

KV-DP2L Series 100W

Whole Family: KV-xy-DP2L 12V/ 24V/ 36V/ 48V DC - [30W 36W 60W 100W 150W]



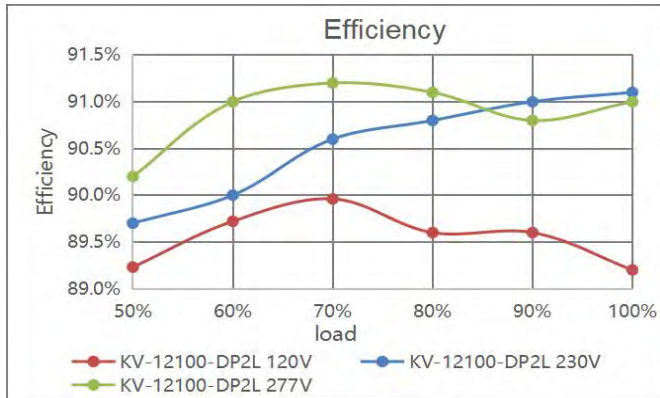
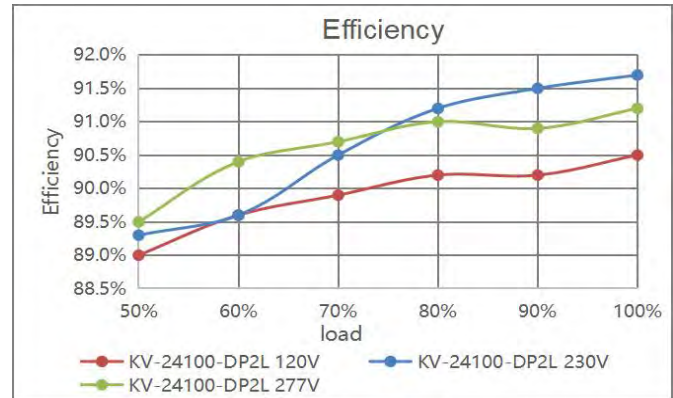
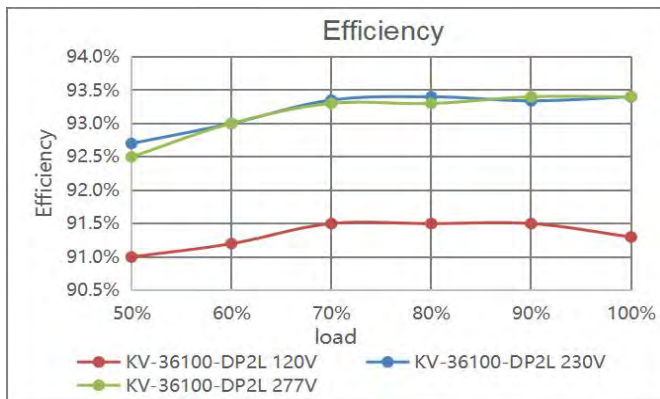
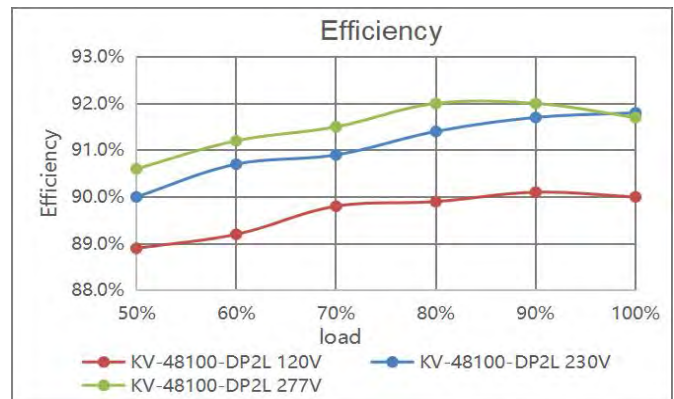
Features

Output:	Constant Voltage
Range:	100-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 91.7%
Protections:	Short circuit/ over load/ over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	IP66 for indoor and outdoor
Dimming function:	DALI Protocol IEC62386; PUSH-DIM
Dimming range:	0-100% dimming depth: 0.1%
PWM output:	Frequency 4K Hz, reaching the exemption level
NFC function	Adjust slightly, read & write output voltage, and set address
Application:	Suitable for LED lighting and moving sign applications
Warranty:	5 years warranty

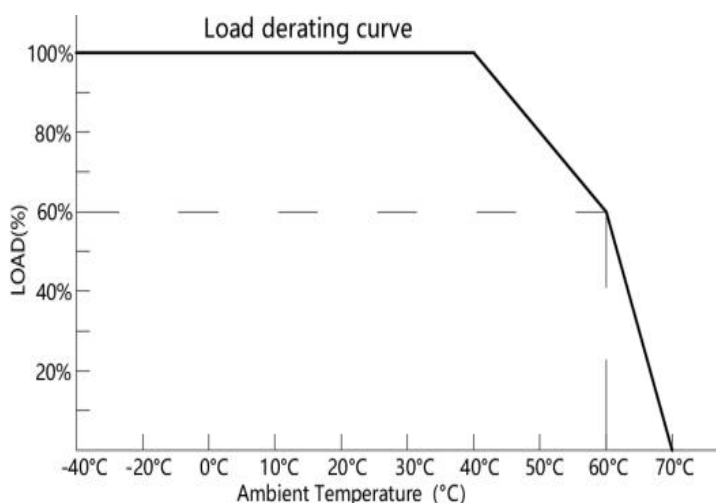
Specification

Model		KV-12100-DP2L	KV-24100-DP2L	KV-36100-DP2L	KV-48100-DP2L
Certificate		UL / cUL / FCC / ENEC / SAA / CE / CB / RoHS			
Output	DC Voltage	12V (12-13.5V adjust by NFC)	24V (24-26V adjust by NFC)	36V (36-38V adjust by NFC)	48V (48-50V adjust by NFC)
	Voltage Tolerance	±0.2V			
	Voltage Regulation	±0.5%			
	Rated current	8.33A	4.17A	2.78A	2.08A
	Rated power	100W			
	Load Regulation	2%	1%		
	Standby power	≤ 0.5W			
Input	Voltage Range	100-277VAC			
	Frequency Range	47 - 63Hz			
	Power Factor @ full load	PF≥0.98@120VAC	PF≥0.97@230VAC	PF≥0.95@277VAC	
	THD(Typ.) @ full load	≤10%@120VAC	≤10%@230VAC	≤15%@277VAC	
	Efficiency @ full load	89.2%@120VAC 91%@230VAC 91%@277VAC	90.5%@120VAC 91.7%@230VAC 91.7%@277VAC	90%@120VAC 91.8%@230VAC 91.7%@277VAC	90%@120VAC 91.7%@230VAC 91.7%@277VAC
	AC Current (Max.)	1.2A			
	Inrush Current (Typ.)	17A, 266us@50%120VAC 60A, 128us@50%230VAC 42.4A, 286us@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.100℃±10℃,output will be off; recovers automatically after temp. 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 UL1310 (US)			
	Withstand voltage	I/P-O/P:3.75KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC (EU) I/P-O/P:1.8KVAC I/P-FG:1.8KVAC O/P-FG:1.8KVAC (US)			
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25℃ / 70%RH			
	EMC immunity	EN61000-4-2,3,4,5,6,11 EN61547			
	EMC Emission	EN55015 EN61000-3-2,3 (≥50%) (EU) & FCC Part 15 Subpart B (US)			
Others	Net Weight	0.49Kg			
	Dimension	338*38.5*23.6mm (L*W*H)			
	Packing	360*270*175mm 30pcs /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)

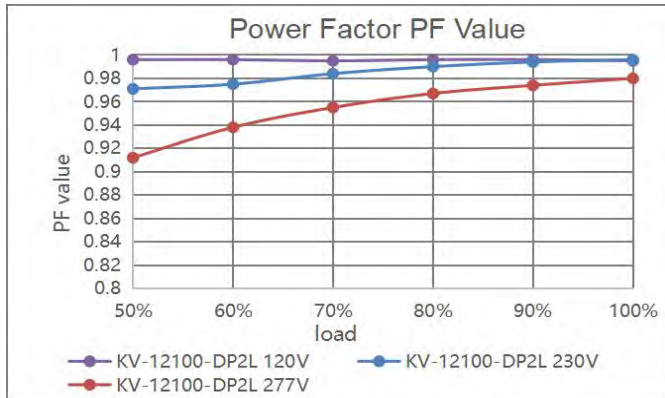
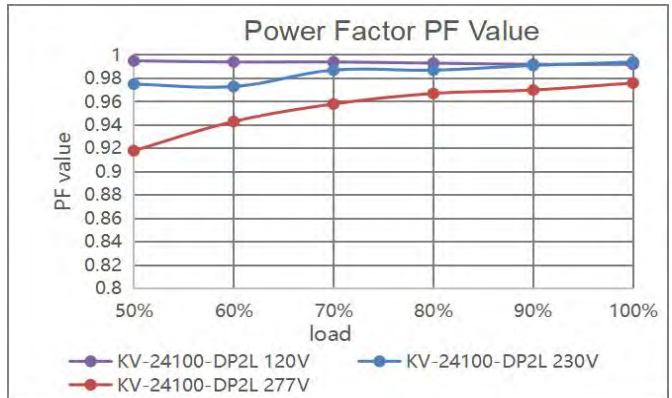
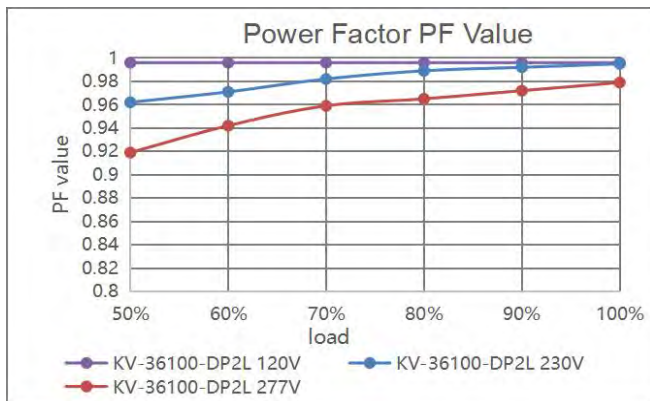
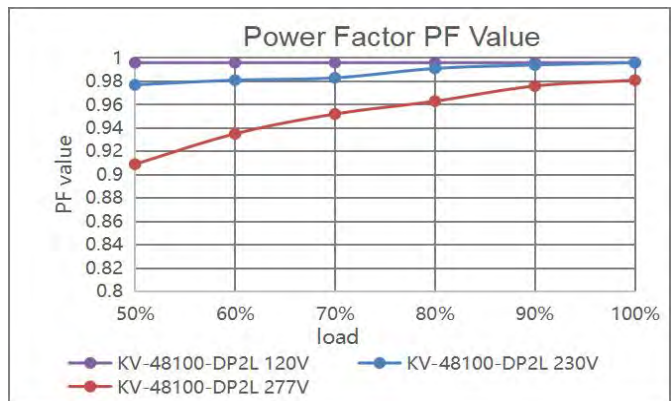


Derating Curve (output load vs TEMP.)

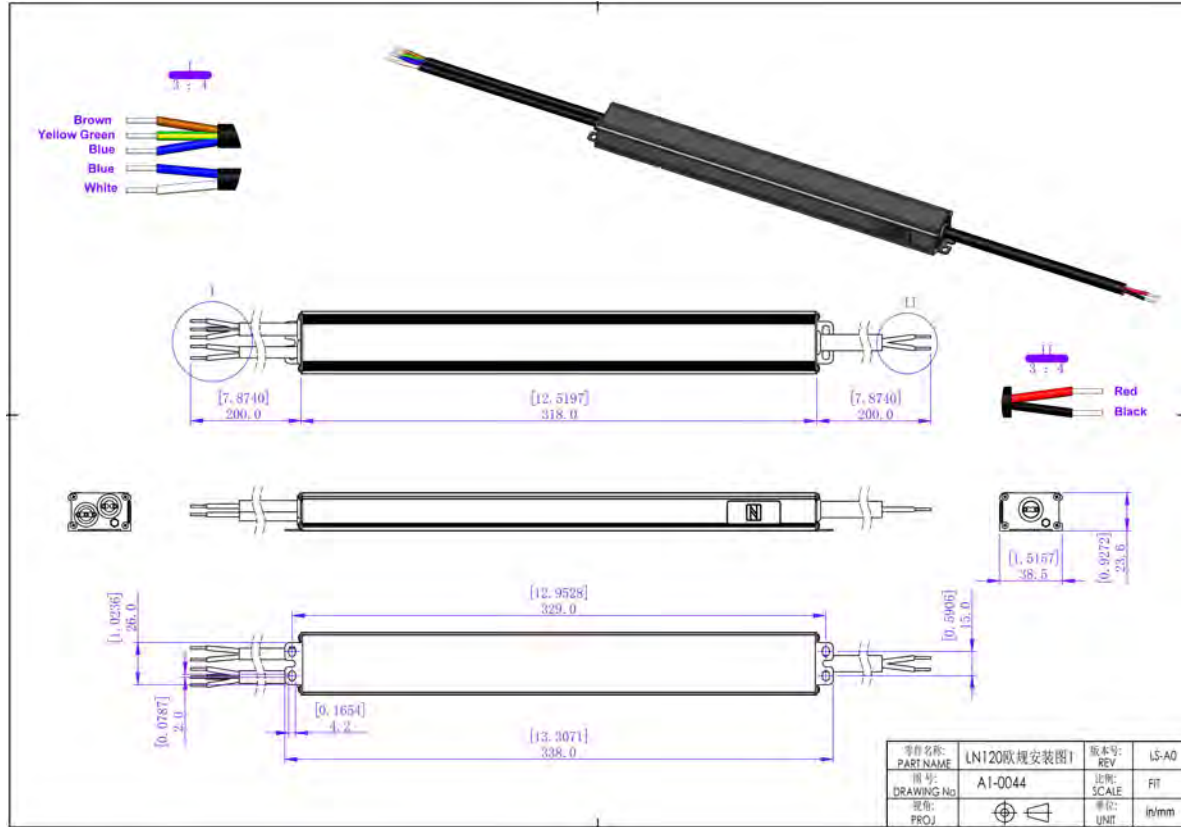


1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid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

Power Factor PF Value



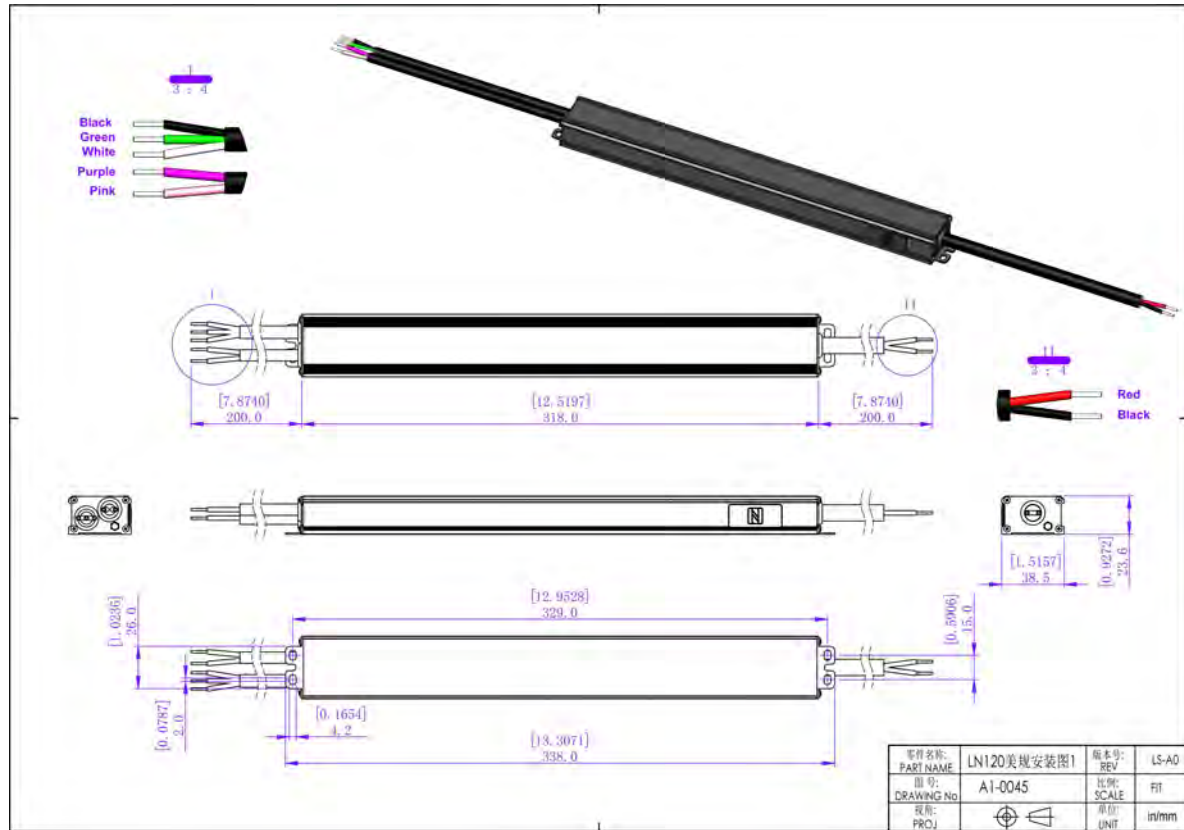
Mechanical Specification (For European Market)



12V&24V&36V&48V Version

1. Input cable 3*1.0mm², the Brown cable to (L), the Blue cable to (N), and the Yellow & Green cable to (FG).
2. Output cable 2*1.5mm²(12V), 2*1.0 mm² (24V/36V/48V), Red cable (+) to Positive side(+), Black cable(-) to Negative side (-).
3. Dimming cable 2*1.0mm², White DA/N and Blue DA/L (No polar) connected to the DALI BUS.
4. Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.

Mechanical Specification (For North American Market)

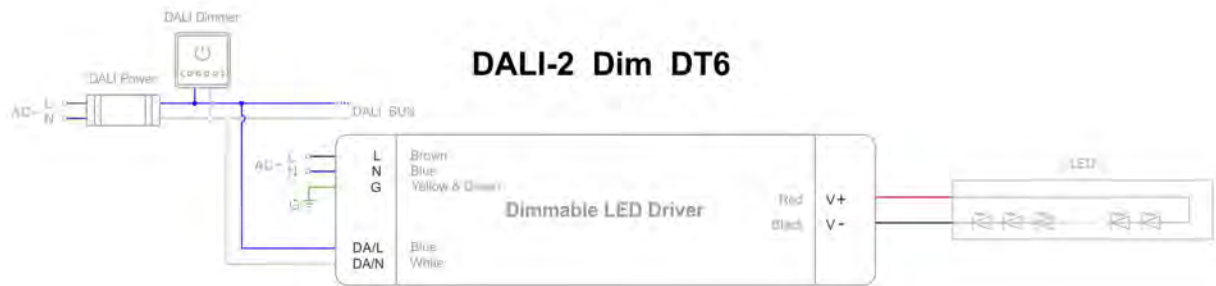


12V&24V&36V&48V Version

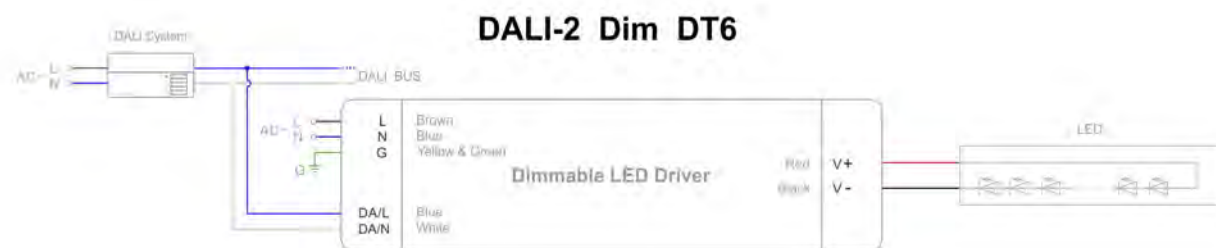
1. Input cable 3*18AWG, the Black cable to (L), the White cable to (N), and the Green cable to (FG)
2. Output cable 2*18AWG (12V), , Red cable (+) to Positive side(+), Black cable (-) to Negative side (-).
3. Dimming cable 2*18AWG, Pink DA/N and Purple DA/L (No polar) connected to the DALI BUS when use DALI function. Pink (N) is connected to AC (N) while Purple (L) is connected to Push dim switch dimmer(L) when use Push function.
4. Please make sure you connect these correctly otherwise your product will not function correctly and could be damaged.

Dimming Operation and Connecting Diagram (For European Market)

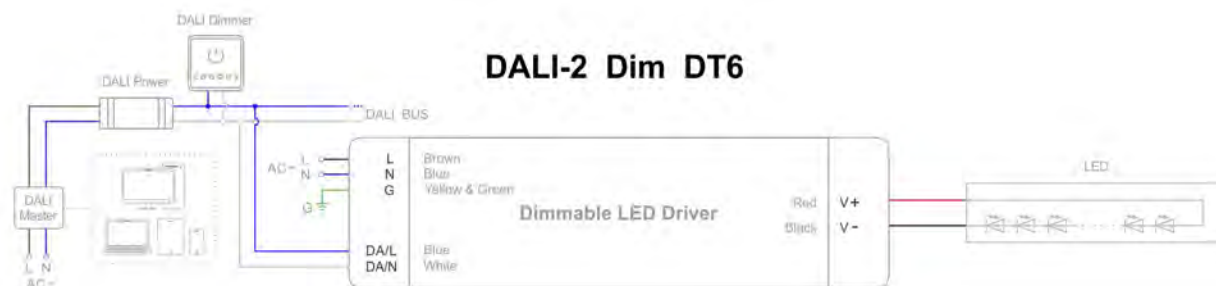
- Using DALI-2 dimming with DALI power and dimmer



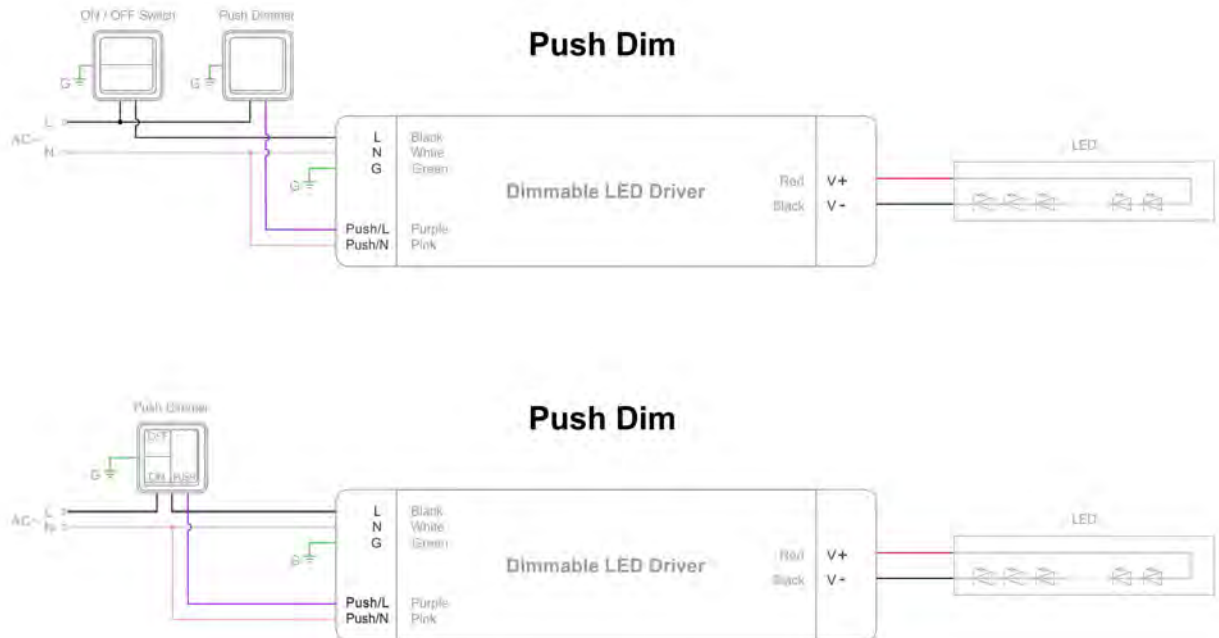
- Using DALI-2 dimming with DALI system and DALI bus



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

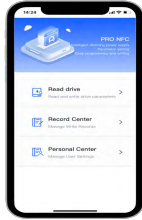


- Using PUSH dimming with dimmer (on & off function)



Please note push dimming will only work with **one power supply per dimmer or switch**

NFC Function



ProNFC APP



NFC Handheld devices

- Address settings:

NFC setting address:

The address can be read and written by a mobile with ProNFC APP or NFC handheld device (NFC read & write device: NFC-RW) by close to the NFC signal area of the DALI 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	12.2V	12.3V	12.5V	12.6V	12.8V	13V	13.1V	13.3V	13.5V
24V	24V	24.2V	24.4V	24.7V	24.9V	25.1V	25.3V	25.6V	25.8V	26.0V
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.