recommended implementations are provided below.

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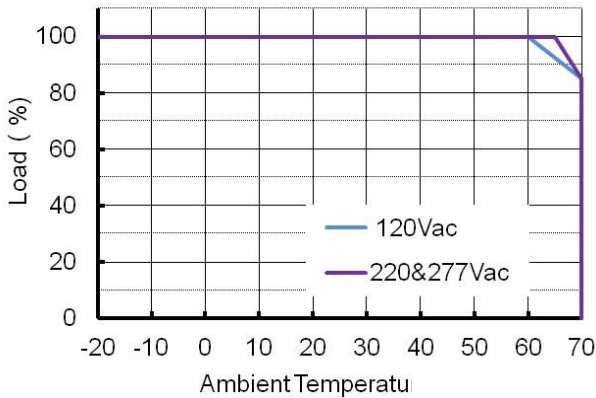
■ **Dimming Curve**

Output Current vs. Dimming Voltage

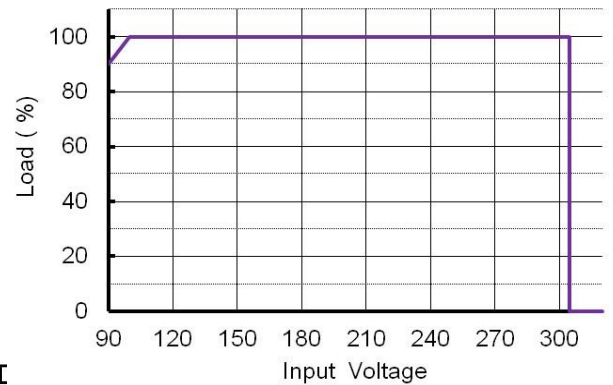


■ **Derating Curve**

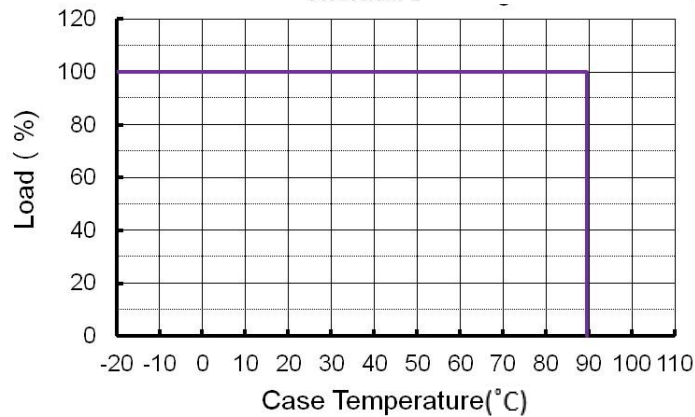
Thermal Derating



Derating Curve (Ta=25°C)



Thermal I

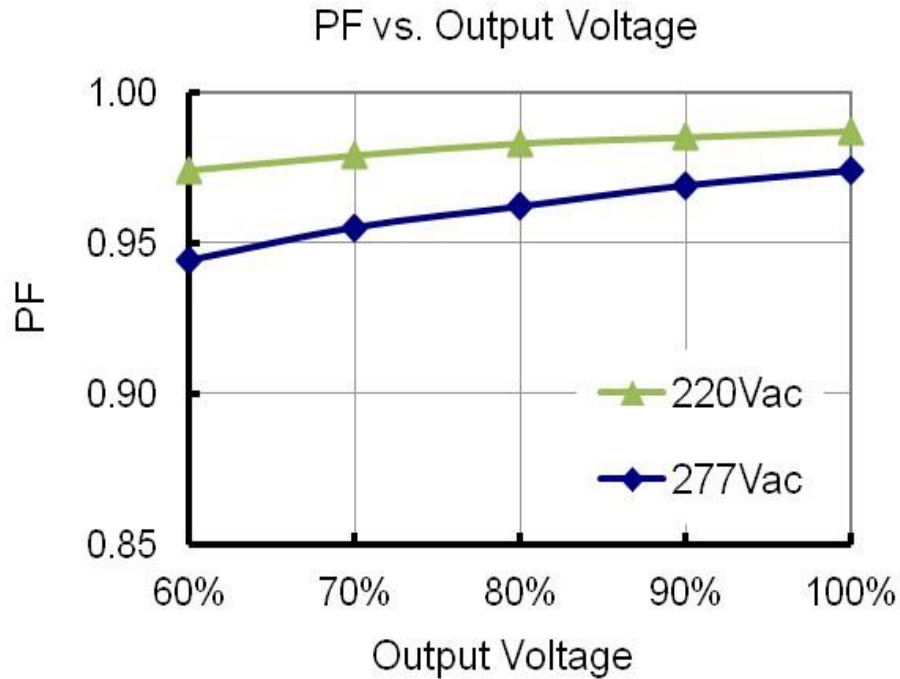


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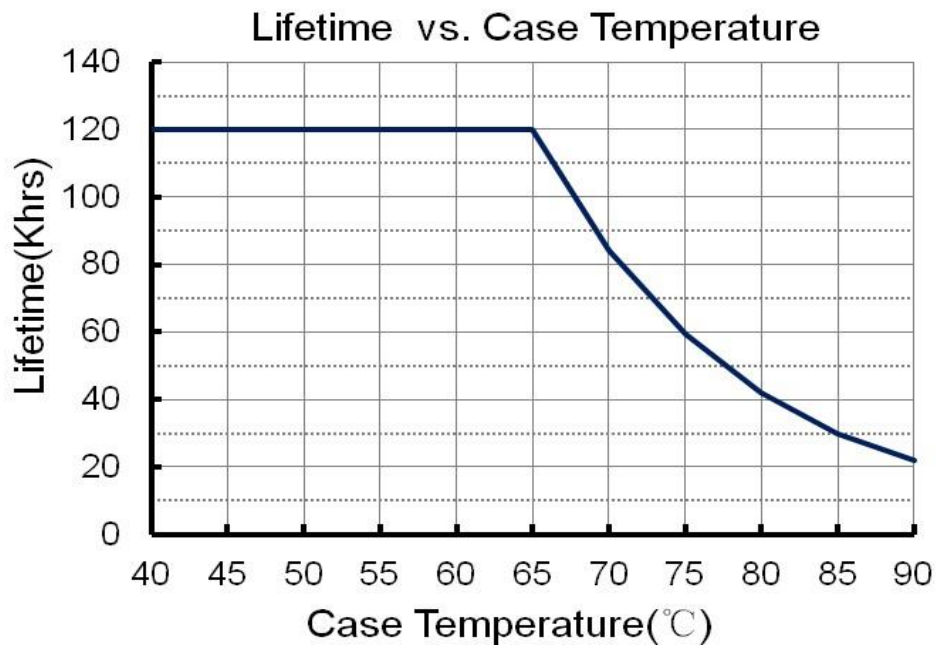
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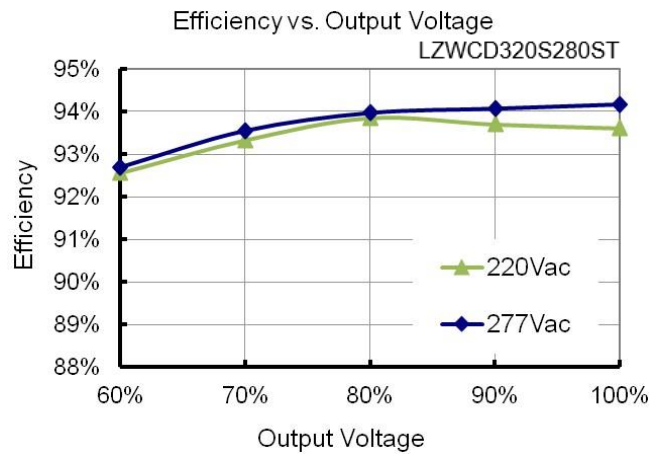
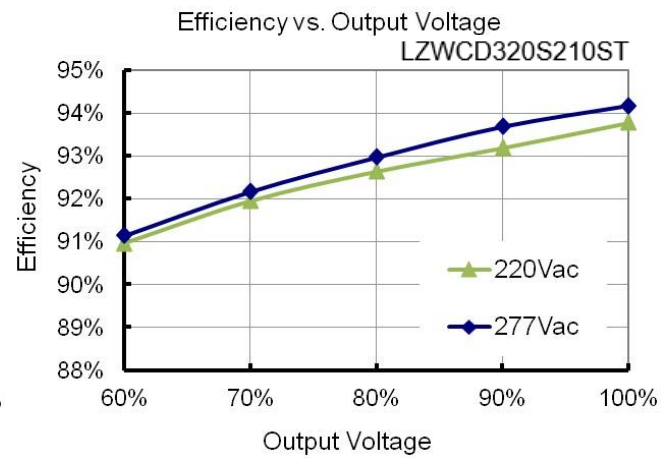
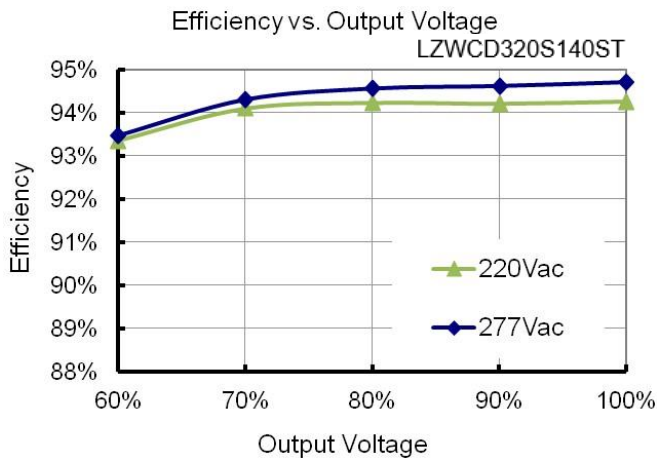
■ Power Factor vs Output Voltage



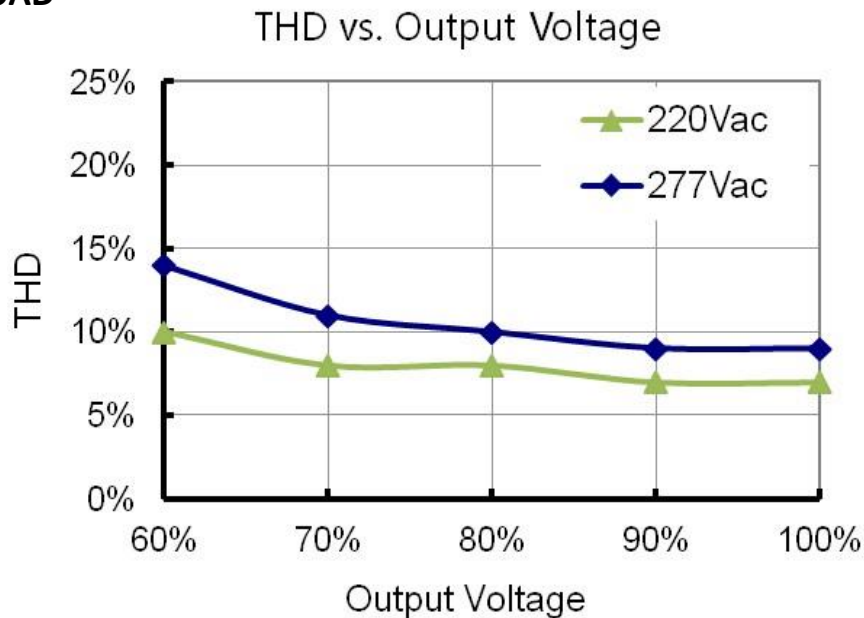
■ Lifetime vs Case Temperature



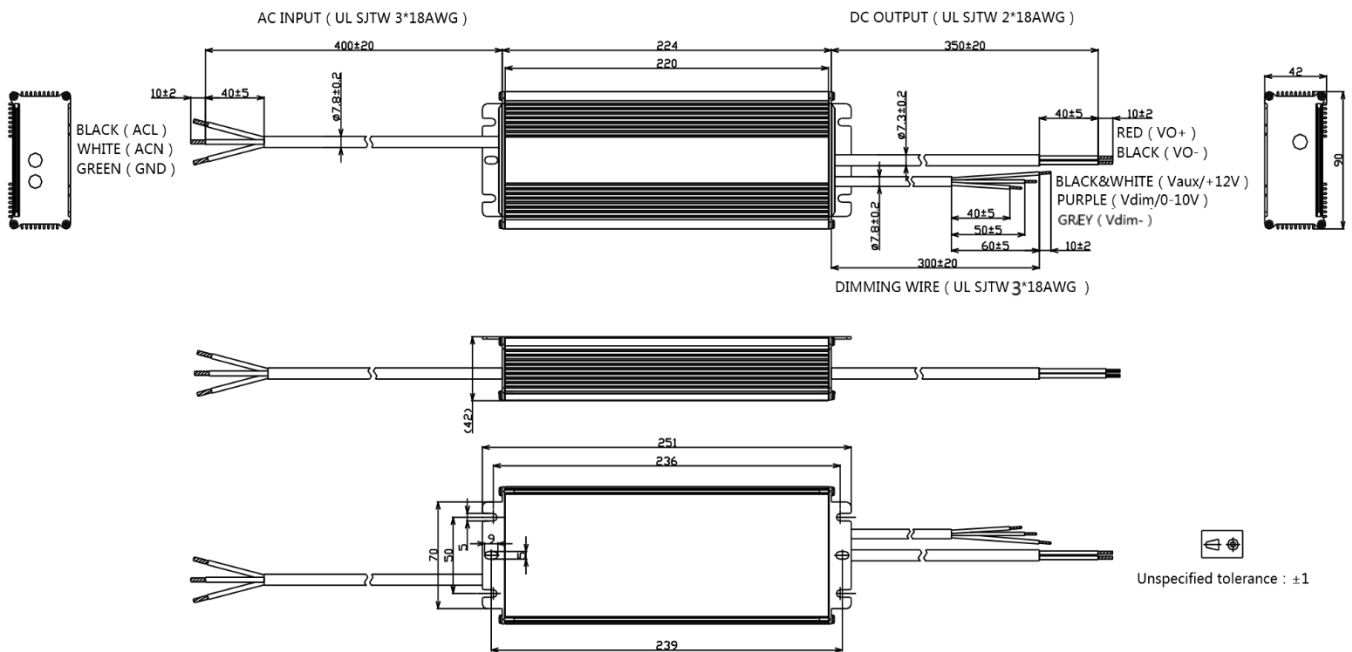
■ Efficiency vs Output Voltage



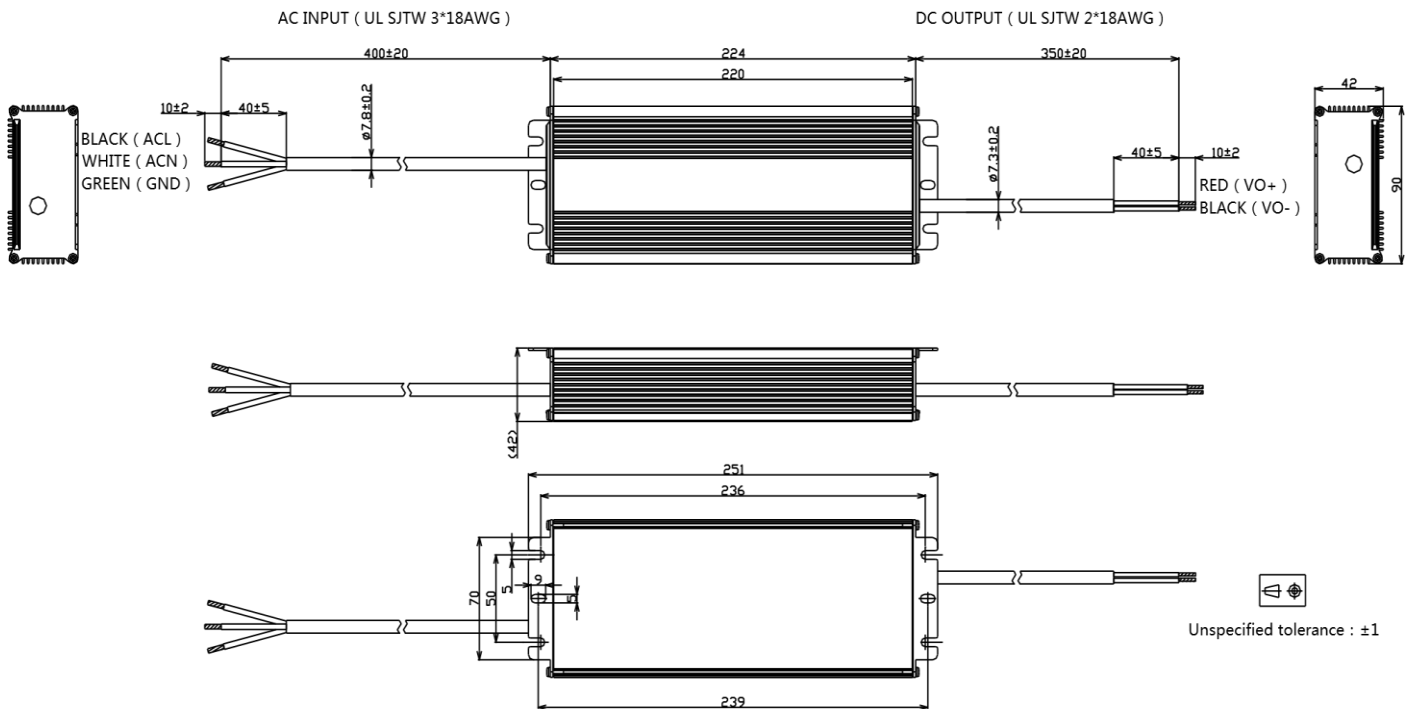
■ THD vs LOAD



■ Mechanical Diagram Dimming



■ Mechanical Diagram Non-dimming

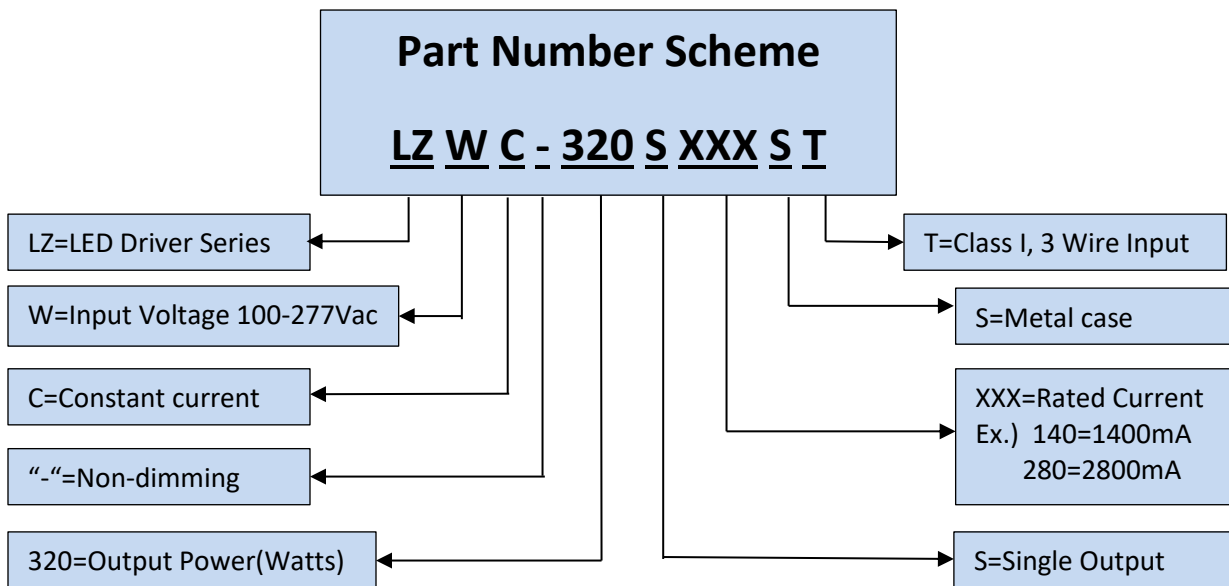
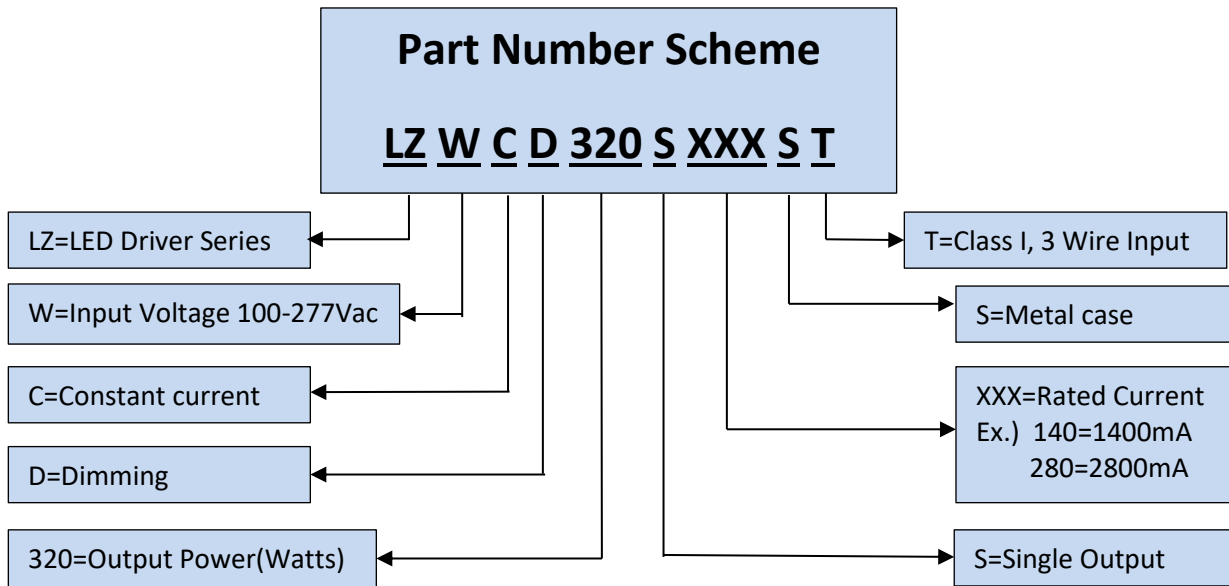


Note: Please make sure the output cable does not connect to dimming cable or the cables of other drivers until 20 seconds after being tested because of the remained voltage in the output capacitor.

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