KV-2C-DP2 Series 60W

Whole Family: KV-XX060-2C-DP2 (XX=12/24/36/48VDC) [60W]

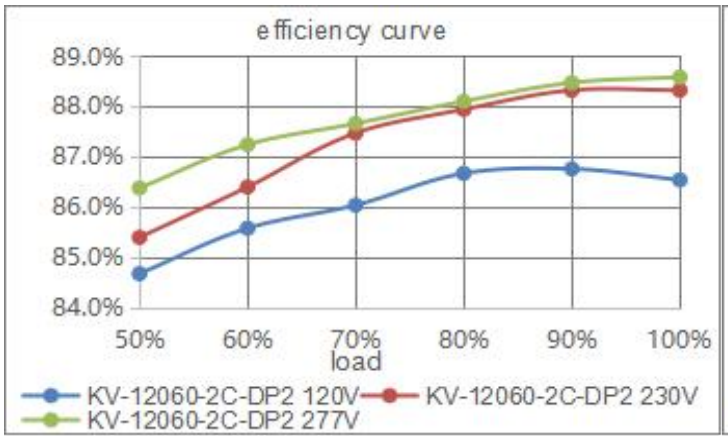
Features

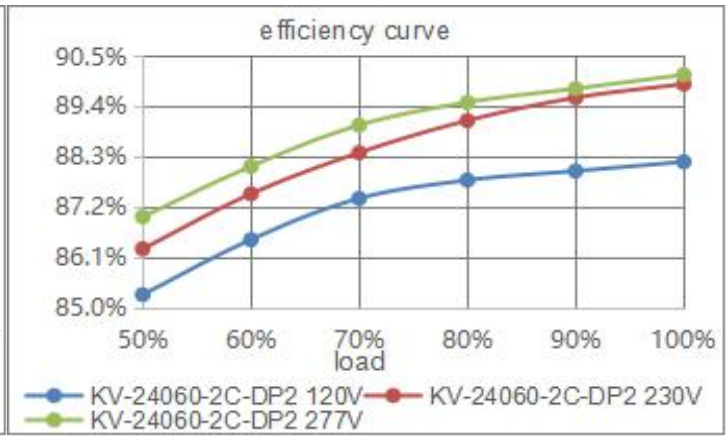
Output:	Constant Voltage
Range:	100-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 90%
Protections:	Short circuit/ over load/ over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	IP20(EU); Full plastic protection housing, for dry and damp locations(US)
Dimming function:	DALI-2 & PUSH 2 in 1 dimming (CCT). PWM output frequency 4KHz.
Dimming range:	0-100% dimming depth:0.1%
NFC function:	1. Adjust output voltage slightly. 2. Set up address.
Application:	Suitable for LED lighting and moving sign applications
Warranty:	5 years warranty

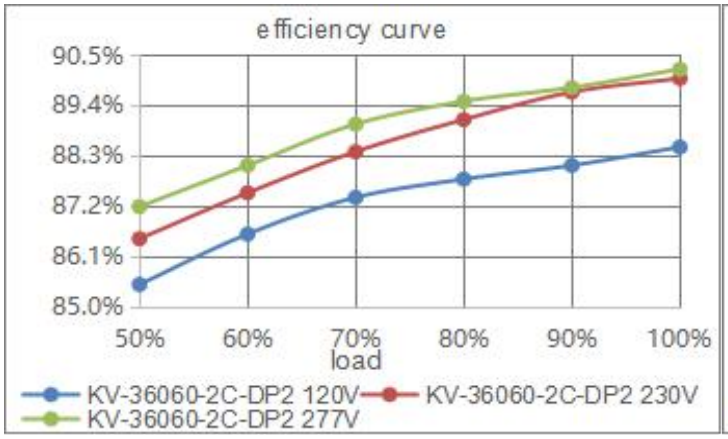
Specification

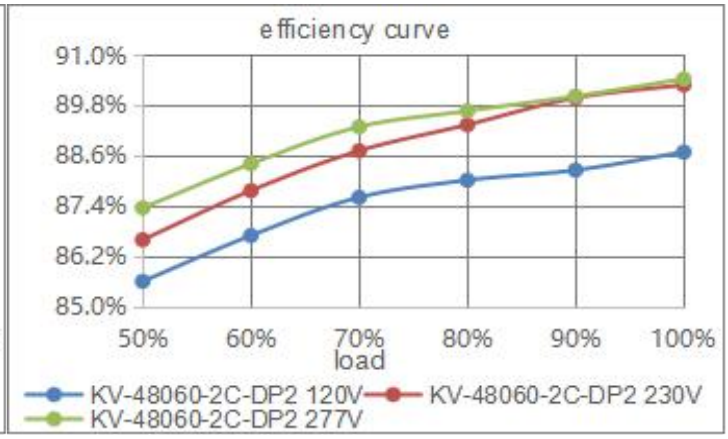
Model		KV-12060-2C-DP2	KV-24060-2C-DP2	KV-36060-2C-DP2	KV-48060-2C-DP2
Certificate		UL / cUL / FCC / ICES-005 / Class 2 / Class P / ENEC / CE / SAA / RoHS / Reach / SELV / DALI-2			
Output	DC Voltage	12V (12-13.5V adjust by NFC)	24V (24-26V adjust by NFC)	36V (36-38V adjust by NFC)	48V (48-50V adjust by NFC)
	Voltage Tolerance	±0.2V	±0.2V	±0.2V	±0.2V
	Voltage Regulation	0.5%			
	Rated current	5A	2.5A	1.67A	1.25A
	Rated power	60W			
	Load Regulation	2%	1%		
Input	Voltage Range	100-277VAC			
	Frequency Range	47 - 63Hz			
	Power Factor (Typ.)	PF≥0.98@120VAC PF≥0.96@230VAC PF≥0.94@277VAC			
	THD(Typ.) @ full load	≤10%@120VAC ≤10%@230VAC ≤15%@277VAC			
	Efficiency(Typ.) @ full load	86.5%@120VAC 88.5%@230VAC 88.5%@277VAC	88%@120VAC 89.5%@230VAC 89.5%@277VAC	88.5%@120VAC 90%@230VAC 90%@277VAC	88.5%@120VAC 90%@230VAC 90%@277VAC
	AC Current (Max.)	0.8A			
	Inrush Current (Typ.)	16A, 204us @50%120VAC 60.8A,104us @50%230VAC 37.6A,312us @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℃ shut down o/p voltage,recovers automatically after temp. drops.			
Environment	Working TEMP.	-40~+60℃ (see below derating curve)			
	Working Humidity	20 - 90%RH non-condensing			
	StorageTEM.,Humidity	-40 - +80℃,10 - 95% RH			
	TEMP.coefficient	±0.03%/℃(0 - 50℃)			
	Vibration	10~500Hz, 2G 10min./1 cycle, period for 60min. 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(EU) & I/P-O/P:1.80KVAC (US)			
	Isolation resistance	I/P-O/P:100MΩ / 500VDC / 25℃ / 70%RH			
	EMC Emission	EN55015; EN61000-3-2,3 (EU) FCC Part15 Subpart B; ANSI C63.4a-2017; ICES-005 Issue 5 (US)			
	EMC Immunity	EN61547; EN61000-4-2,3,4,5,6,11 (EU) & FCC/ICES do not request this test (US)			
Others	Net Weight	0.38Kg			
	Dimension	192.5*62*24mm (L*W*H)			
	Packing	280*210*160mm 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)

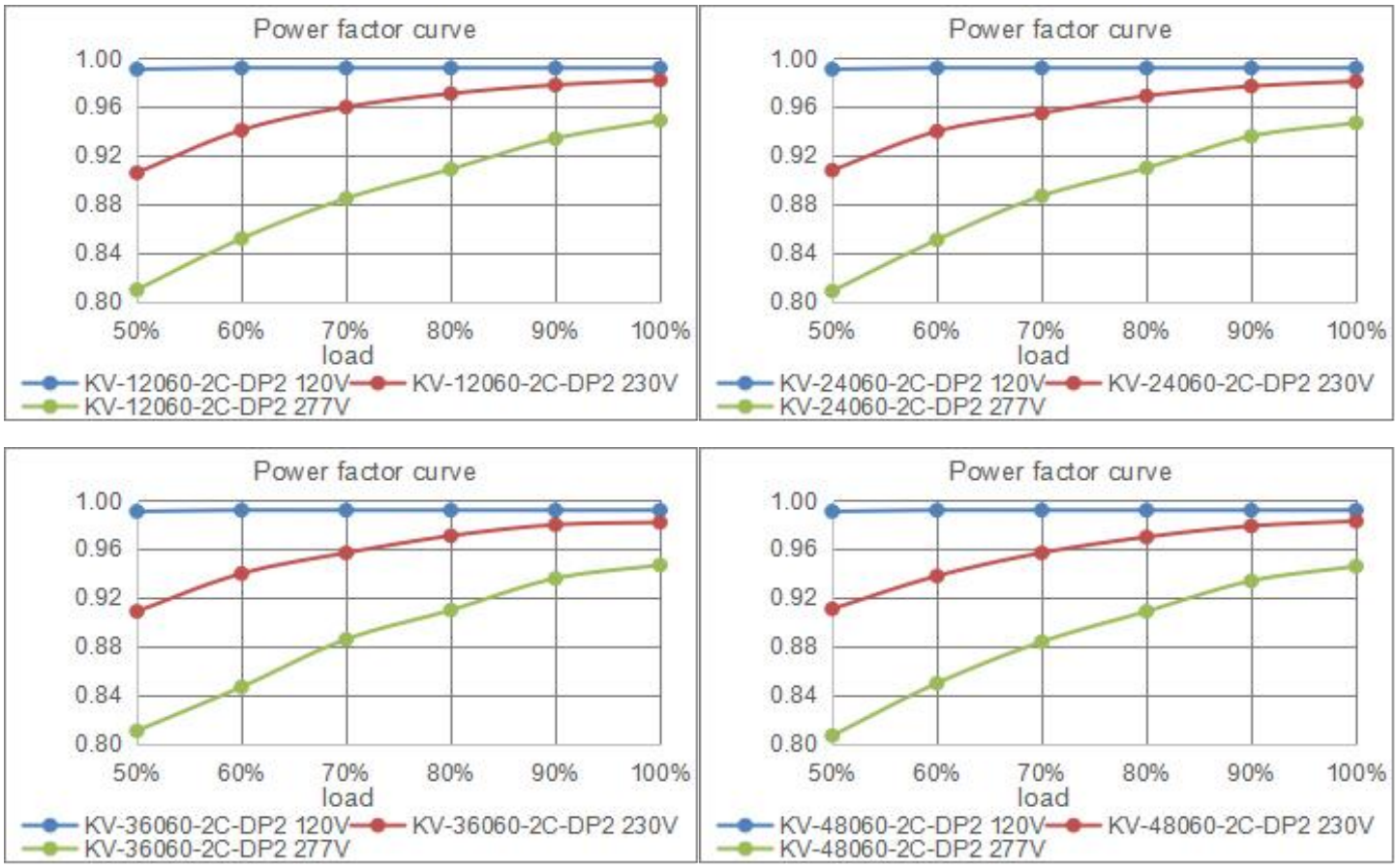




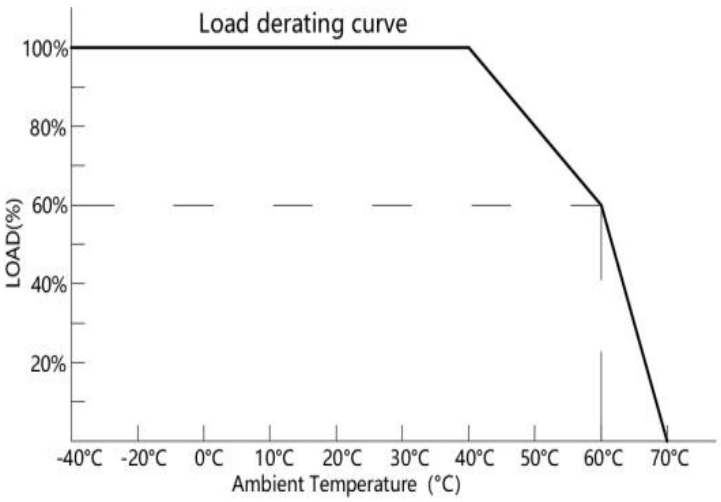




Power Factor Curve

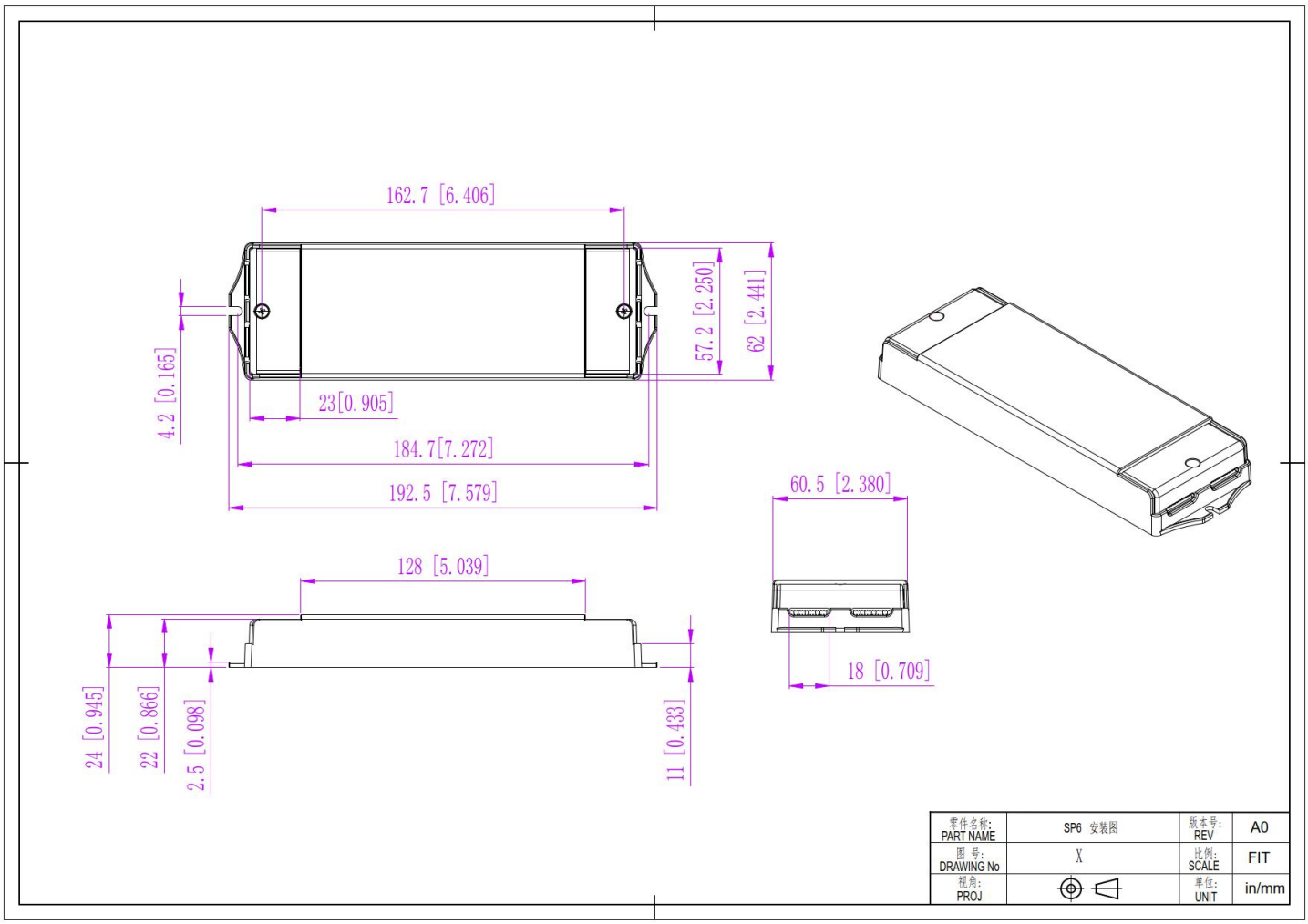


Derating Curve (output load vs TEMP.)



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.

Mechanical Specification



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

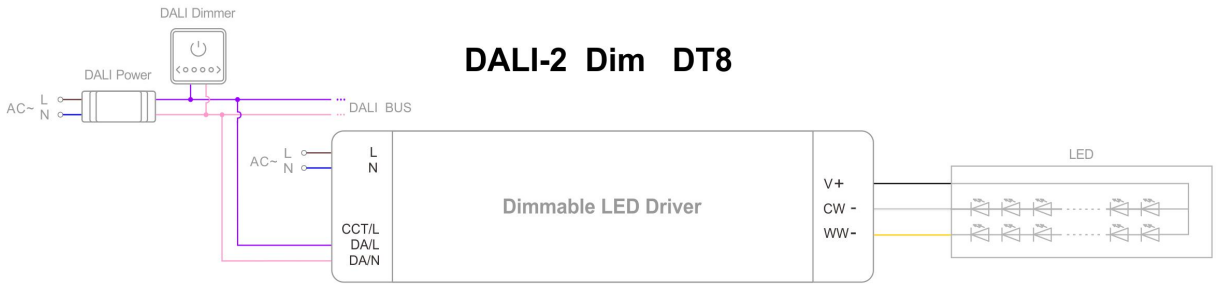
1. Input with DG128 terminals 3P: Live Wire AC (L), Neutral Wire AC(N) .
2. Output with DG128 terminals 3P: output Positive (LED+), output negative (LED-). Connected to LED Lamps.
3. DALI or PUSH Dim. terminals with DG128 terminals 3P:
   when DALI dimming, signal dimming DA1, DA2 (No polar) connected to the BUS of the DALI Master;
   when PUSH dimming, (N) is connected to AC (N) while (L) is connected to Push dim switch dimmer(L).

Warm tips:

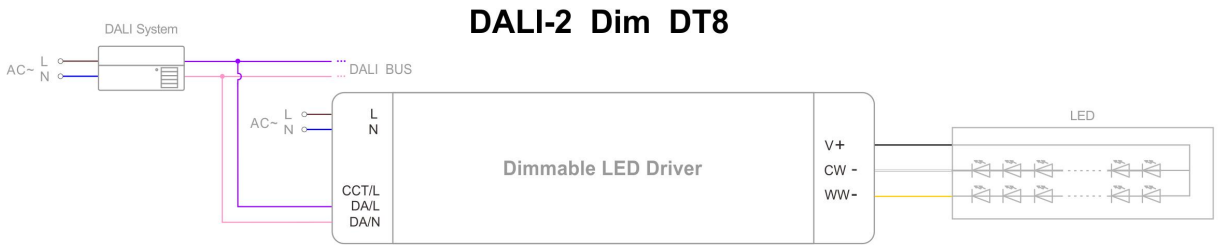
1. Suggested wire diameter: Input 0.75mm^2 - 2mm^2; Output: 0.5mm^2 - 2mm^2.
2. Any other requests for, we can customize.

Dimming Operation and Connecting Diagram (For European Market)

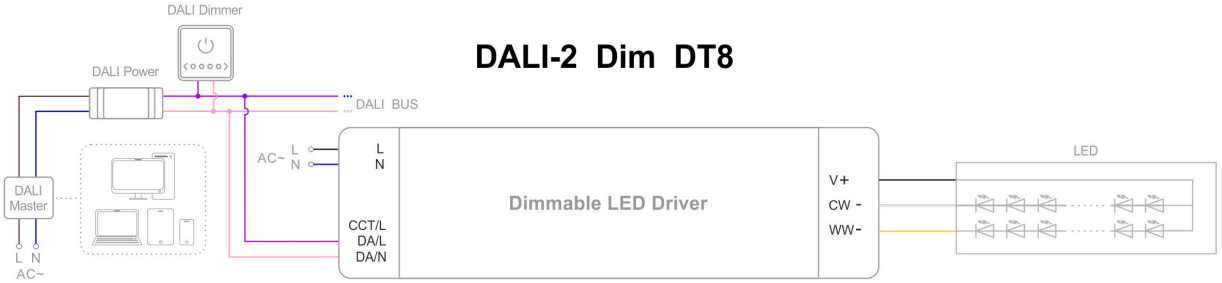
- **Using DALI-2 dimming with DALI power and dimmer**



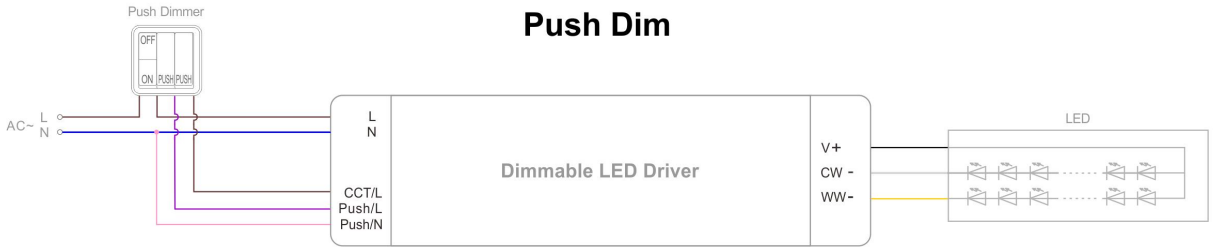
- **Using DALI-2 dimming with DALI system and DALI bus**

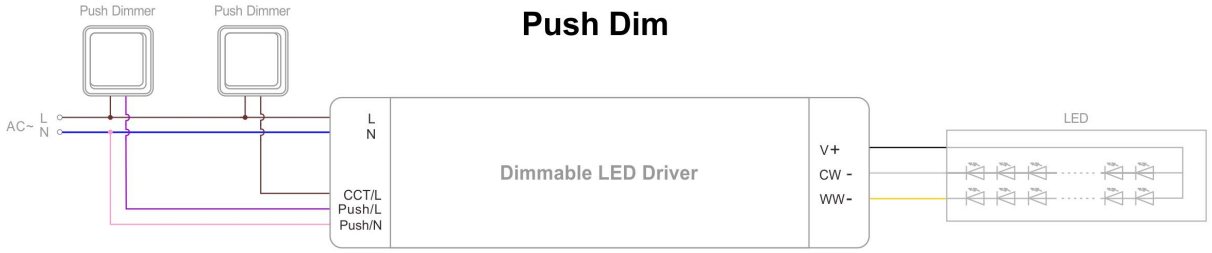


- **Using DALI-2 dimming with intelligent device, DALI master and dimmer**



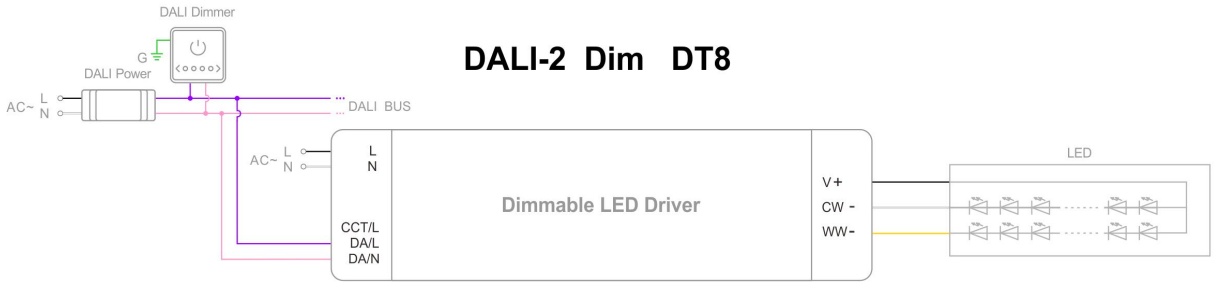
- **Using PUSH dimming with dimmer (on & off function)**



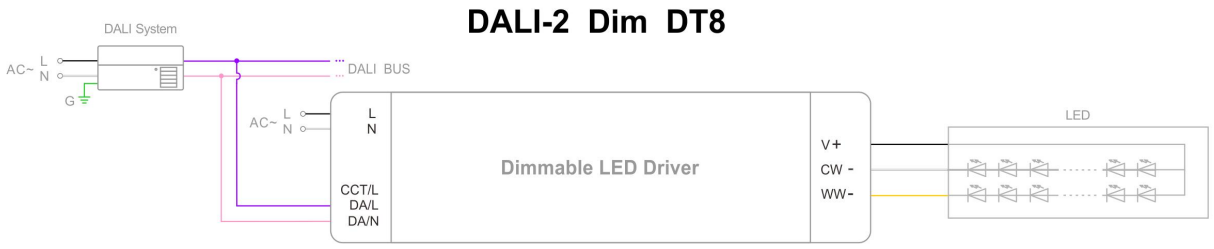


Dimming Operation and Connecting Diagram (For North American Market)

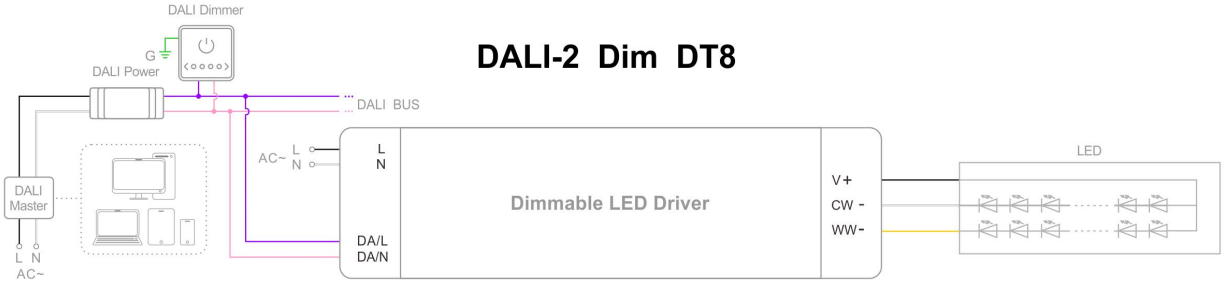
- **Using DALI-2 dimming with DALI power and dimmer**



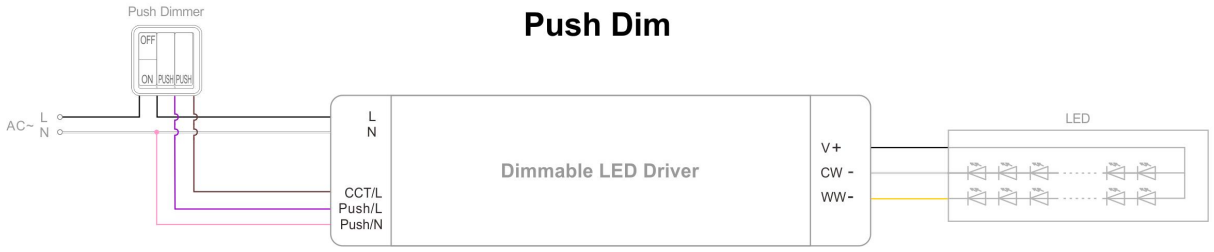
- **Using DALI-2 dimming with DALI system and DALI bus**

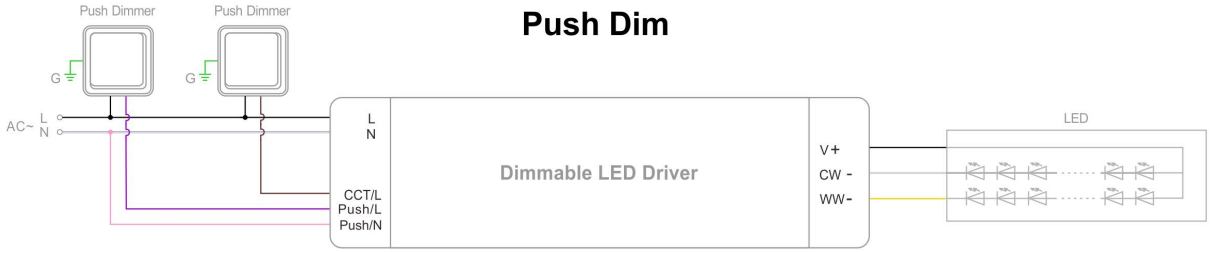


- **Using DALI-2 dimming with intelligent device, DALI master and dimmer**



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





NFC Function

ProNFC APP

NFC Handheld devices

IOS Download

Android Download

Adjust output voltage slightly by NFC:

The output voltage 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 Dimmable LED 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	12.16V	12.32V	12.48V	12.64V	12.80V	12.96V	13.12V	13.28V	13.5V
24V	24V	24.22V	24.44V	24.66V	24.88V	25.10V	25.32V	25.54V	25.66V	26.0V
36V	36V	36.22V	36.44V	36.66V	36.88V	37.10V	37.32V	37.54V	37.66V	38.00V
48V	48V	48.22V	48.44V	48.66V	48.88V	49.1V	49.32V	49.54V	49.66V	50.00V

Set Address easily by NFC

The address can be read and written by a mobile with Set NFC APP or NFC handheld device (NFC read & write device: NFC-RW) by close to the NFC signal area of the Dimmable LED driver.

Instructions

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.

Have any questions, please contact Zhuhai Shengchang.

Please visit our website or contact us for more information! www.scpower.net.cn/en