

ANP100 Series -277V

Single Output Channel, CC / CV Mode,
Dimmable LED Driver



Features and Applications:

- One 100W / 75W / 60W / 40W DC Output
- Options for Standard LED Current Available: 350mA / 500mA / 700mA / 1A / 1.4A
- Highly Efficient Switching-Mode Technology
- Active Power Factor Correction
- Built For Outdoor Wet, Damp or Indoor Dry Applications
- Silicone Encapsulated For Wet Locations
- Rugged & Splash Proof Aluminum Case - IP67 Rated
- Built-in EMI Filter For Low Noise
- 0-10Vdc Dimmable Output, Optional DALI interface Available
- 12Vaux Output 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	max. 1.3A@115Vac/60Hz,full load
Inrush Current	80A @230Vac input/60Hz,full load cold start
Leakage Current	0.5mA max.
Power Factor	≥0.9 at 65-100% load (100W)
(for Full Input Range)	≥0.9 at 85-100% load (75/60/40W)
THD	<20% @ 80% load, 277Vac

OUTPUT

Output Current Regulation	5% typical / 6% @ Vout > 200V
Efficiency	See Table 1 @ Page 2
Short Circuit Protection	Shutdown & Auto Recovery
Start-up Time	< 2 sec.
Dimming Control	0 - 10Vdc (10V for max. output)
Optional 12Vaux Output	Available. Max Load: 0.2A

Safety Certifications

UL	UL879 (included In SAM) UL8750, UL1310 (Wet Location) E File#: E307120
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General Specifications

Warranty Info / MTBF	Contact Amperor for detailed warranty and MTBF information
Dimension (100W)	160mm x 64.5mm x 38mm 6.30" x 2.54" x 1.50"
Dimension (75/60/45W)	130mm x 64.5mm x 38mm 5.12" x 2.54" x 1.50"

Environmental Specifications

Max. Operating Temp.	90°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 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, Level 4 L-N: 2KV, L/N-PE: 4KV

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Order Information

Table1: ANP100-XXXP1-277-WWW-U Model vs. Output Specifications

Model	Max. Output Voltage (V)	Rated Output Current (mA)	Vout Range (V)	Max. Pout (W)	Min. Efficiency (115Vac input 100% load)	Min. Efficiency (230Vac input 100% load)
ANP100-285P1-277-100	285	350	180 ~ 285	100	88.00%	90.00%
ANP100-200P1-277-100	182	550	120 ~ 200	100	88.00%	90.00%
ANP100-142P1-277-100	142	700	80 ~ 142	100	87.50%	89.50%
ANP100-095P1-277-100	95	1050	55 ~ 95	100	87.50%	89.50%
ANP100-071P1-277-100	71	1400	40 ~ 71	100	87.50%	89.50%
ANP100-107P1-277-075	107	700	65 ~ 107	75	87.50%	89.50%
ANP100-075P1-277-075	75	1000	45 ~ 75	75	87.50%	89.50%
ANP100-086P1-277-060	86	700	52 ~ 86	60	87.50%	89.50%
ANP100-060P1-277-060	60	1000	36 ~ 60	60	87.50%	89.50%
ANP100-057P1-277-040	57	700	35 ~ 57	40	87.50%	89.50%
ANP100-040P1-277-040	40	1000	24 ~ 40	40	87.50%	89.50%

Notes:

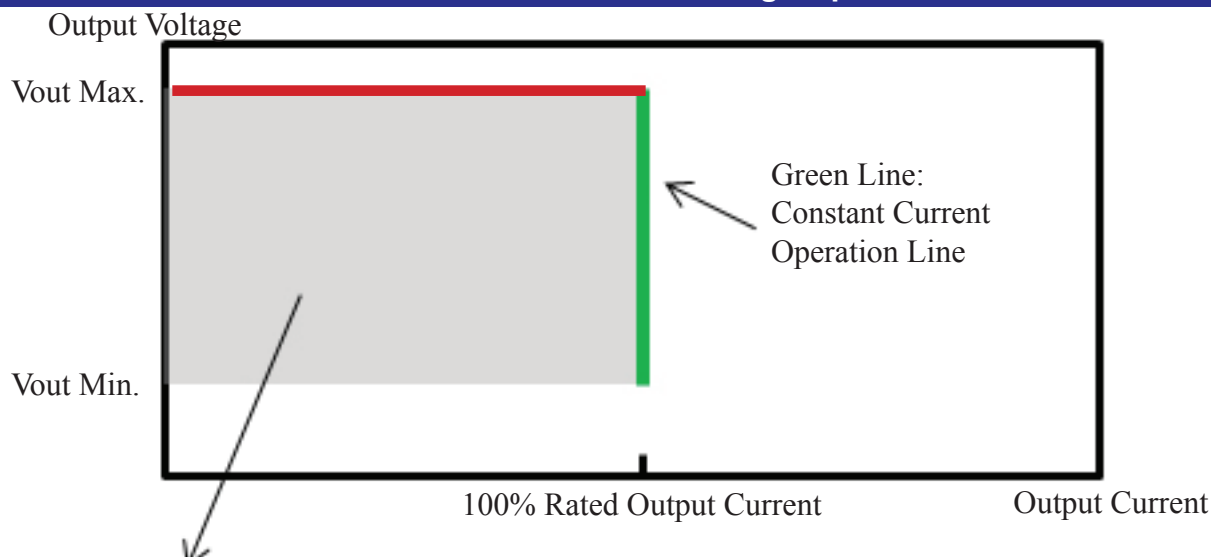
Order the built-in dimming function by replacing -U in the model name with:

-D: with Dimming Function built-in, **Blank:** no Dimming Function built-in.

Example: ANP100-142P1-277-100-D indicates a 700mA, 100W output driver with dimming function built-in.

-D-D: the driver is equipped with DALI, but without the 0-10V dimming interface.

Constant Current / Constant Voltage Operation



Red Line and Gray Area: Constant Voltage Operation Area

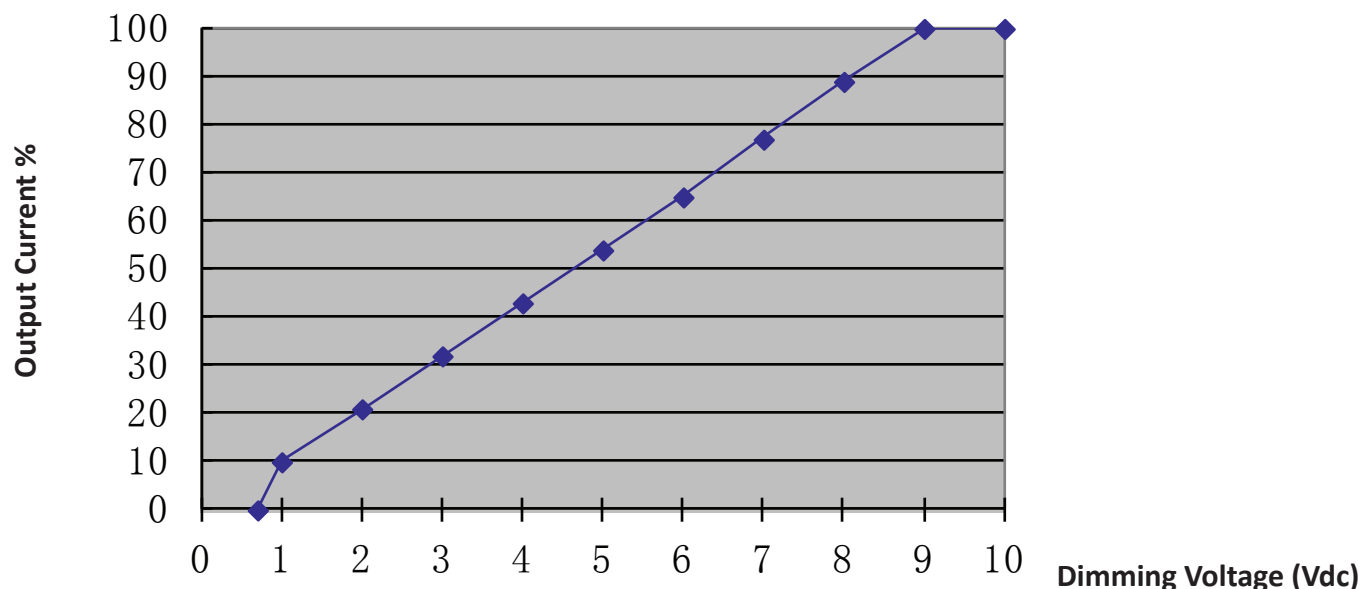
1. If the current draw from the load is equal to the rated output current of the driver, the driver will operate in CC mode. (on the **Green Line** above)
2. If the current draw from the load is less than the rated output current of the driver, the driver will operate in CV mode. When working with the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

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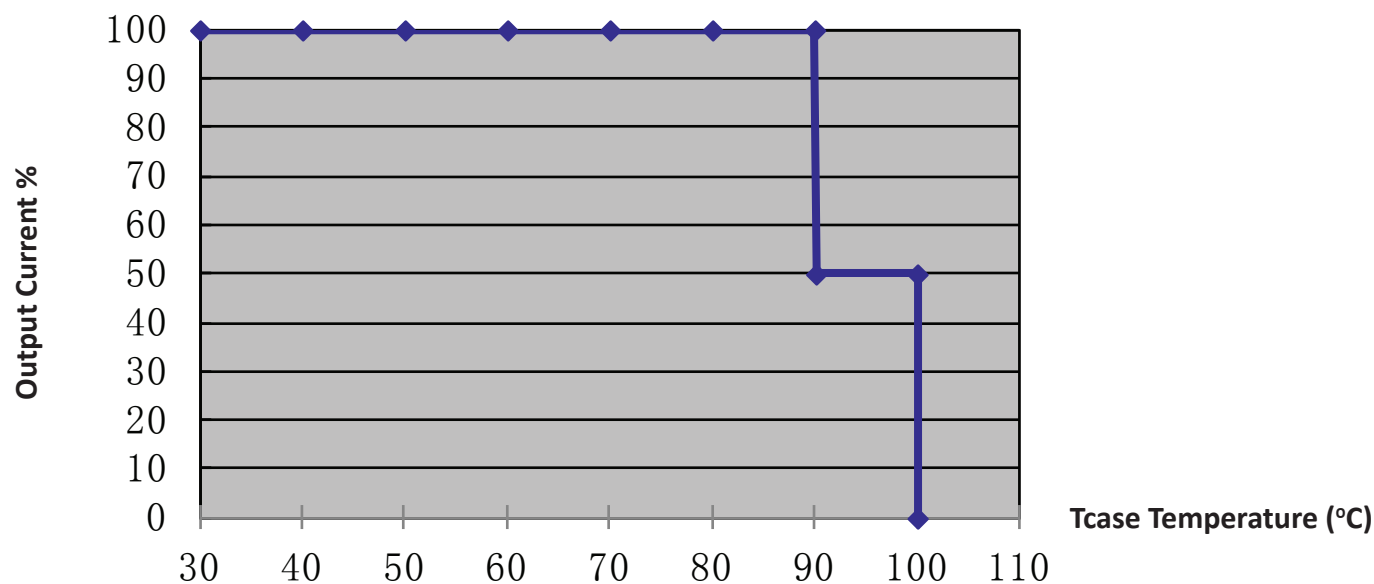
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Dimming Curve



OTP (Over Temperature Protection) Operation



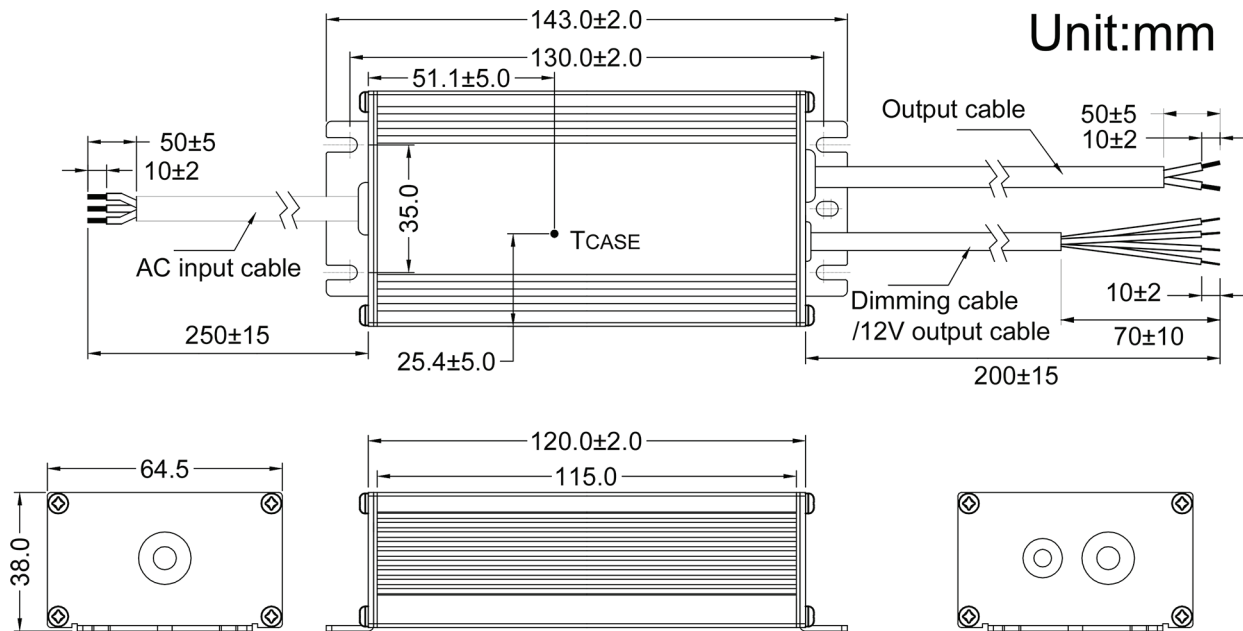
Note: The min. temperature the driver can operate in is -30°C (Ambient Temperature)

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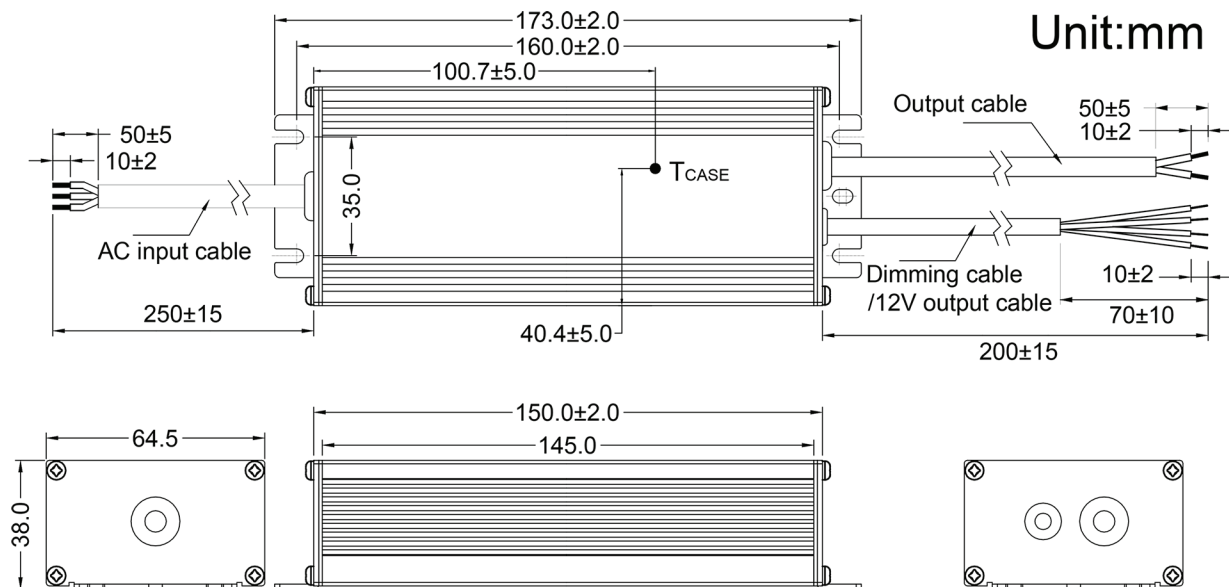
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Mechanical Drawing - 75W / 60W / 40W Version



Mechanical Drawing - 100W Version



Note:

1. AC input cable; UL2517 18AWGX3C (White: L, Black: N, Yellow/Green: G)
2. DC output cable: UL2517 18AWGX2C (Red: +, Black: -)
3. Dimming cable (or DALI cable): UL2517 22AWGX2C (Violet: +, Gray: -)
4. All tolerance in the drawing w/o specifically mentioned is +/- 0.5