

ANP106 Series -277V

Single Output Channel, UL 8750, Class 2,
CV / 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
- Options with Junction Box Built-in

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	max. 1.5A@120Vac/60Hz,full load
Inrush Current	80A @ 230Vac / 60Hz, full load, cold start
Leakage Current	0.3mA@110Vac, 0.5mA@277Vac
Power Factor	≥0.9 at 70% to full load, over entire rated input range ≥0.99 at 115Vac, 60Hz, full load
THD	<20% @ 80% load, 277Vac

OUTPUT

Output Current Regulation	5%
Ripple & Noise	< 1% of Vout
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.

Safety Certifications

UL	UL8750 (Recognized / Listed), E file#: E328880
	UL1310 (Wet Location, Class 2)
	UL879, included in SAM, E#: E307120



General Specifications

Weight	1.7 lbs.
Dimension (w/o mounting tab)	7.09" x 2.68" x 1.22" (180mm x 68mm x 31mm)
Warranty	Contact Amperor for detailed warranty and MTBF information
MTBF	

Environmental Specifications

Max. Operating Temp.	85°C @ Tcase (See Page 4 for Tcase Location)
Min. Operating Temp.	-30°C @ Tambient
Thermal Protection (See Page 3 for Details)	Output Drops to 50% @ 1st OTP Output Shutdown @ 2nd OTP
Storage Temp.	-40°C to +85°C
Relative Humidity	10% 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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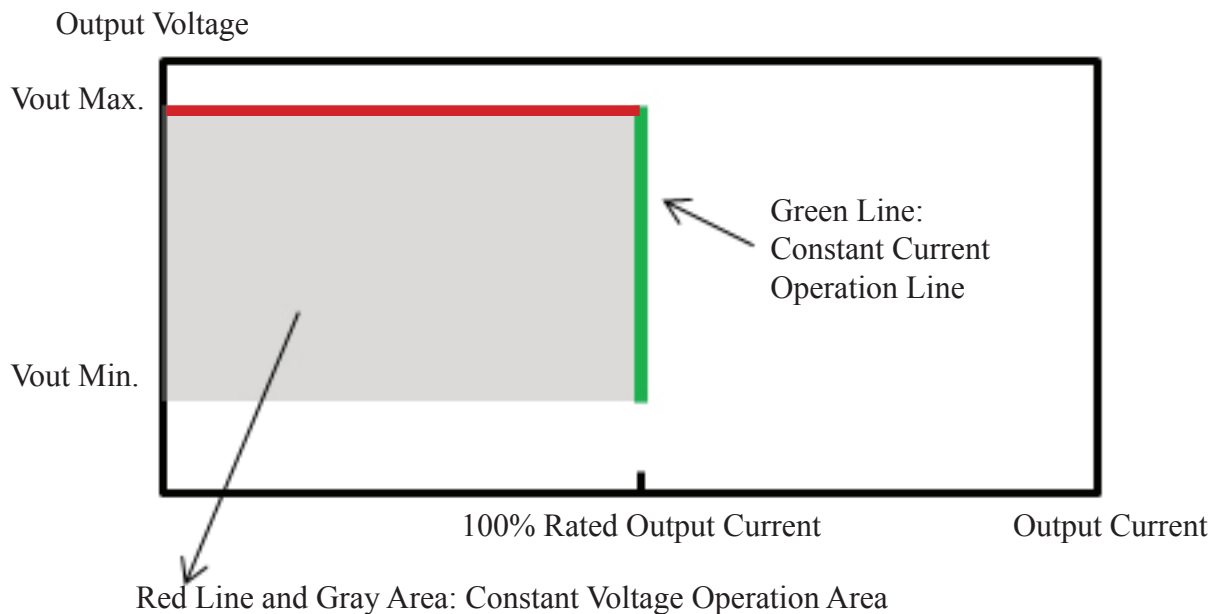
Order Information

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)	Min. Efficiency (230Vac input 100% load)
ANP106-12P1-277	12	5.00	9 ~ 12	60	88.00%	89.00%
ANP106-24P1-277	24	4.16	18 ~ 24	100	89.00%	90.00%
ANP106-30P1-277	30	3.33	22 ~ 30	100	89.00%	90.00%
ANP106-36P1-277	36	2.78	28 ~ 36	100	89.00%	90.00%
ANP106-48P1-277	48	2.08	37 ~ 48	100	90.00%	91.00%
ANP106-12P1Z-277	12	5.00	9 ~ 12	60	88.00%	89.00%
ANP106-24P1Z-277	24	4.16	18 ~ 24	100	89.00%	90.00%

Note: ANP106-12P1Z-277 and ANP106-24P1Z-277 are the models with junction box built-in at the AC input side. Both models are UL Listed parts.

Constant Current / Constant Voltage Operation



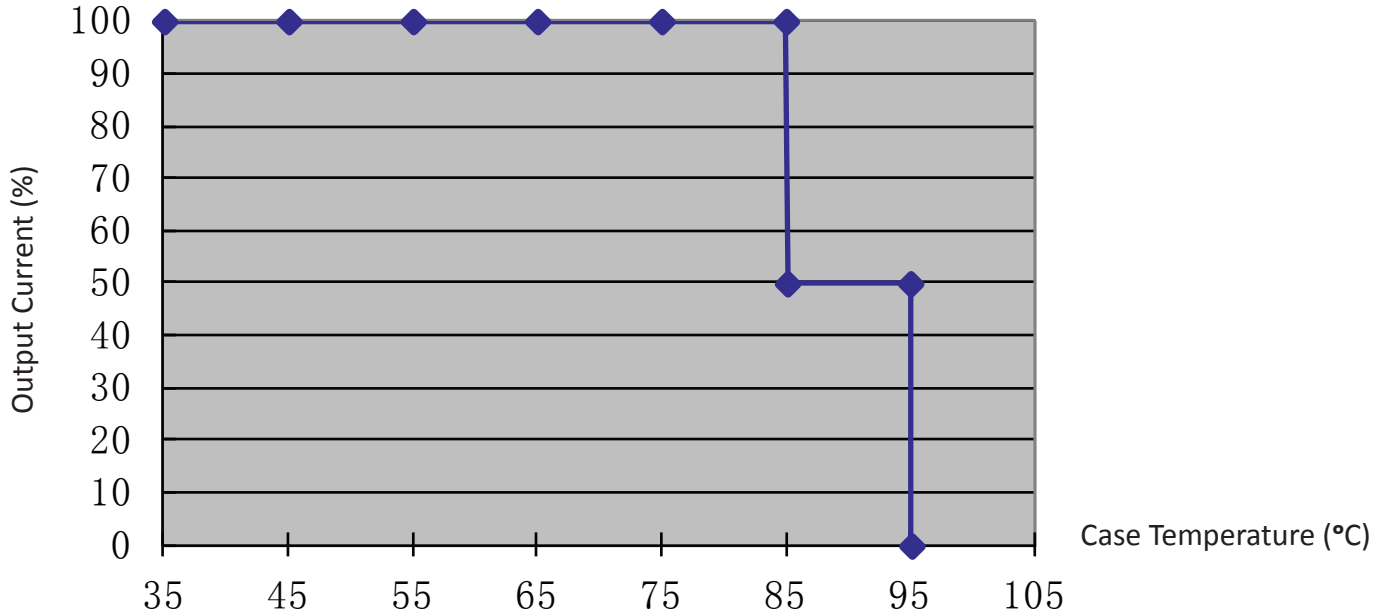
1. If the current draw from the load is equal to the rated output current of the driver, the driver will operate in CC mode. (on the **Green Line** above)
2. If the current draw from the load is less than the rated output current of the driver, the driver will operate in CV mode. When working with the 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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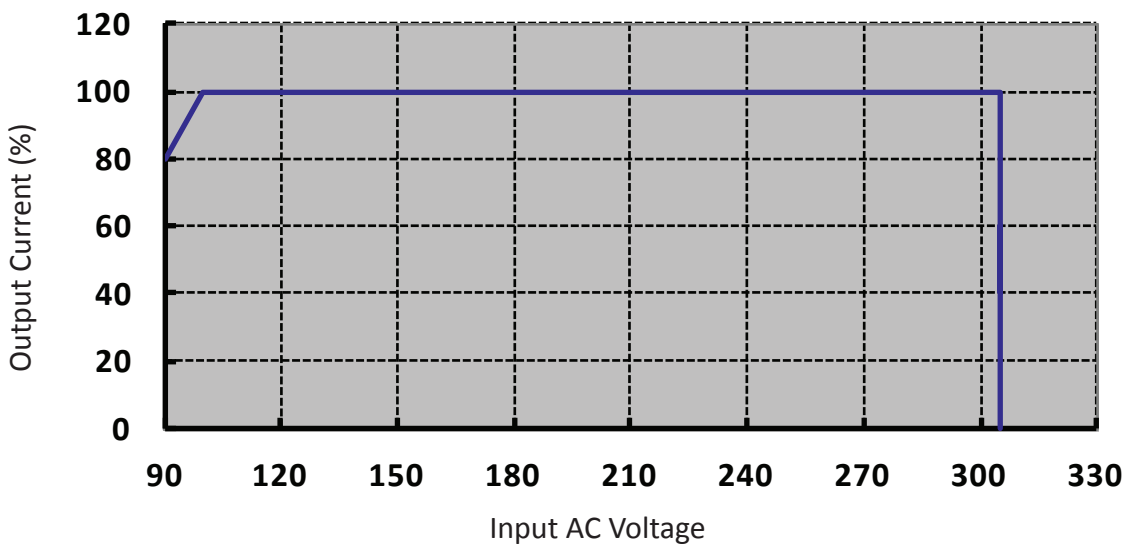
OTP (Over Temperature Protection) Operation



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

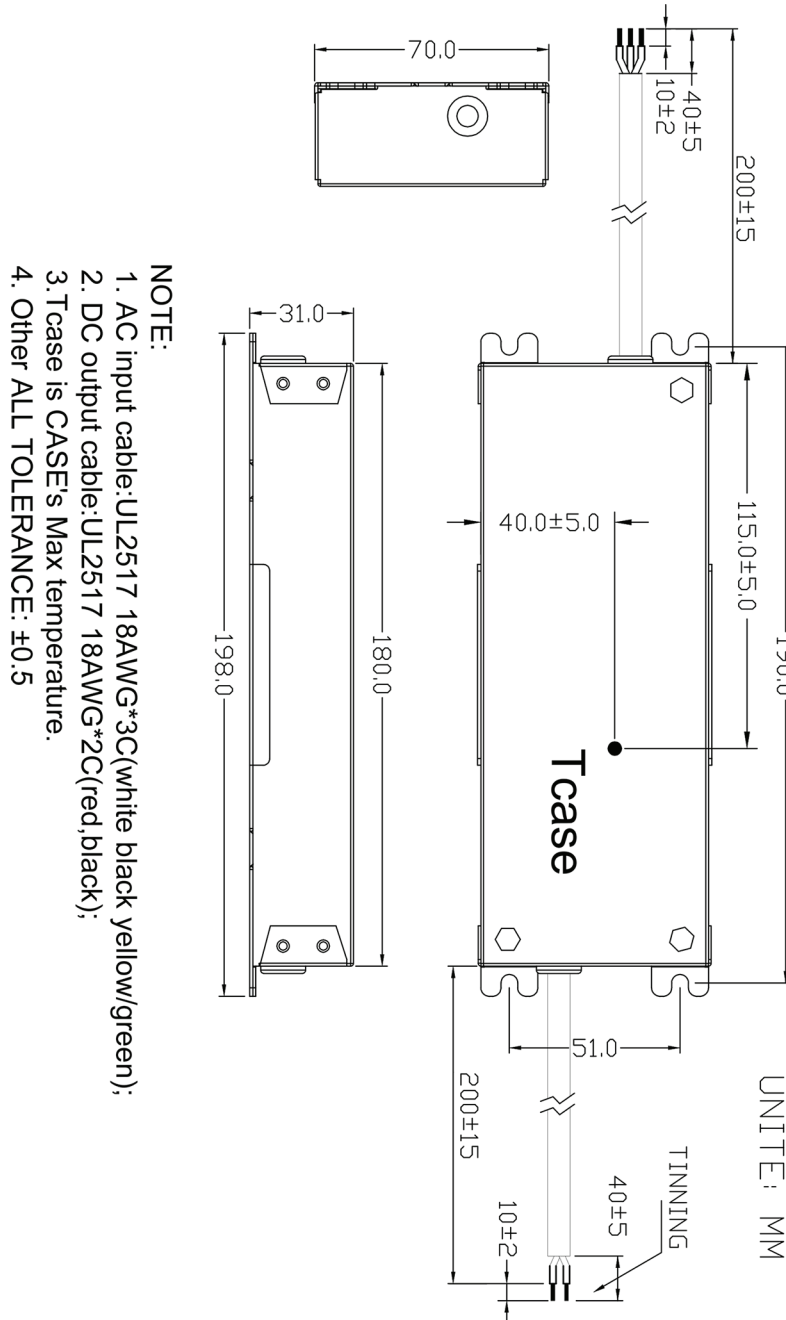


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Mechanical Drawing - w/o Built-in Junction Box

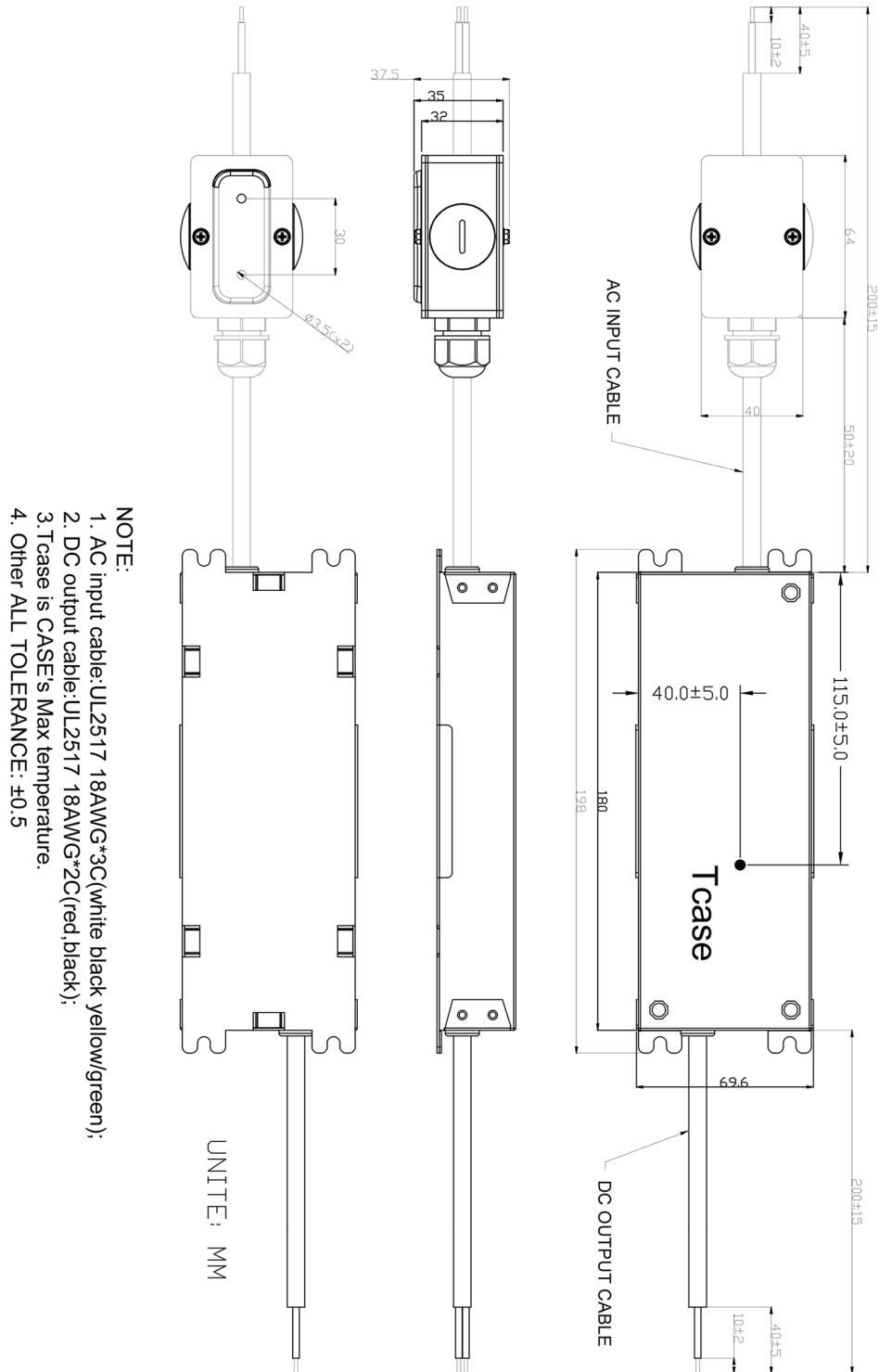


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AmperorTM
power by design

Mechanical Drawing - with Built-in Junction Box



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