

DALI-2 & PUSH (2 in 1) Dimmable Constant Voltage LED driver 75W

# **KV-DP2A Series 75W**

Whole Family: KV-DP2A 12V/ 24V/ 36V/ 48VDC - [60W 75W 80W 90W 96W100W 120W 150W 200W 300W 320W 360W 600W]

















### **Features**

Output: Constant Voltage 100-277VAC Range:

Built-in active PFC function PFC design:

Up to 90% Efficiency:

Protections: Short circuit/ over load/ over temperature

Heat dissipation: Cooling by free air convection

IP66(EU); Full aluminum housing, for dry, damp and wet locations(US) Waterproof performance: DALI-2 & PUSH (2 in 1) dimming. Digital dimming, flicker-free dimming Dimming function:

NFC function: Read and write the address Dimming range: 0-100% dimming depth: 0.1%

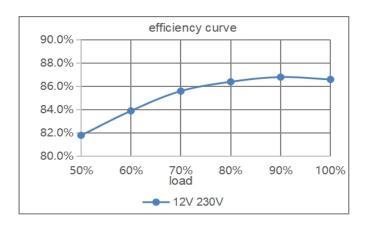
Application: Suitable for LED lighting and moving sign applications

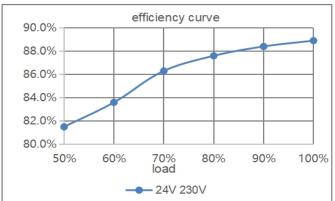
Warranty: 5 years warranty

# Specification

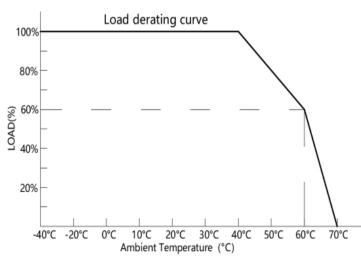
Model		KV-12075-DP2A	KV-24075-DP2A	KV-36075-DP2A	KV-48075-DP2A				
Certificate		UL / cUL / Class 2 / Class P / FCC / ENEC / SAA / CE / SELV / ROHS / Reach / DALI2							
Output	DC Voltage	12V	24V	36V	48V				
	DC voltage	(12-13.5V adjust by NFC)	(24-26V adjust by NFC)	(36-38V adjust by NFC)	(48-50V adjust by NFC)				
	Voltage Tolerance	±0.5V							
	Voltage Regulation	0.5%							
	Rated current	6.25A	3.13A	2.08A	1.56A				
	Rated power	75W							
	Load Regulation	2% 1%							
	Voltage Range 100-277VAC								
Input	Frequency Range 47 - 63Hz								
	Power Factor @ full load	load PF≥0.98@120VAC PF≥0.96@230VAC PF≥0.92@277VAC							
	THD(Typ.) @ full load ≤15%								
	Efficiency @ full load 88%@120VAC 90%@230VAC 90%@277VAC								
	AC Current (Max.) 0.9A								
	Inrush Current (Typ.)	29A, 352us@50%120VAC 78A, 122us@50%230VAC 59A, 276us@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,automatically recover after the							
	Over temperature	temperature drops.							
	Working TEMP.	-40~+60°C (see below derating curve)							
	Working Humidity	20 - 95%RH non-condensing							
Environment	Storage TEM.,Humidity	-40 - +80℃,10 - 95% RH non-condensing							
	TEMP.coefficient	±0.03%/℃(0 - 50℃)							
	Vibration	bration 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 (								
	Withstand voltage	I/P-O/P:3.75KVAC I/P-FG:1.5KVAC O/P-FG:0.5KVAC (EU)							
	Withstand Voltage	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°C / 70%RH							
	EMC Emission	EN55015 EN61000-3-2,3 (≥50%) (EU) & FCC Part 15, Subpart B(US)							
Others	Net Weight	0.45Kg							
	Dimension	200*78.1*25.1mm (L*							
	Packing	300*280*210mm 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)**





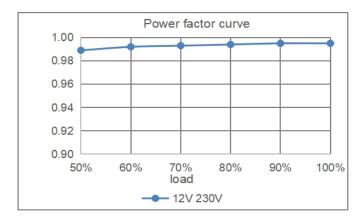
### **Derating Curve (output load vs TEMP.)**

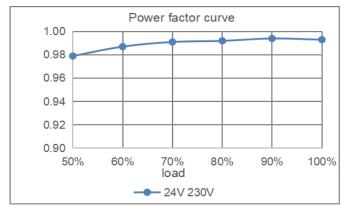


- 1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
- 2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise.

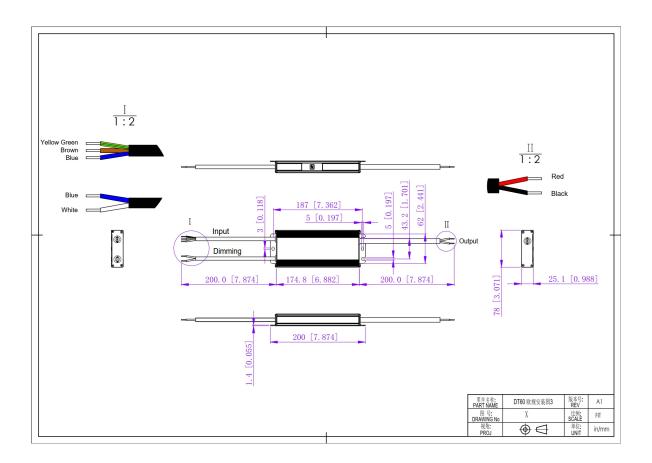
  Therefore, we recommend the power supply to reserve a certain amount of load to avoid overloading.

#### **Power Factor Curve**





# **Mechanical Specification (For European Market)**



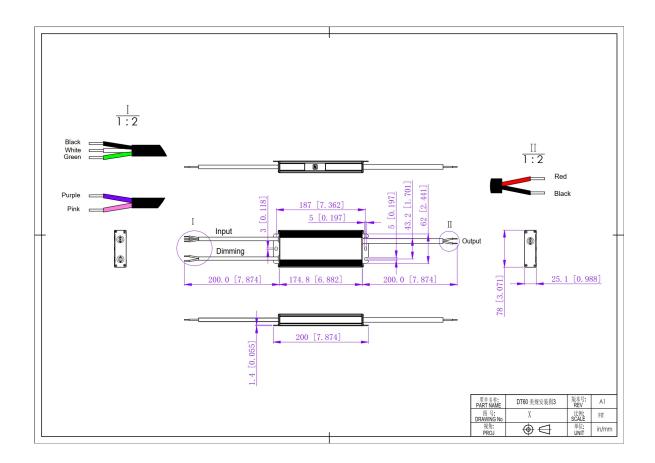
#### 12V&24V&36V&48V Version

- 1. Input cable 3\*1.0mm², the Brown cable to (L), the White cable to (N), and the Yellow & Green cable to (FG).
- 2. Output cable 2\*1.0mm², Red cable (+) to Positive side(+), Black cable (-) to Negative side (-).
- 3. Dimming cable 2\*1.0mm², 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 North American Market)



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

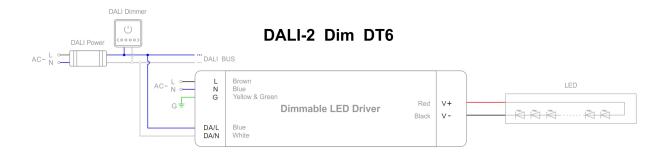
- 1. Input cable 3\*18AWG, the Black cable to (L), the White cable to (N), and the Green cable to (G).
- 2. Output cable 2\*18AWG, Black cable (+) to Positive side(+), Red cable (+) to Negative side (-).
- 3. Dimming cable 2\*18AWG, Purple DA/N and Pink DA/L (No polar) connected to the DALI BUS when 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:

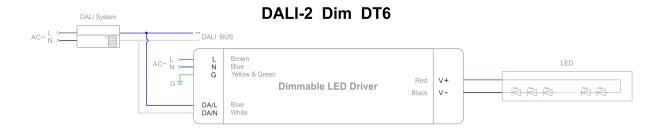
1. Any other requests for, we can customized.

# Dimming Operation and Connecting Diagram (For European Market)

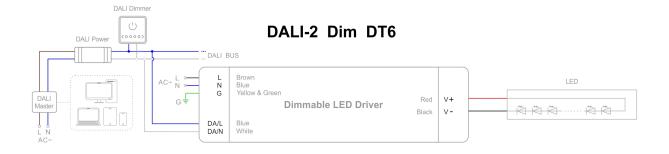
• Using DALI-2 dimming with DALI power and dimmer



Using DALI-2 dimming with DALI system and DALI bus



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



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# • Using PUSH dimming with dimmer (on & off function)



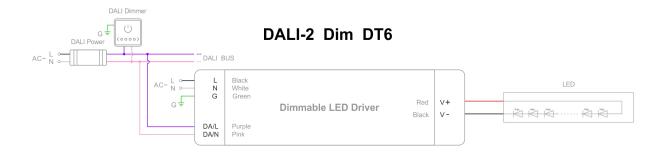


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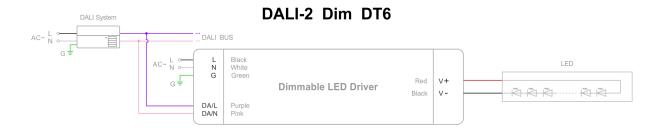
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### Dimming Operation and Connecting Diagram (For North American Market)

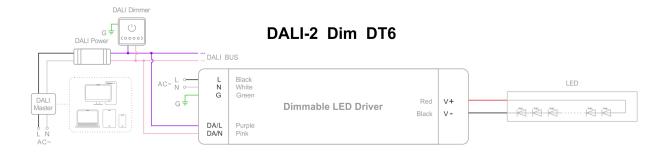
Using DALI-2 dimming with DALI power and dimmer



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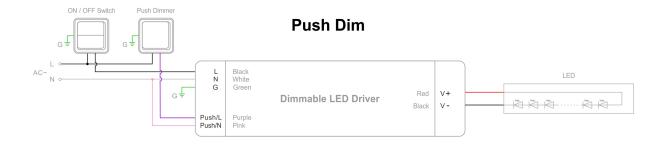
• Using DALI-2 dimming with intelligent device, DALI master and dimmer



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# • Using PUSH dimming with dimmer (on & off 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	12.16V	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			

### 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.



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