

ANP318 Series - 277V

Single Output 320W / 250W, Dimmable LED Driver



Features and Applications:

- Options for 24V/36/48V/54V/58V, 320W, CV/CC Mode Output
- Option for 12V, 250W, CV Mode Only Output
- Active PFC (Power Factor Correction)
- Built For Outdoor Wet, Damp or Indoor Dry Applications
- Silicone Encapsulated For Wet Locations
- Built-in EMI Filter for FCC Level B compliance
- Outside case sealed per IP67 Rated
- Over Temperature / Voltage / Current Protection
- 0-10V Dimming Option Available
- 12V / 200mA (max.) Auxiliary Output Option Available

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

Electrical Specifications

INPUT

Input Voltage Range	90-305Vac, Rated@100-277Vac
Input Frequency	47-63Hz
Input Current	4.5A max.@115Vac/60Hz, full load
Inrush Current (Cold Start at 25C)	80A max at full load 230Vac
Power Factor	≥0.9 @full load and full Input range
THD	<20% @ full load
Leakage Current	1.75mA at 230Vac/50Hz

OUTPUT

Output Options & Efficiency	See Page 2.
Ripple and Noise	< 1% Vout max. at 20MHz
Over Temp. Protection	Auto Re-Start
OTP Method	One stage
Over Voltage Protection	130% Vout, auto recover
Over Current Protection	120% Max. current, auto recover
Power On Time	< 1 sec.
Auxiliary Output	12V / 200mA

Safety Certifications


UL UL8750, UL1310 Wet Location,
E-File#: E328880



General Specifications

Weight	2.2 Kg (13lbs.)
Dimension	9.61" x 3.55" x 1.97" (264mm x 90mm x 50mm)
Isolation Level	I/P-O/P: 3000Vac O/P-FG: 400Vac I/P-FG: 1800Vac w GasTube Removed
Warranty Info / MTBF	Contact Amperor for detailed warranty and MTBF information

Environmental Specifications

Max. Operating Temp.	90°C +/- 5°C @ Tcase
Min. Operating Temp.	-40°C @ Tambient
Storage Temp.	-40°C to +85°C (Tambient)
Relative Humidity	5% to 95% (non-Condensing)
Enclosure	Outside case sealed per IP67
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 L/N-PE: 6KV, L-N: 4KV

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Order Information

Table1: ANP318-XXP1-277-YY Model vs. Output Specifications

Model	Max. Output Voltage (V)	Load (A)	Output Voltage Swing in CC Mode (V)	Output Regulation	Max. Total Output Power (W)	Min. Efficiency (115Vac input 100% load)	Min. Efficiency (277Vac input 100% load)
ANP318-58P1-277	58	5.51	30 - 58	+/- 5%	320	92.00%	95.00%
ANP318-54P1-277	54	5.93	30 - 54	+/- 5%	320	92.00%	95.00%
ANP318-48P1-277	48	6.67	28 - 48	+/- 5%	320	92.00%	95.00%
ANP318-36P1-277	36	8.88	21 - 36	+/- 5%	320	92.00%	95.00%
ANP318-24P1-277	24	13.33	14 - 24	+/- 5%	320	92.00%	95.00%
ANP318-12P1-277	12	21	N.A. (Note 1.)	+/- 5%	250	88.00%	90.00%

Notes:

Note 1.: ANP318-12P1-277 only has Constant Voltage Mode output and is not Dimmable.

How to Order with the Full Model Name - ANP318-XXP1-277-YY:

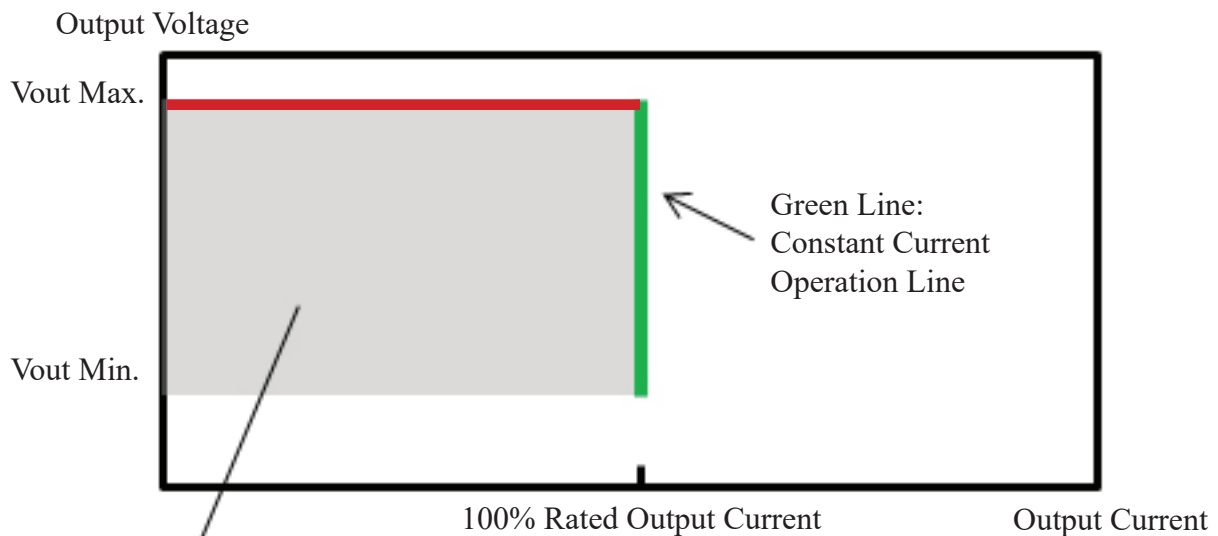
“XX” - Replaced by the 12 / 24 / 48 / 60, This indicates the Max. Output Voltage of the Driver.

“YY” - **VN**: CV mode output only and no dimming, **CD**: CC mode (CCR) Dimming,

Blank: CV / CC Hybrid mode and no Dimming

Example: **ANP318-24P1-277-CD**: 24V, CC/CV Hybrid mode, CCR mode 0-10V dimmable output

Constant Voltage / Constant Current Operation



Red Line and Gray Area: Constant Voltage Operation Area

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.
3. Not apply to -VN models

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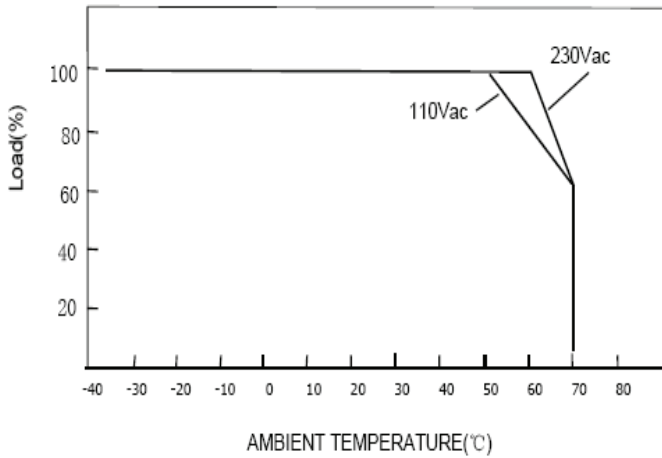
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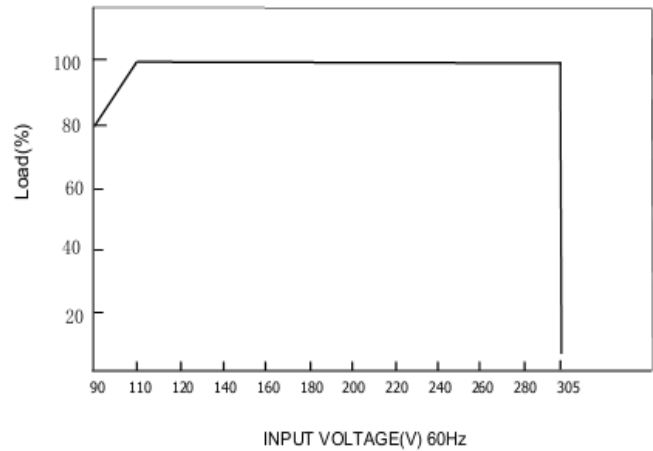


Performance Graphs

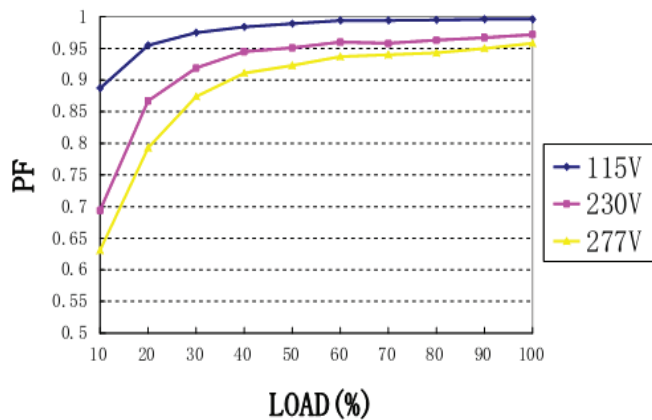
Tambient vs. Recommended Output Load%



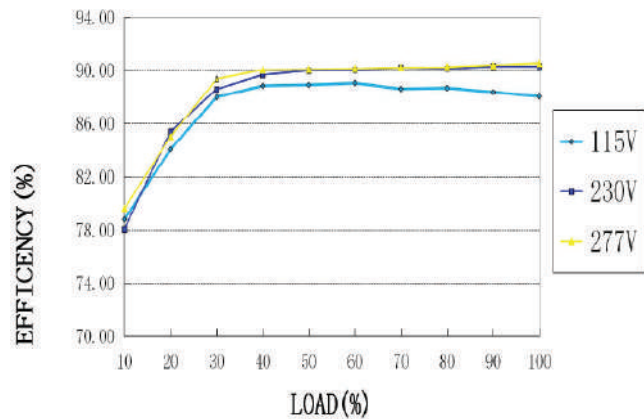
Input Voltage vs. Recommended Output Load%



Load% vs. PF



Load% vs. Efficiency
12V - Worst case Condition

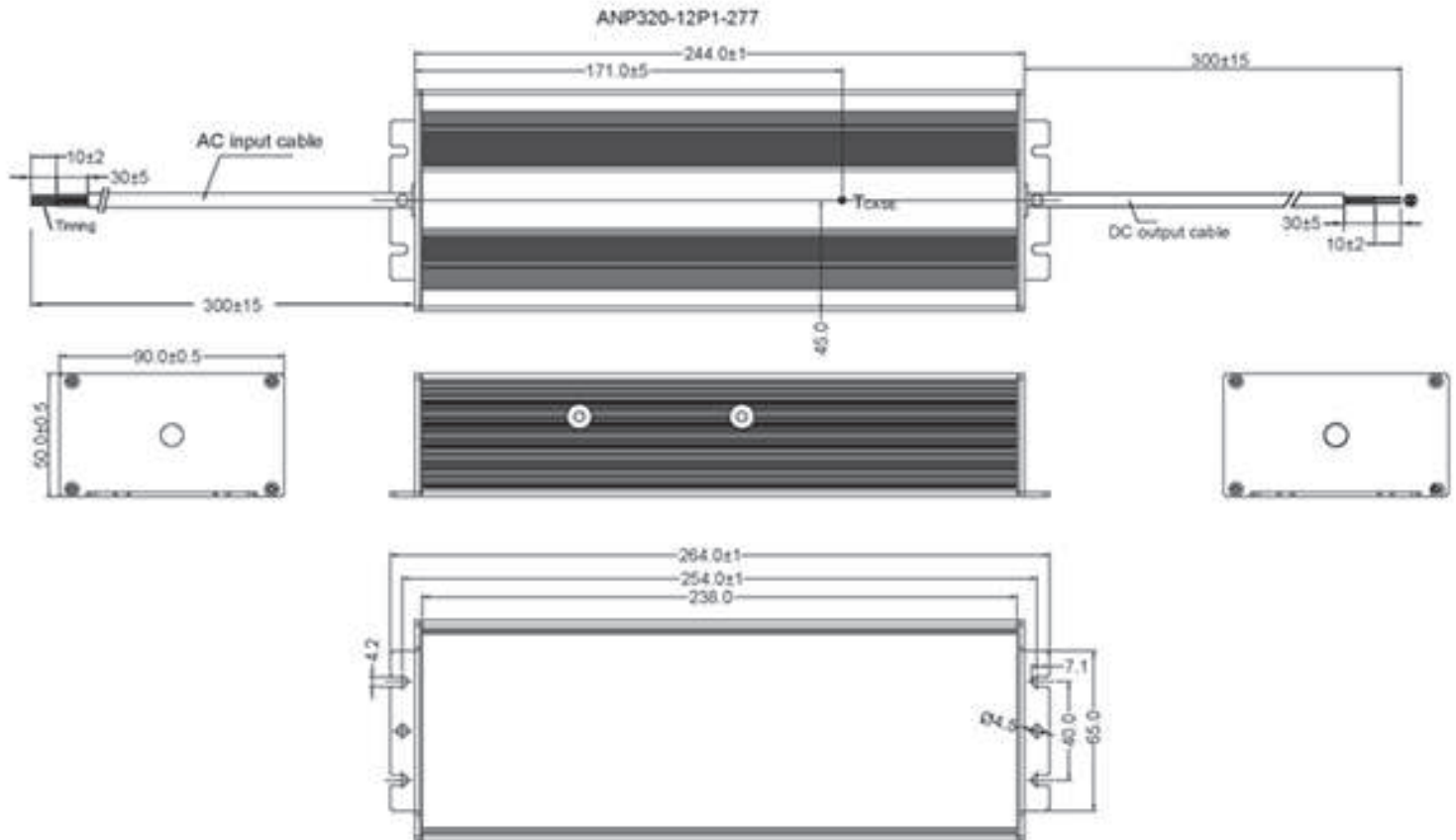


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Mechanical Drawing



NOTE:

1. AC input cable:UL2517 16AWG*3C[black(L),white(N),green(G)];
2. DC output cable:UL2517 12AWG*2C[red(+),black(-)];
3. Other ALL TOLERANCE: ±0.5
4. UNIT:mm