KV-DP2A Series 300W

Whole Family: KV-DP2A 12V/ 24V/ 36V/ 48VDC - [60W 75W 80W 90W 96W 100W 120W 150W 200W 300W 320W 360W 600W]

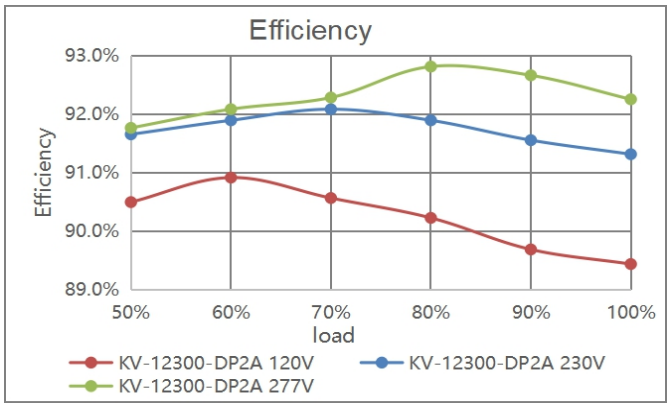
Features

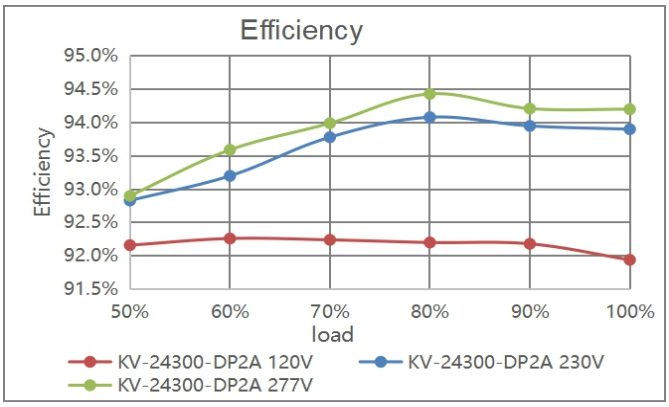
Output:	Constant Voltage
Range:	110-240VAC (EU) & 100-277VAC(US)
PFC design:	Built-in active PFC function
Efficiency:	Up to 93.5%
Protections:	Short circuit/ over load/ over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	IP66(EU); Full aluminum housing, for dry, damp and wet locations(US)
Dimming function:	DALI-2 & PUSH (2 in 1) dimming. Digital dimming, flicker-free dimming
Dimming range:	0-100% dimming depth: 0.1%
Application:	Suitable for LED lighting and moving sign applications
Warranty:	5 years warranty

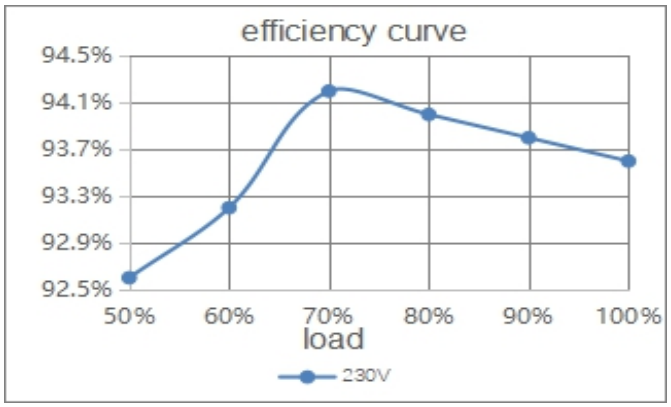
Specification

Model		KV-12300-DP2A	KV-24300-DP2A	KV-36300-DP2A	KV-48300-DP2A
Certificate		UL / cUL / Class P / FCC / ENEC / SAA / CE / CB / SELV / ROHS / Reach / DALI2			
Output	DC Voltage	12V (12-13V adjust by NFC)	24V (24-25.5V adjust by NFC)	36V (36-38V adjust by NFC)	48V (48-50V adjust by NFC)
	Voltage Tolerance	±0.5V			
	Voltage Regulation	0.5%			
	Rated current	25A	12.5A	8.33A	6.25A
	Rated power	300W			
	Load Regulation	2%	1%		
Input	Voltage Range	110-240VAC(EU) & 100-277VAC(US)			
	Frequency Range	47 - 63Hz			
	Power Factor (Typ.)	PF≥0.99@120VAC PF≥0.97@230VAC PF≥0.94@277VAC			
	THD(Typ.) @ full load	≤15%			
	Efficiency(Typ.) @ full load	89.5%@120VAC 91%@230VAC 91%@277VAC	92%@120VAC 93.5%@230VAC 93.5%@277VAC	92%@120VAC 93.5%@230VAC 93.5%@277VAC	92%@120VAC 93.5%@230VAC 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 temp.100C+10C shut down o/p voltage,automatically recover after the temperature drops.			
Environment	Working TEMP.	-40~+60℃ (see below derating curve)			
	Working Humidity	20 - 95%RH non-condensing			
	Storage TEM.,Humidity	-40 - +80℃,10 - 95% RH non-condensing			
	TEMP.coefficient	±0.03%/℃(0 - 50℃)			
	Vibration	10~500Hz, 5G 12min./1 cycle, period for 72min. each along X,Y,Z axes			
Safety & EMC	Safety standards	EN61347-1 EN61347-2-13 (EU) & UL8750 CAN/CSA-C22.2 No. 250.13 (US)			
	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℃ / 70%RH			
	EMC Emission	EN55015 EN61000-3-2,3 (≥50%) (EU) & FCC Part 15, Subpart B(US)			
Others	Net Weight	1.15Kg			
	Dimension	302*78*25.1mm (L*W*H)			
	Packing	350*300*215mm 20pcs /CTN			
Notes	1. All parameters NOT specially mentioned are measured at rated load and 25℃ of ambient temperature. 2. Tolerance: includes set up tolerance and load regulation .				

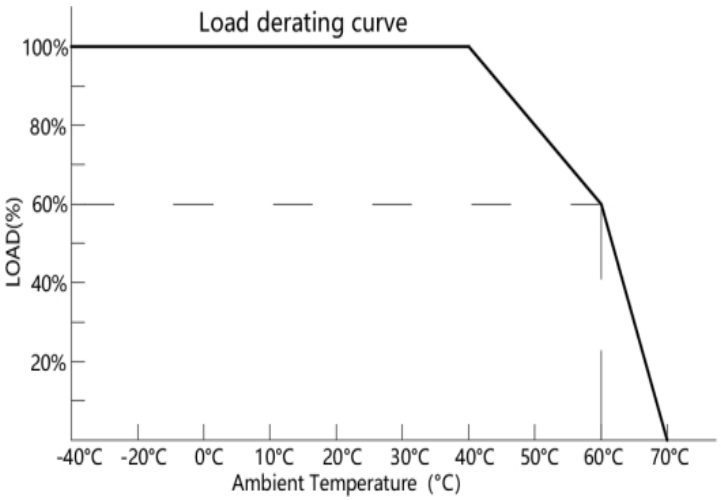
Efficiency Curve (efficiency vs output load)





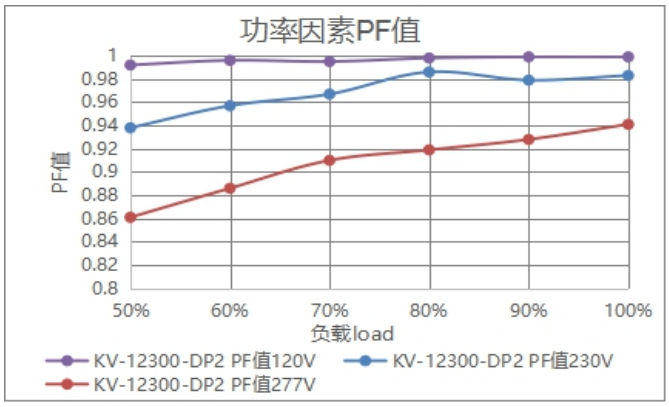


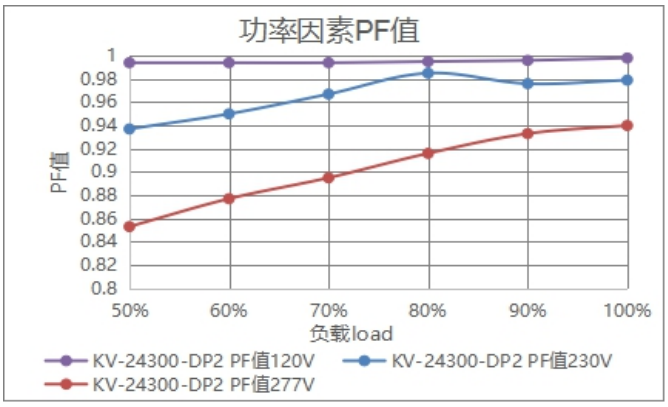
Derating Curve (output load vs TEMP.)

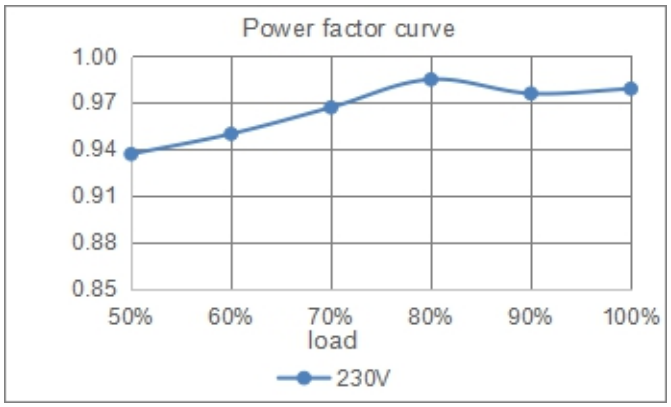


1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading .

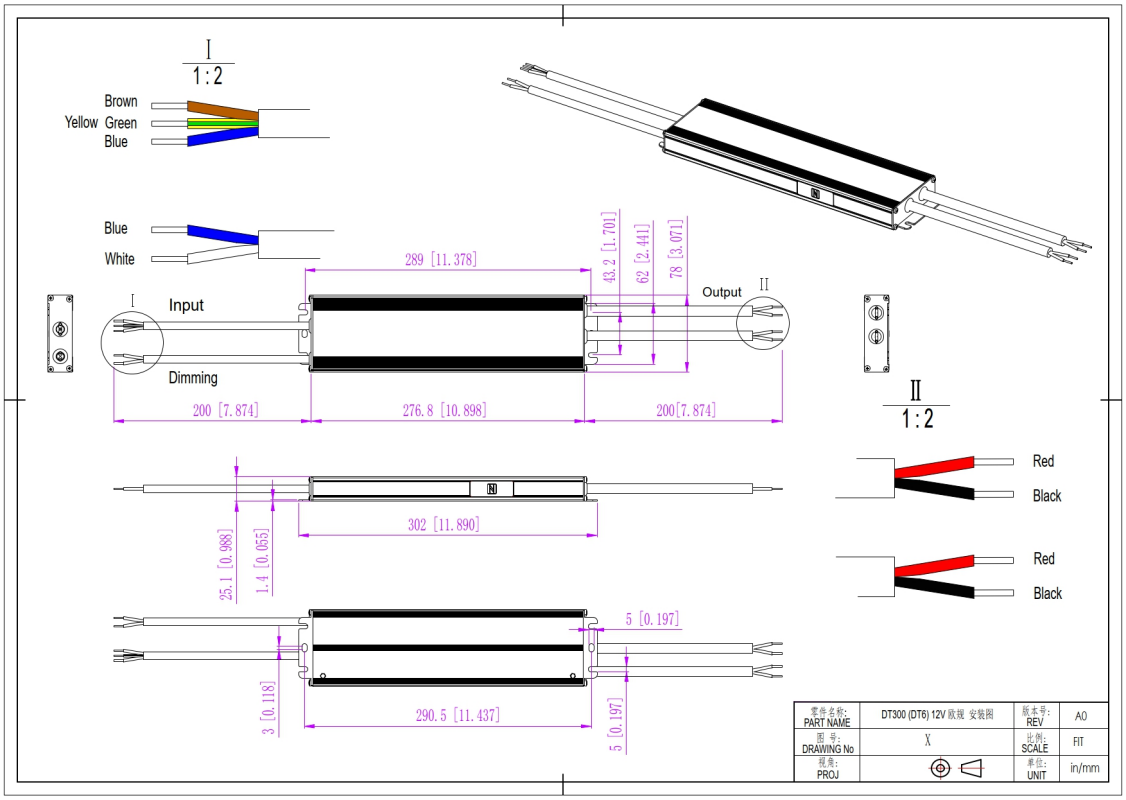
Power Factor Curve



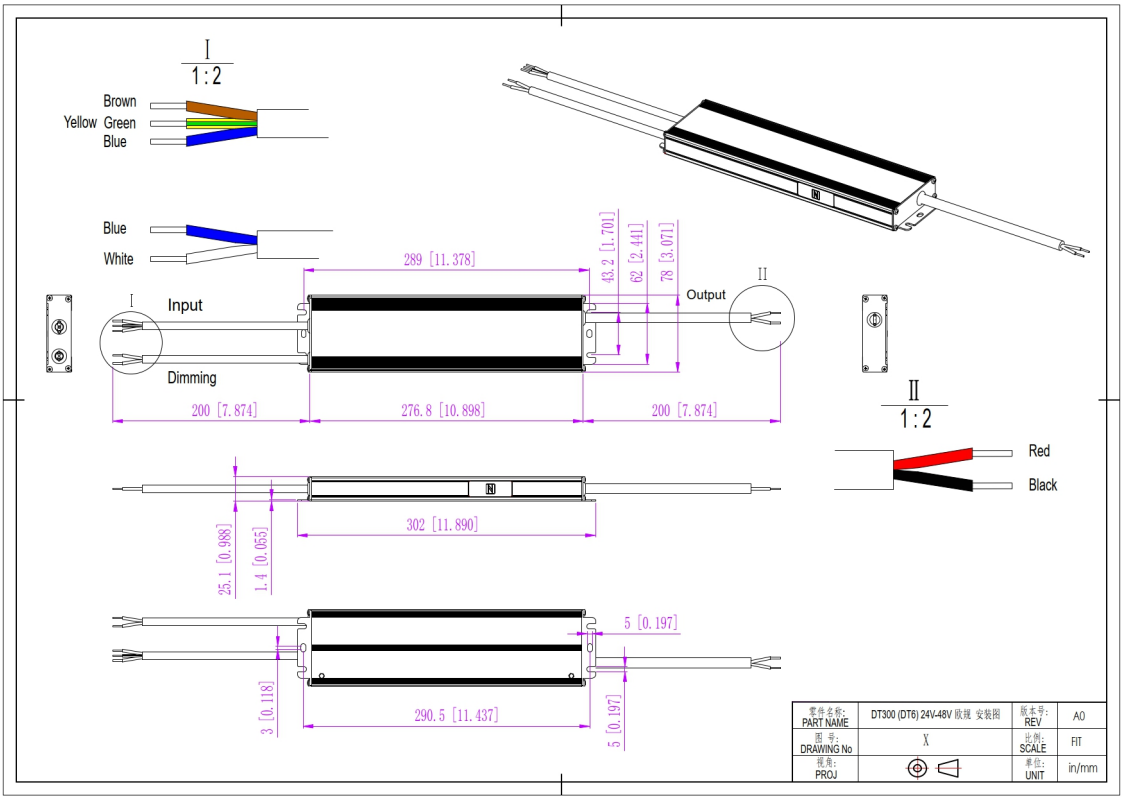




Mechanical Specification (For European Market)



12V Version



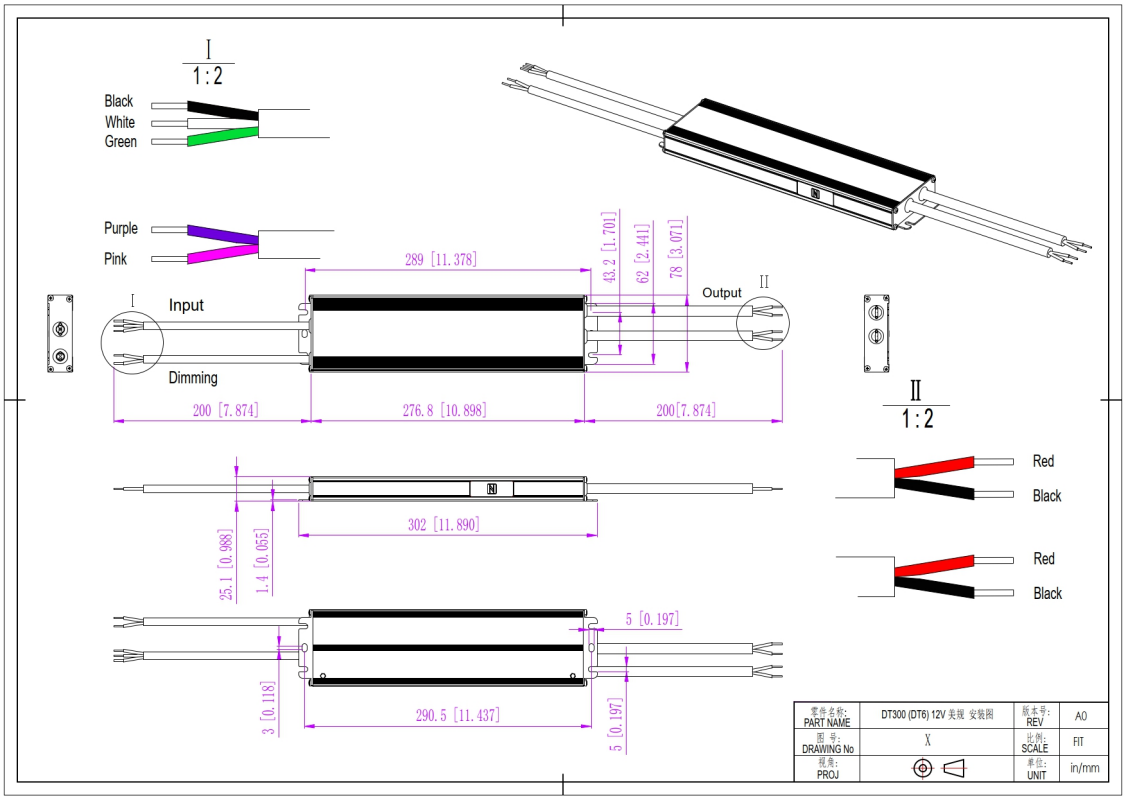
24V&36V&48V Version

1. Input cable 3*1.0mm^2, the Brown cable to (L), the White cable to (N), and the Yellow & Green cable to (FG).
2. Output cable 2*2.08mm^2 (12V), 2*2.08mm^2 (24V/36V/48V), Red cable (+) to Positive side(+), Black cable (-) to Negative side (-).
3. Dimming cable 2*1.0mm^2, Blue DA/N and White DA/L (No polar) connected to the DALI BUS when use DALI function.
   Blue (N) is connected to AC (N) while White (L) is connected to Push dim switch dimmer(L) when use Push function.

Warm tips:

1. Any other requests for, we can customized.

Mechanical Specification (For America Market)



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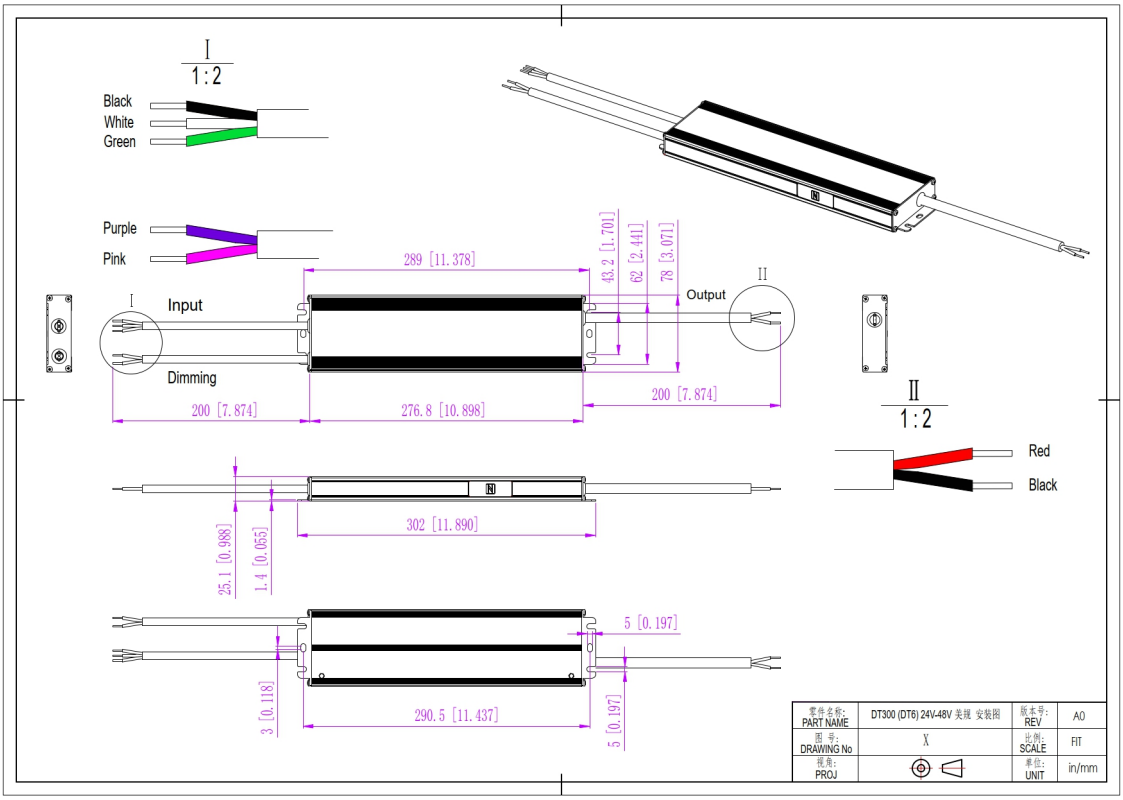


24V&36V&48V Version

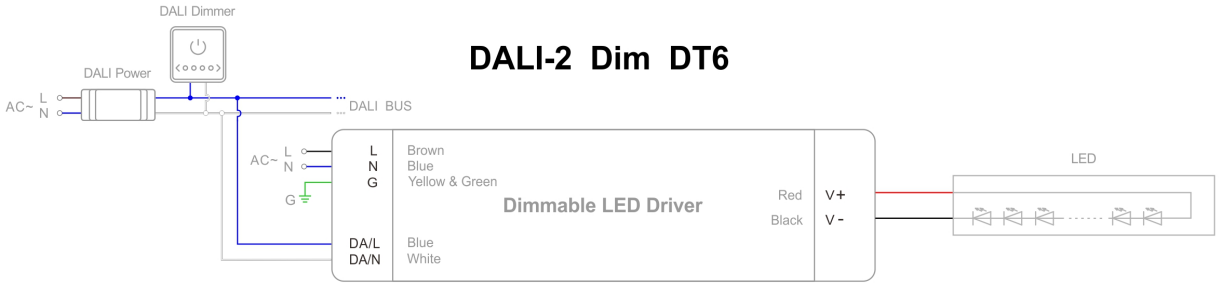
1. Input cable 3*18AWG, the Black cable to (L), the White cable to (N), and the Green cable to (G).
2. Output cable 2*14AWG (12V), 2*14AWG (24V/36V/48V), Black cable (+) to Positive side(+), Red cable (+) to Negative side (-).
3. Dimming cable 2*18AWG,Purple DA/N and Pink DA/L (No polar) connected to the DALI BUS when use DALI function.
   Purple (N) is connected to AC (N) while Pink (L) is connected to Push dim switch dimmer(L) when use Push function.

Warm tips:

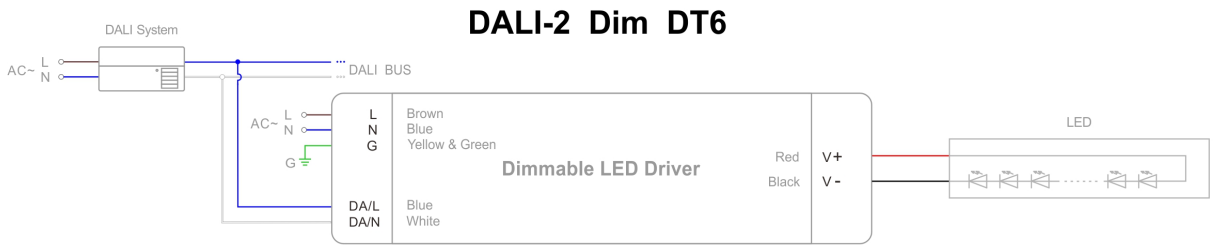
1. Any other requests for, we can customized.

Dimming Operation and Connecting Diagram (For European Market)

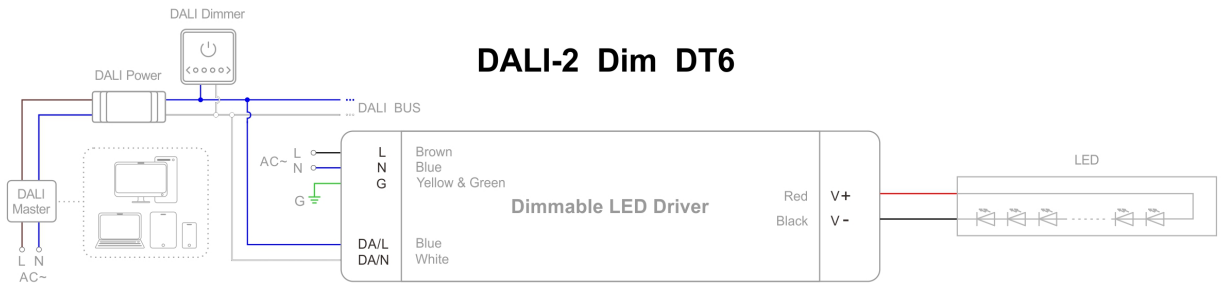
- **Using DALI-2 dimming with DALI power and dimmer**



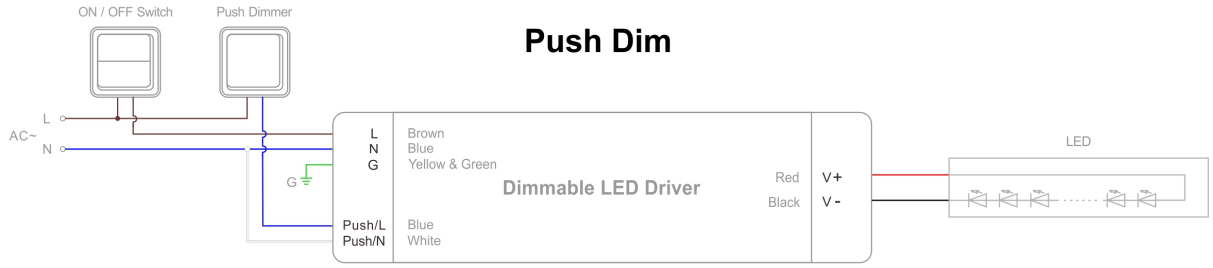
- **Using DALI-2 dimming with DALI system and DALI bus**

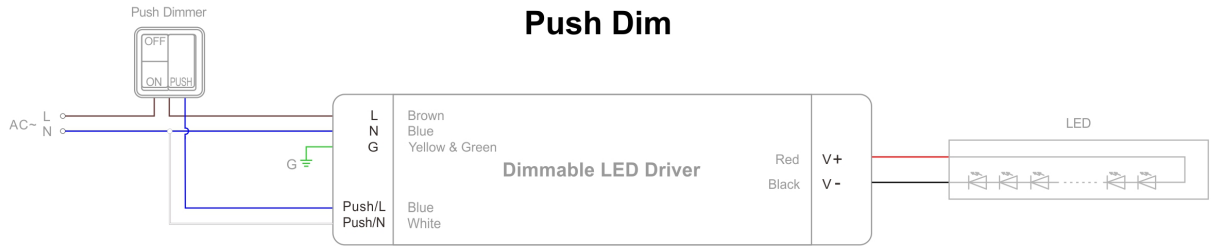


- **Using DALI-2 dimming with intelligent device, DALI master and dimmer**



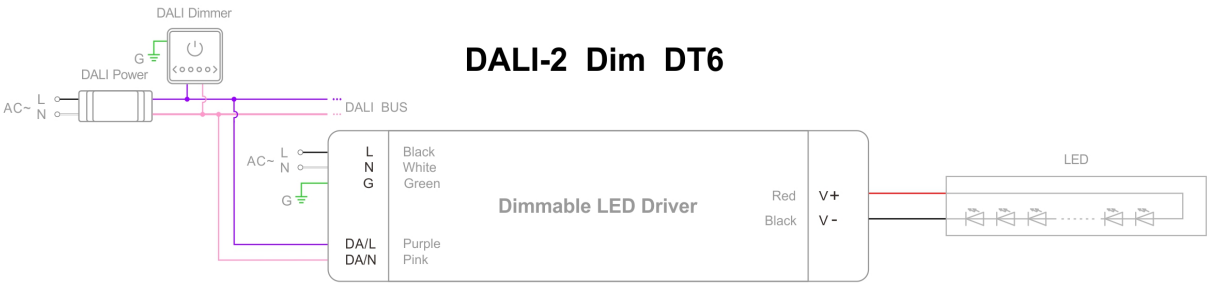
- **Using PUSH dimming with dimmer (on & off function)**



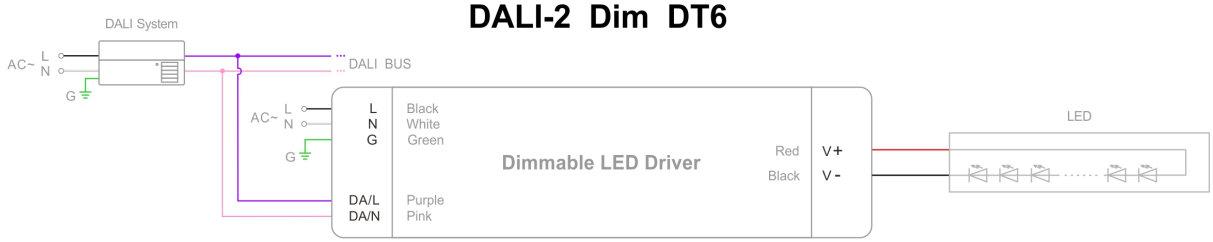


Dimming Operation and Connecting Diagram (For North American Market)

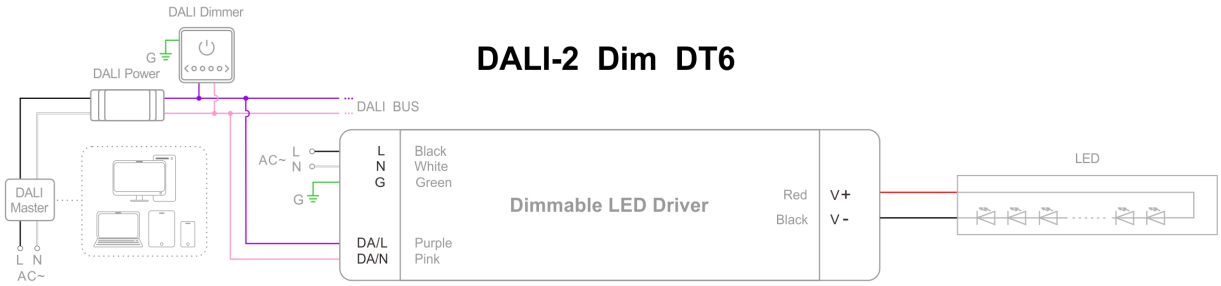
- **Using DALI-2 dimming with DALI power and dimmer**



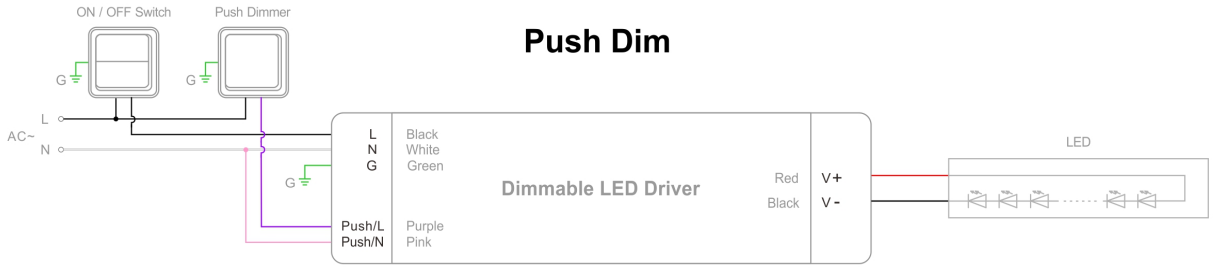
- **Using DALI-2 dimming with DALI system and DALI bus**

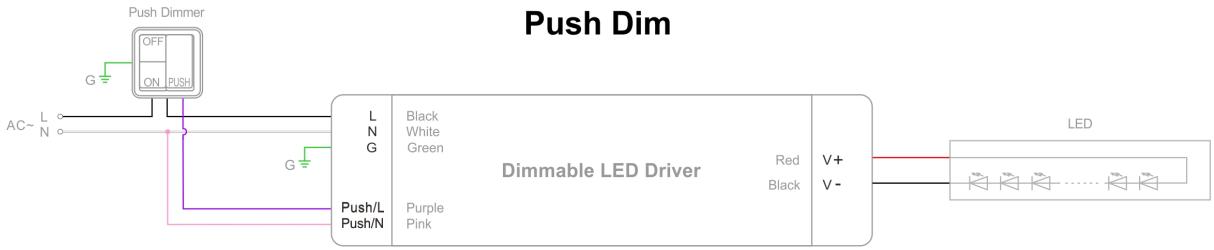


- **Using DALI-2 dimming with intelligent device, DALI master and dimmer**

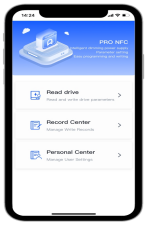


- **Using PUSH dimming with dimmer (on & off function)**





NFC Function



ProNFC APP

NFC Handheld devices

- Address settings:

NFC setting address:

The address can be read and written by a mobile with SetNFC APP or NFC handheld device (NFC read & write device: NFC-RW)by close to the NFC signal area of the DALI-2/PUSH 2 in 1 Dimmable driver.

NFC voltage regulation level										
	level 1	level 2	level 3	level 4	level 5	level 6	level 7	level 8	level 9	level 10
12V	12V	12.1V	12.2V	12.3V	12.4V	12.6V	12.7V	12.8V	12.9V	13V
24V	24V	24.2V	24.3V	24.5V	24.7V	24.8V	25V	25.2V	25.3V	25.5V
36V	36V	36.2V	36.4V	36.7V	36.9V	37.1V	37.3V	37.6V	37.8V	38.0V
48V	48V	48.2V	48.4V	48.7V	48.9V	49.1V	49.3V	49.6V	49.8V	50.0V

Instruction

1. This driver should be installed by qualified and professional person.
2. Please make sure the driver is installed with adequate ventilation around it to allow for heat dissipation.
3. Ensure that wiring is correct before test in order to avoid light and power supply damage.
4. If driver Cannot work normally, don’t maintain privately.

Lucretia

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