

## AV0D024V30066 - 24Vdc - 300W DALI 2



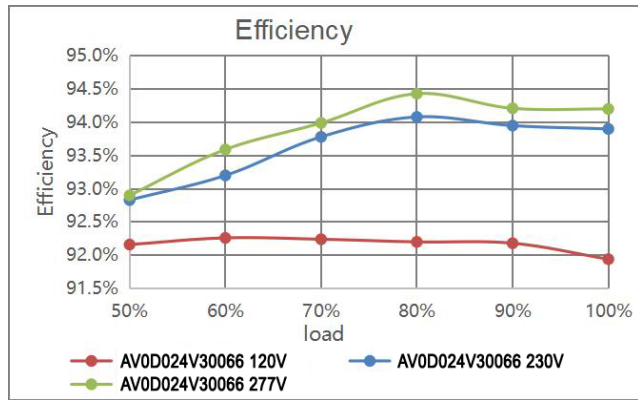
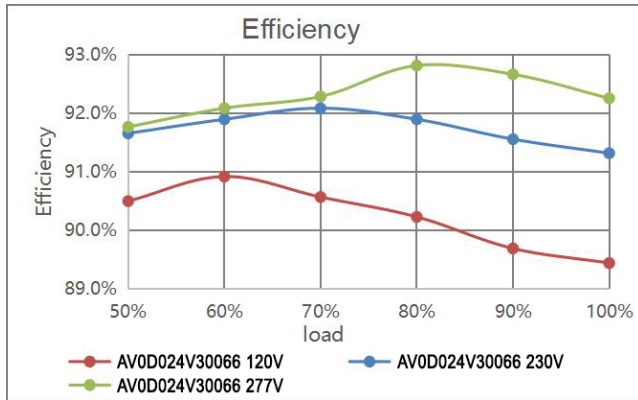
### Features

|                         |   |
|-------------------------|---|
| Output:                 | Constant Voltage  |
| Range:                  | 110-277VAC  |
| PFC design:             | Built-in active PFC function                              |
| Efficiency:             | up to 93.5%   |
| Protections:            | short circuit/ over load/ over temperature                |
| Heat dissipation:       | Cooling by free air convection                            |
| Waterproof performance: | Full aluminum housing, for dry, damp, wet locations, IP66 |
| Dimming function:       | DALI & PUSH dim. Digital dimming, flicker-free dimming    |
| Dimming range:          | 0-100% dimming depth: 0.1%                                |
| Application:            | Suitable for LED lighting and moving sign applications    |

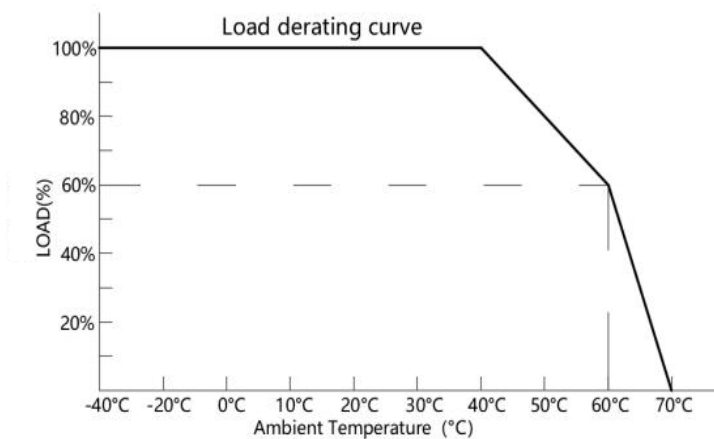
## Specification

| Model           |  | AV0D024V30066  |
|-----------------|--|--|
| Certificate     |  | UL / cUL / Class P / FCC / ENEC / CE / SELV / ROHS / Reach / DALI2   |
| Output          | DC Voltage   | 24V<br>(24-25.5V adjust by NFC)  |
|                 | Voltage Tolerance  | ±0.5V  |
|                 | Voltage Regulation   | 0.5%   |
|                 | Rated current  | 12.5A  |
|                 | Rated power  | 300W   |
|                 | Load Regulation  | 1%   |
| Input           | Voltage Range  | 110-277VAC   |
|                 | Frequency Range  | 47 - 63Hz  |
|                 | Power Factor (Typ.) @ full load  | PF≥0.99@120VAC PF≥0.97@230VAC PF≥0.94@277VAC   |
|                 | THD(Typ. ) @ full load   | ≤15%   |
|                 | Efficiency(Typ.) @ full load   | 92%@120VAC   |
|                 |  | 93.5%@230VAC<br>93.5%@277VAC   |
|                 | AC Current (Max.)  | 3.5A   |
|                 | Inrush Current (Typ.)  | 60A, 9us @50%120VAC 70A, 188us @50%230VAC 180A, 4.4us @50%277VAC   |
| Leakage current | <0.5mA   |  |
| Protection      | Short Circuit  | Hiccup mode, recover automatically after fault condition is removed  |
|                 | Over Load  | ≤120% ,hiccup mode, recover automatically after fault condition is removed                                   |
|                 | Over temperature   | Shell surface temperature 100C+10C shut down o/p voltage, automatically recover after the temperature drops. |
| Environment     | Working TEMP.  | -40~+60°C (see below derating curve)   |
|                 | Working Humidity   | 20 - 95%RH non-condensing  |
|                 | Storage TEM.,Humidity  | -40 - +80°C,10 - 95% RH non-condensing   |
|                 | TEMP.coefficient   | ±0.03%/°C(0 - 50°C)  |
|                 | Vibration  | 10~500Hz, 5G 10min./1 cycle, period for 60min. each along X,Y,Z axes   |
| Safety & EMC    | Safety standards   | EN61347-1 EN61347-2-13 UL8750 CAN/CSA-C22.2 No. 250.13 UL1310  |
|                 | Withstand voltage  | I/P-O/P:3.75KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC ( EU )  |
|                 |  | I/P-O/P:1.80KVAC I/P-FG:1.8KVAC O/P-FG:1.8KVAC ( US )  |
|                 | Isolation resistance   | I/P-O/P:100MΩ/500VDC/25°C/70%RH  |
| EMC Emission    | EN55015 EN61000-3-2,3 (≥50%load) FCC Part 15 Subpart B   |  |
| Others          | Net Weight   | 1.15Kg   |
|                 | Dimension  | 232*78*25.1mm (L*W*H)  |
|                 | Packing  | 330*300*210mm  |
| Notes           | 1. All parameters NOT specially mentioned are measured at rated load and 25°C of ambient temperature.<br>2. Tolerance: includes set up tolerance and load regulation . |  |

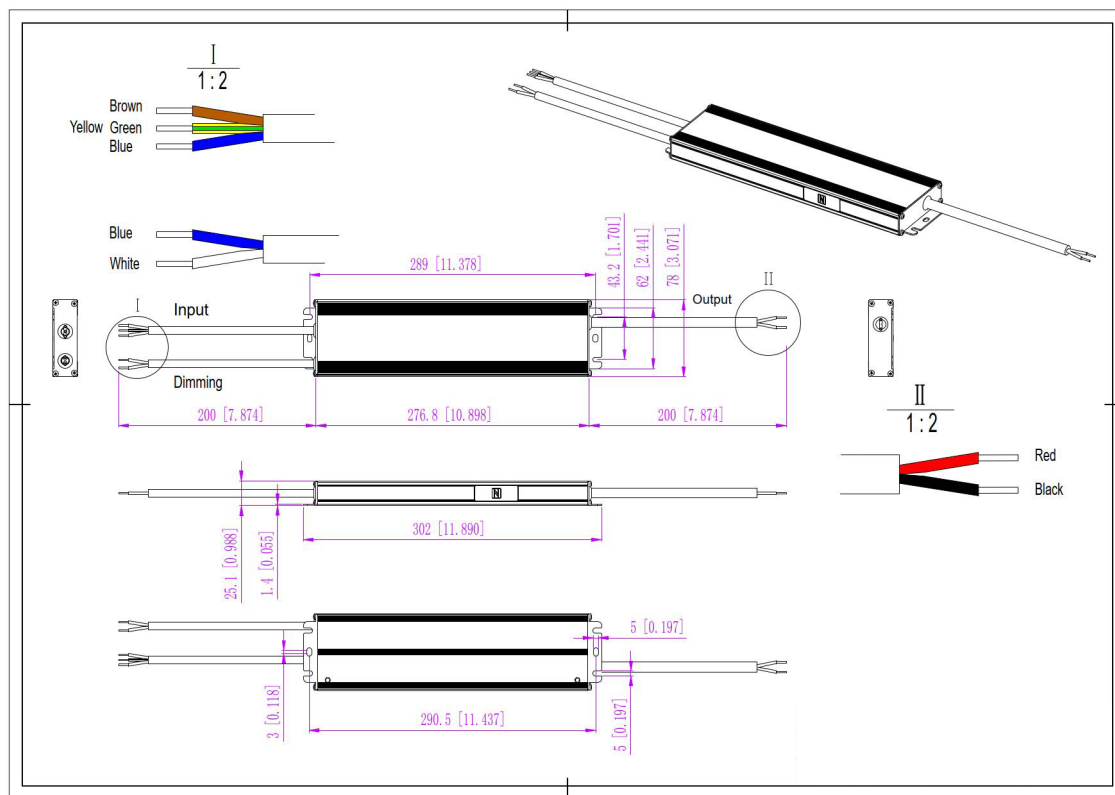
### Efficiency Curve (efficiency vs output load)



### Derating Curve (output load vs TEMP.)



❖ To extend their life, please refer to the Derating Curve and derate according to the temperature.

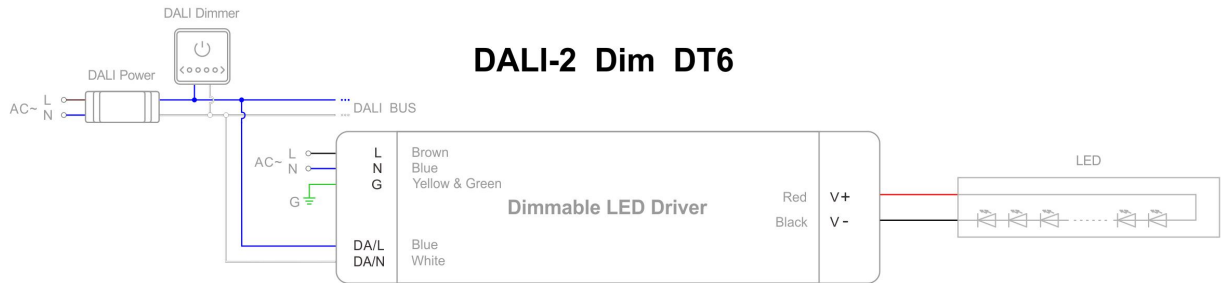


## 24V Version

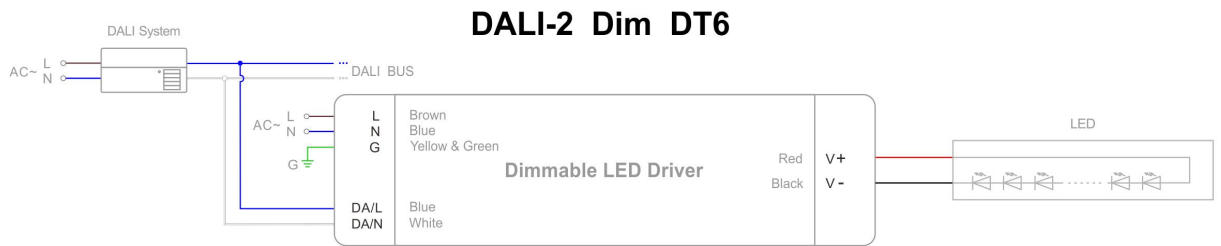
1. Input cable 3\*1.0mm<sup>2</sup>, the Brown cable to (L), the White cable to (N), and the Yellow & Green cable to (FG)
2. Output cable 2\*2.08mm<sup>2</sup> (12V), 2\*2.08mm<sup>2</sup> (24V), Red cable (+) to Positive side(+), Black cable (-) to Negative side (-).
3. Dimming cable 2\*1.0mm<sup>2</sup>, White DA/N and Blue DA/L (No polar) connected to the DALI BUS when use DALI function. White (N) is connected to AC (N) while Blue (L) is connected to Push dim switch dimmer( L) when use Push function.

## Dimming Operation and Connecting Diagram

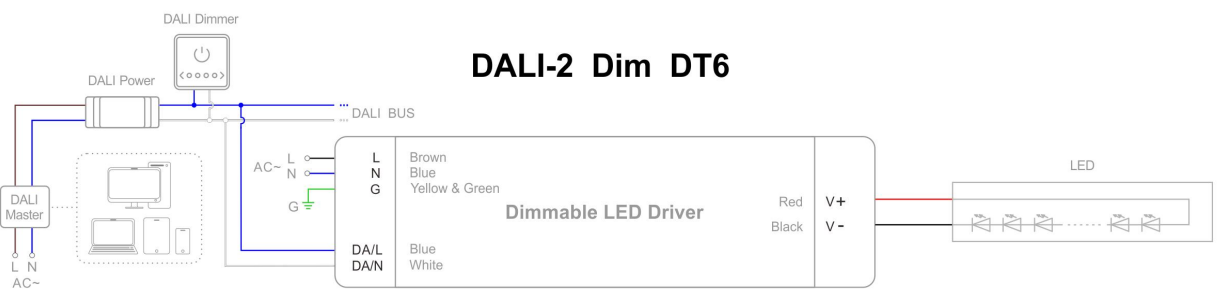
- Using DALI-2 dimming with DALI power and dimmer



- Using DALI-2 dimming with DALI system and DALI bus



- Using DALI-2 dimming with intelligent device, DALI master and dimmer



● **Using PUSH dimming with dimmer (on & off function)**

