

ANP107 Series -277V

Single Output Channel, UL 8750, Class 2,
CV / Dimmable CC Mode LED Driver



Features and Applications:

- One 100W Class 2 DC Output
- Can Operate in either CC or CV Mode (See Page 2 for details)
- High Output Efficiency Design (Typ. > 90%)
- Active Power Factor Correction
- Built For Outdoor Wet, Damp or Indoor Dry Applications
- Silicone Encapsulated For Wet Locations
- Rugged & Splash Proof Aluminum Case - IP66 Rated
- Built-in EMI Filter For Low Noise
- Over-Current and Over-Voltage Protection with Auto-Recovery
- Dimmable Output in Constant Current Mode
- Optional 12Vaux Output

All specifications are typical at nominal input, full load, at 25°C unless otherwise stated.

Electrical Specifications

INPUT

Rated Input Voltage Range	100 - 277Vac, 47 - 63Hz
Input Current	max. 1.5A@115Vac/60Hz,full load
Inrush Current	80A @230Vac input/60Hz,full load cold start
No Load Power Draw	< 1W @ no load or dimmed to 0%
Leakage Current	0.3mA @110Vac, 0.5mA @277Vac
Power Factor	≥0.9 at 70% to full load, over entire input range
THD	<20% @ 80% load, 277Vac

OUTPUT

Output Regulation	5% for both voltage and current
Efficiency	See Table 1 @ Page 2
Over Voltage Protection	<130% nominal voltage
Short Circuit Protection	Shutdown & Auto Recovery
OTP Protection	2-Stage Protection
Start-up Time	< 2 sec.
Dimming Control	0 - 10Vdc (10V for max. output)
Optional 12Vaux Output	200mA max.

Safety Certifications


UL UL8750, UL1310 (Wet Location, Class 2)
E-File#: E328880



General Specifications

Weight	1.0 Kg (2.2lbs.) max.
Dimension (w/o mounting tab)	7.09" x 2.68" x 1.22" (180mm x 68mm x 31mm)
Warranty info / MTBF	Contact Amperor for detailed warranty and MTBF information

Environmental Specifications

Max. Operating Temp.	85°C @ Tcase (See Page 4 for Tcase Location)
Min. Operating Temp.	-30°C @ Tambient
Thermal Protection	Output Drops to 50% @ 1st OTP (See Page 3 for Details) Output Shutdown @ 2nd OTP
Storage Temp.	-40°C to +85°C
Relative Humidity	5% to 95% (non-Condensing)
Enclosure	Outside case sealed per IP66
Cooling	Conduction
RoHS	Compliant 

EMC

Conducted Emissions	EN55015,FCC part 15 level B
Radiated Emissions	EN55015,FCC part 15 level B
Surge Protection	EN61000-4-5, Level 2 L-N: 1KV, L/N-PE: 2KV

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Order Information

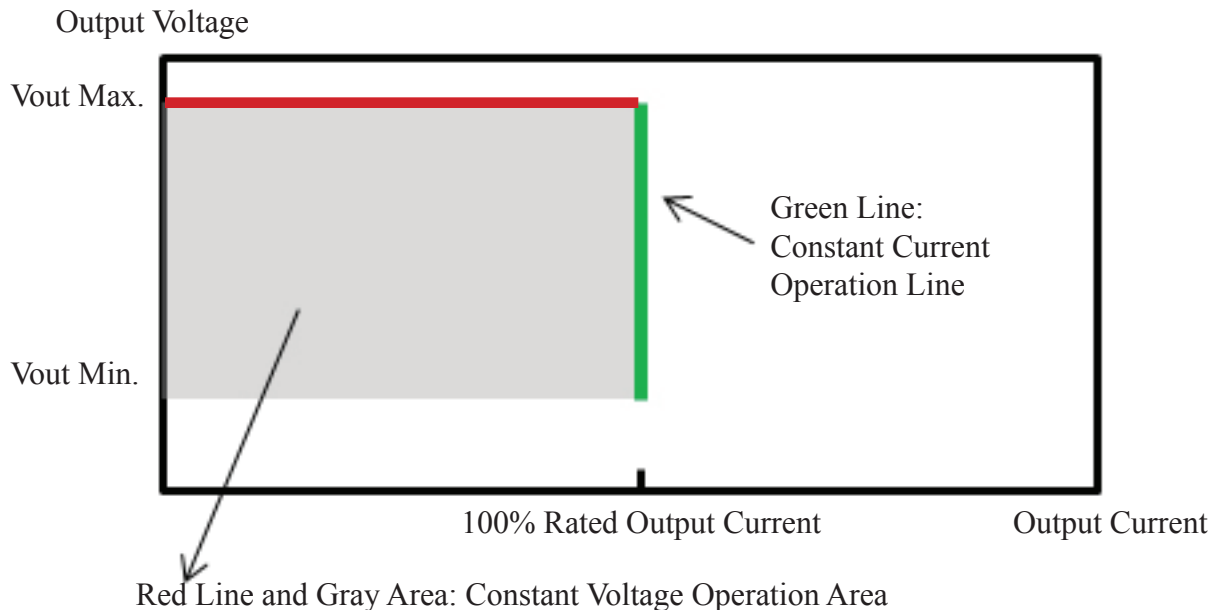
Table1: Model vs. Output Specifications

Model	Max. Output Voltage (V)	Rated Output Current (A)	Output Voltage Range (V)	Max. Output Power (W)	Min. Efficiency (115Vac input 100% load)	12Vaux (Optional) Max. Load (mA)
ANP107-24P1-277	24	4.17	15 ~ 24	100	89.00%	200
ANP107-30P1-277	30	3.33	24 ~ 30	100	90.00%	200
ANP107-36P1-277	36	2.78	30 ~ 36	100	90.00%	200
ANP107-48P1-277	48	2.08	36 ~ 48	100	90.00%	200

Notes:

1. The DC output channel will automatically shut down and auto-recover after an over-current limit (OCP) trip event.
2. 12Vaux is an optional output channel.

Constant Current / Constant Voltage Operation



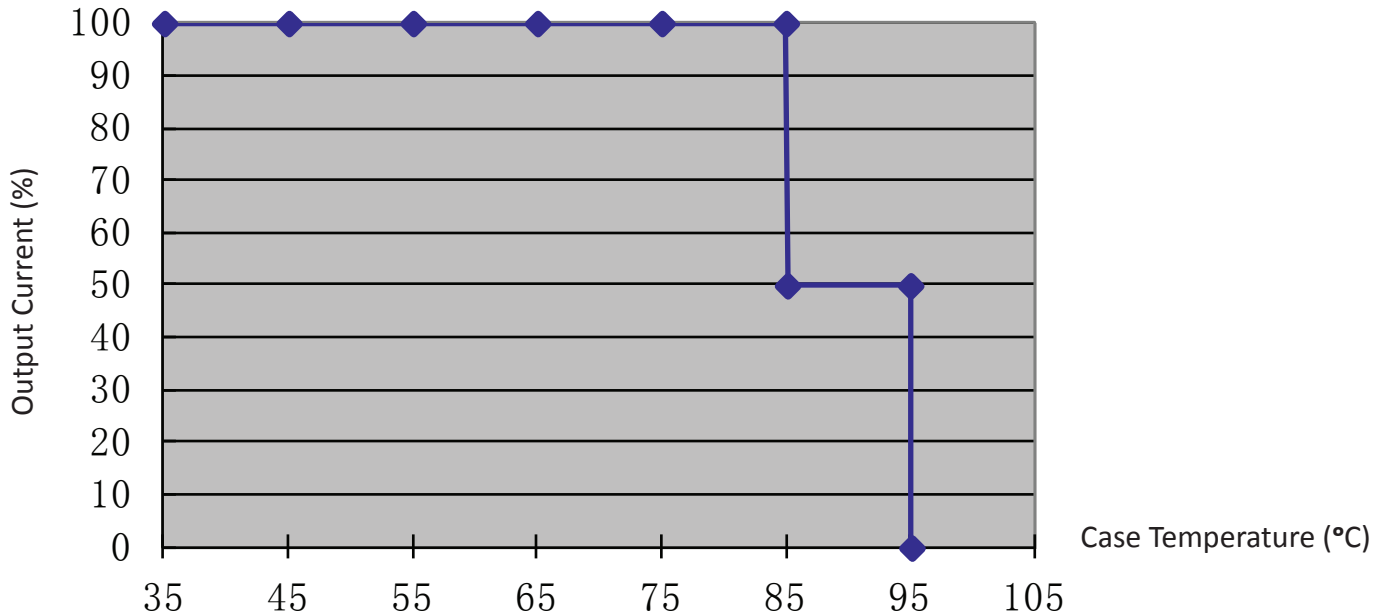
1. If the current draw from the load is equal to the rated output current of the driver, the driver will operate in CC mode. (on the **Green Line** above)
2. If the current draw from the load is less than the rated output current of the driver, the driver will operate in CV mode. When working with the CV mode LED light tube / module / strip, the driver operates on the **Red Line** above. Please contact Amperor for detailed explanation.

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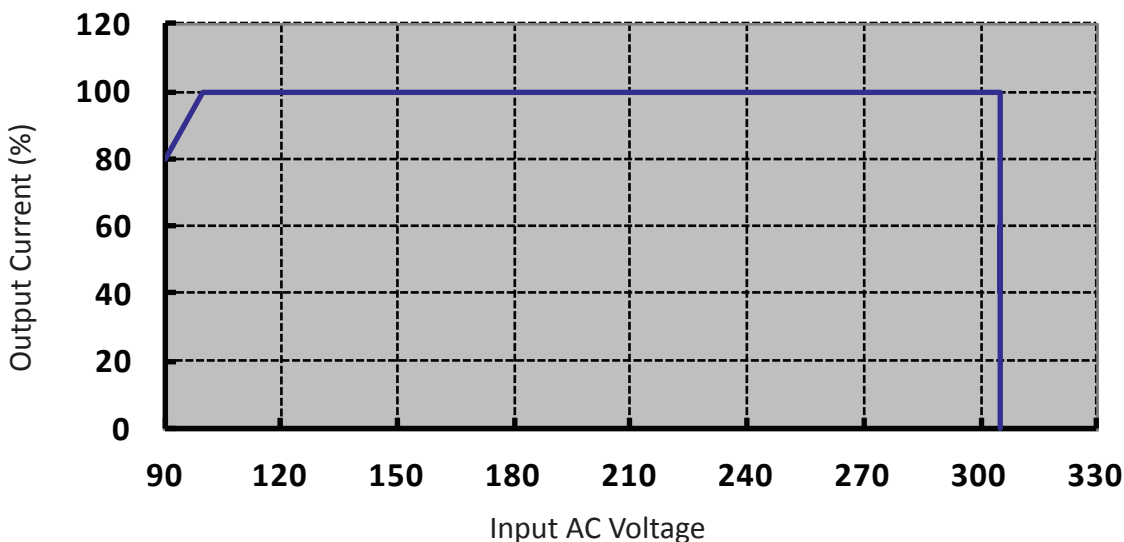
OTP (Over Temperature Protection) Operation



Note: The min. temperature the driver can operate in is -30°C (Ambient Temperature)

Derating Curve - Output Current vs. Input Voltage

Load (%) vs. Input AC Voltage

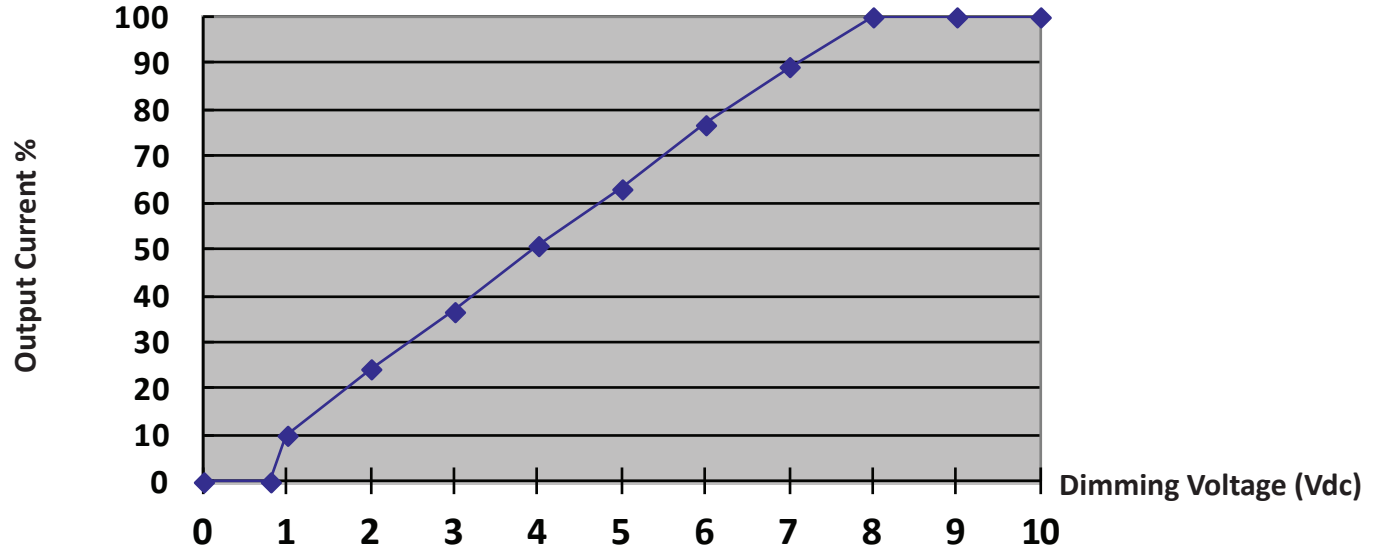


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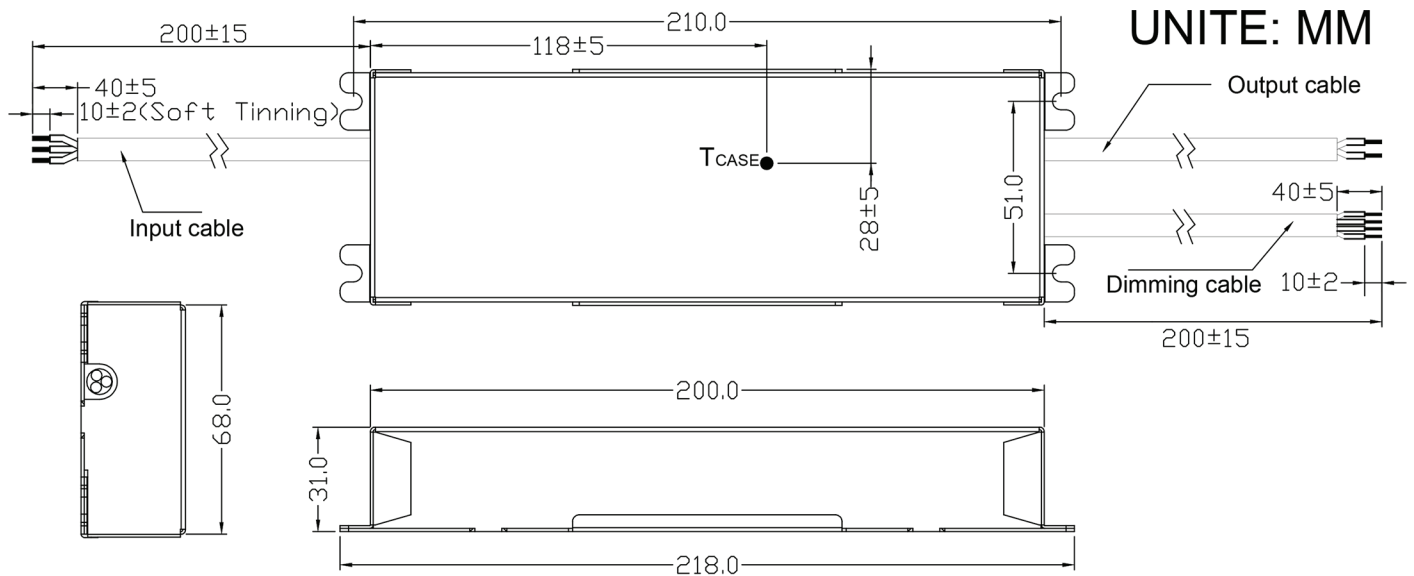
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AmperorTM
power by design

Dimming Curve



Mechanical Drawing



NOTE:

1. AC input cable: UL2517 18AWG*3C [white(L), black(N), yellow/green(G)];
2. DC output cable: UL2517 18AWG*2C [red(+), black(-)];
3. Dimming cable: The 12V Output cable is an optional
UL2517 22AWG*2C [Violet(+), Gray(-)];
UL2517 22AWG*4C [Violet(+), Gray(-), Brown(12V+), Blue(12V-)];
4. Tcase is CASE's Max temperature.
5. Other ALL TOLERANCE: ±0.5

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