

DALI-2 & PUSH (2 in 1) Dimmable Constant Voltage LED driver 10W

KV-DP2A Series 10W

Whole Family: KV-DP2A 24VDC - [10W 20W 60W 75W 80W 90W 96W 100W 120W 150W 200W 300W 320W 360W 600W]

**Features**

Output:	Constant Voltage
Range:	100-277VAC 50/60HZ
PFC design:	Built-in active PFC function
Protections:	Short circuit/ over load/ over temperature
Efficiency	Up to 83%
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
NFC function:	Read and write the address
Dimming range:	0.3-100%
Application:	Suitable for LED lighting and moving sign applications
Warranty:	5 years warranty

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Specification

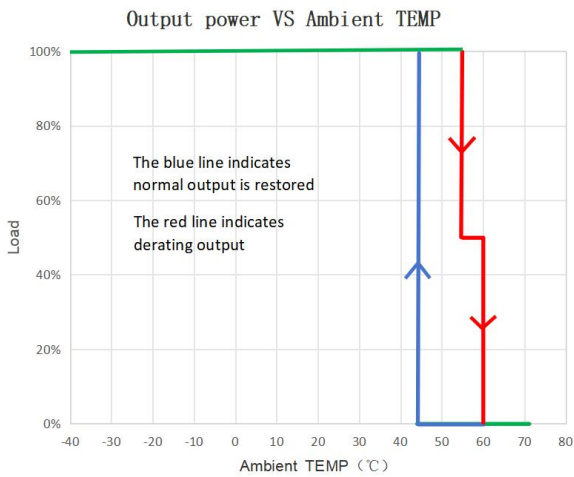
Model		KV-24010-DP2A
Certificate		CE / SELV /ROHS / Reach / DALI2
Output	DC Voltage	24V
	Voltage Tolerance	±3%
	Voltage Regulation	0.5%
	Rated current	0.416A
	Rated power	10W
	Voltage Ripple	0.8%
	Overshoot/Undershoot	+10%/-4%
	Line Regulation	±1%
	Load Regulation	±1%
Input	Voltage Range	100-277VAC
	Frequency Range	47 - 63Hz
	Power Factor @ full load	>0.99@120VAC >0.95@230VAC >0.92@277VAC
	THD(Typ.) @ full load	≤5%@120VAC ≤5%@230VAC ≤10.4%@277VAC
	Efficiency @ full load	>83.0%@120VAC >82.0%@230VAC >81.0%@277VAC
	AC Current (Max.)	0.12A
	Inrush Current (Typ.)	2.33A,35us @50%Ipeak 120VAC 4.47A,36us @50%Ipeak 230VAC 5.39A,34us @50%Ipeak 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	Ambient temperature over 55℃±5℃ , output reduce to 50%;Ambient temperature over 60℃ ±5℃ , output off;When the temperature is reduced to 45℃ ±5℃ the output returns to 100%.
Environment	Working TEMP.	-40~+50℃ (see below derating curve)
	Working Humidity	20 - 90%RH non-condensing
	Storage TEM.,Humidity	-40 - +80℃,10 - 95% RH non-condensing
	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 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 Emission	EN55015 EN61000-3-2,3 (≥50%) (EU) & FCC Part 15, Subpart B(US)
Others	Net Weight	0.245Kg
	Dimension	155.4*44.2*21mm (L*W*H)
	Packing	mm /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 .	

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Efficiency Curve (efficiency vs output load)

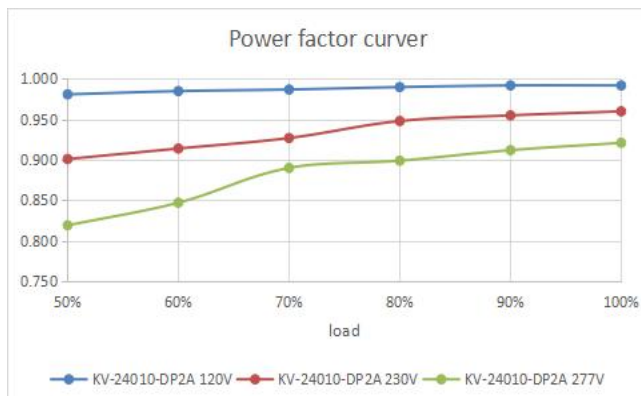


Derating Curve (Load VS Ambient TEMP.)



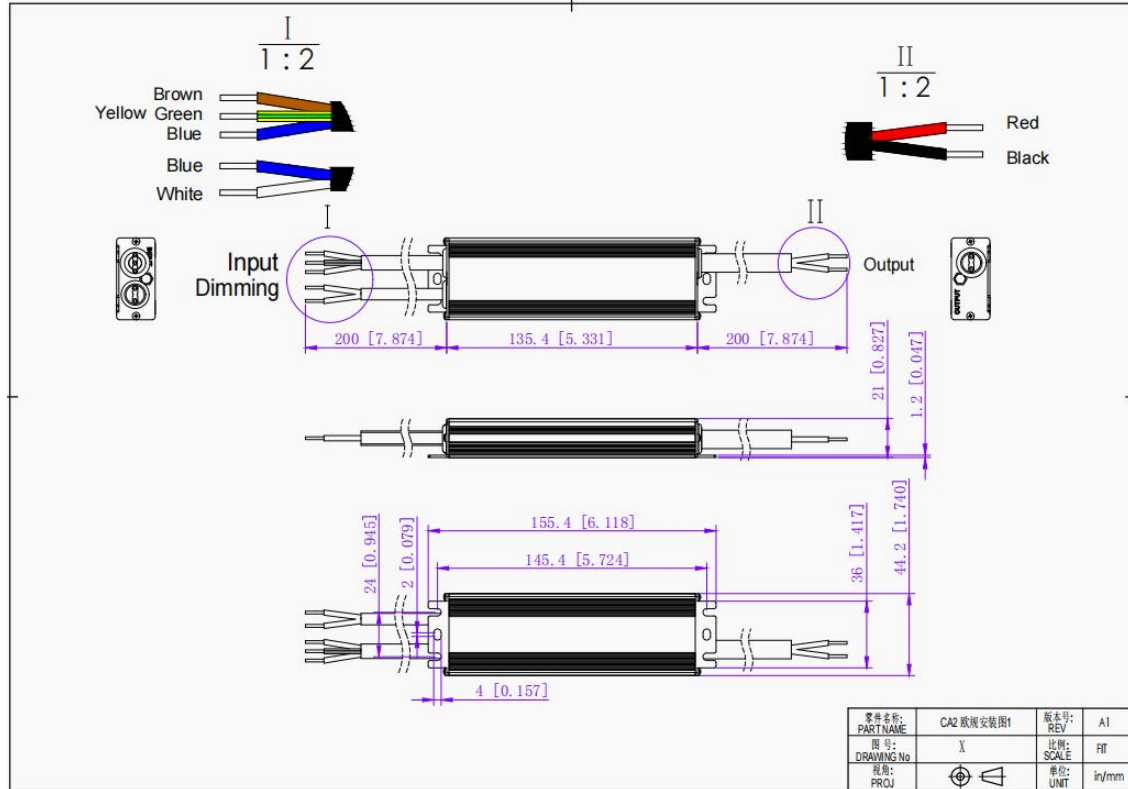
1. To extend their life, please refer to the Derating Curve and derate according to the temperature.
2. Please note that the rise in temperature of LED fixtures over a long period of time will cause their power to rise. Therefore, we recommend the power supply to reserve a certain amount of load to avoid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

Power Factor Curve



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Mechanical Specification (For European Market)



24V Version

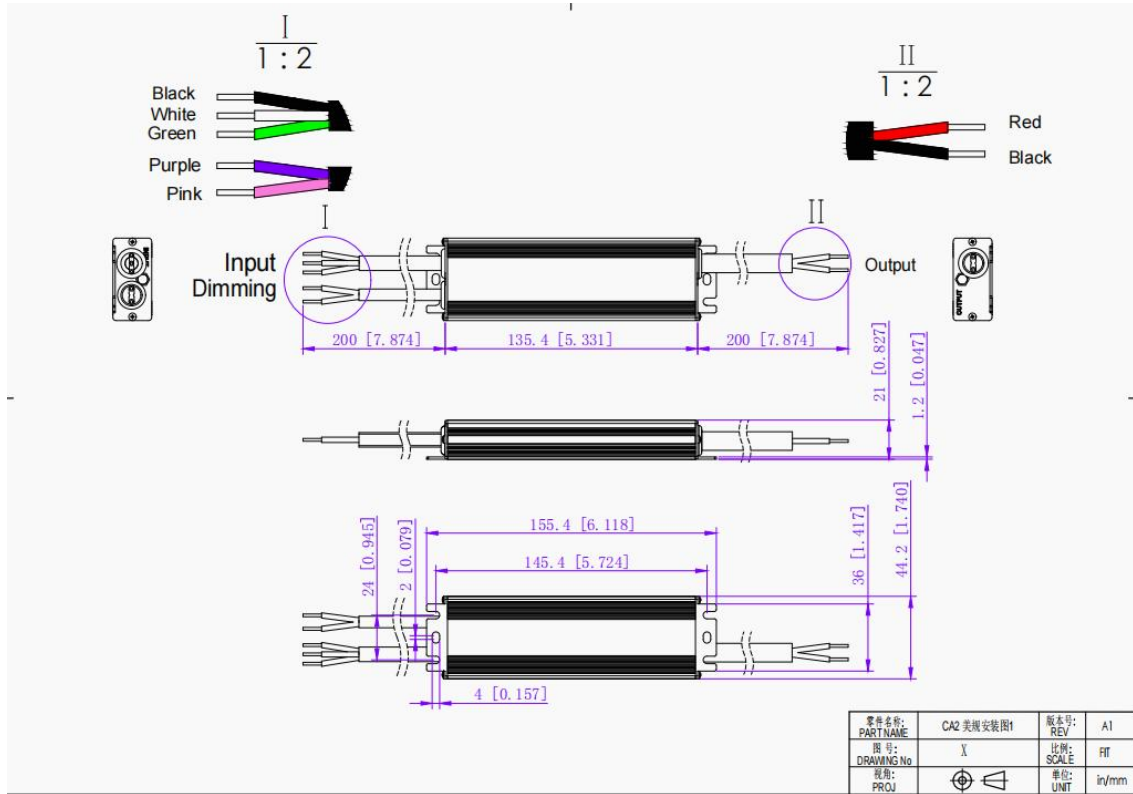
1. Input cable 3*0.75mm², the Brown cable to (L), the White cable to (N), and the Yellow & Green cable to (FG).
2. Output cable 2*0.75mm², Red cable (+) to Positive side(V+), Black cable (-) to Negative side (V-).
3. Dimming cable 2*0.75mm², Blue DA/L and White DA/N (No polar) connected to the DALI BUS when use DALI function.
Blue (L) 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.

DALI-2 & PUSH (2 in 1) Dimmable Constant Voltage LED driver 10W

Mechanical Specification (For North American Market)



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

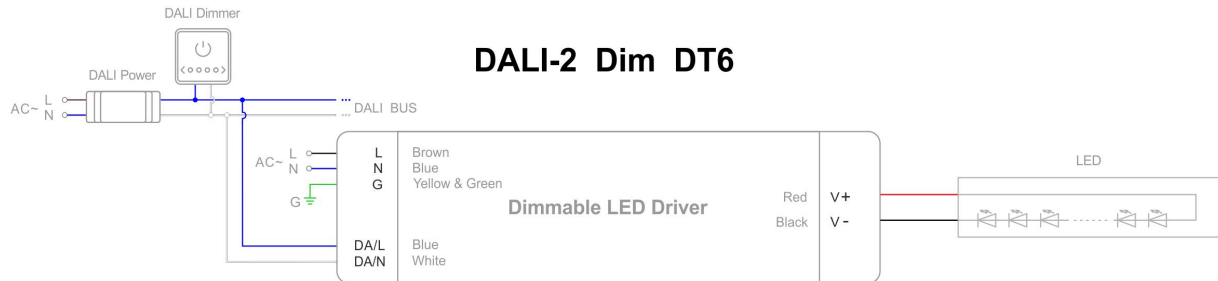
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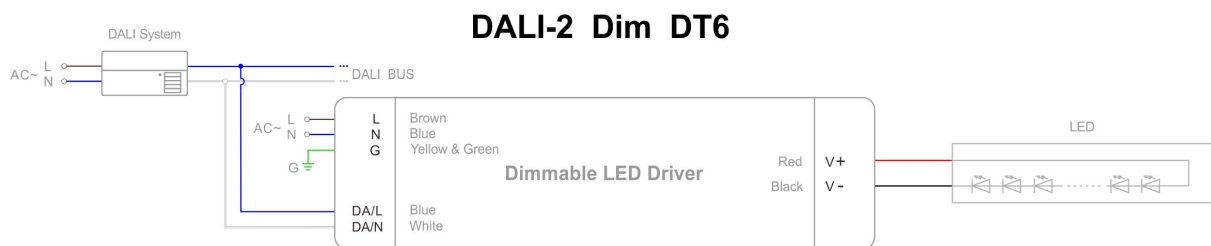
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Dimming Operation and Connecting Diagram (For European Market)

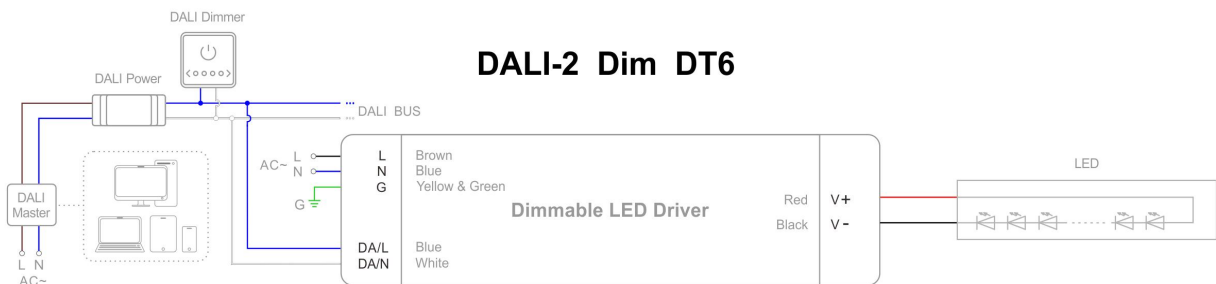
- Using DALI-2 dimming with DALI power and dimmer



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

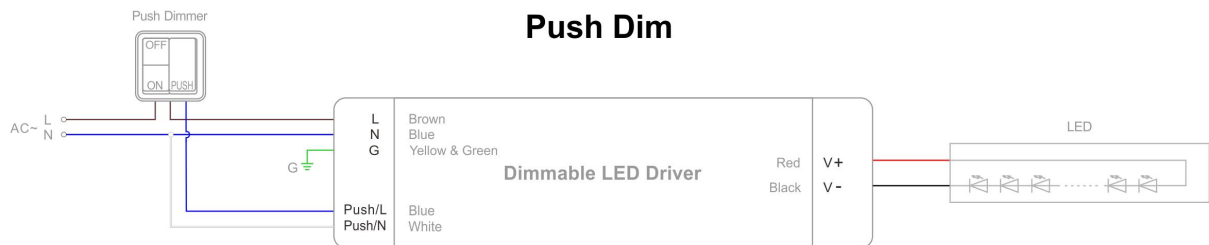
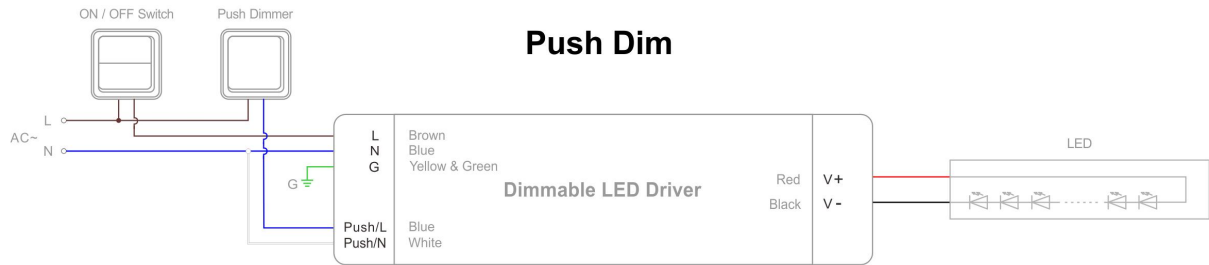


- Using DALI-2 dimming with intelligent device, DALI master and dimmer



DALI-2 & PUSH (2 in 1) Dimmable Constant Voltage LED driver 10W

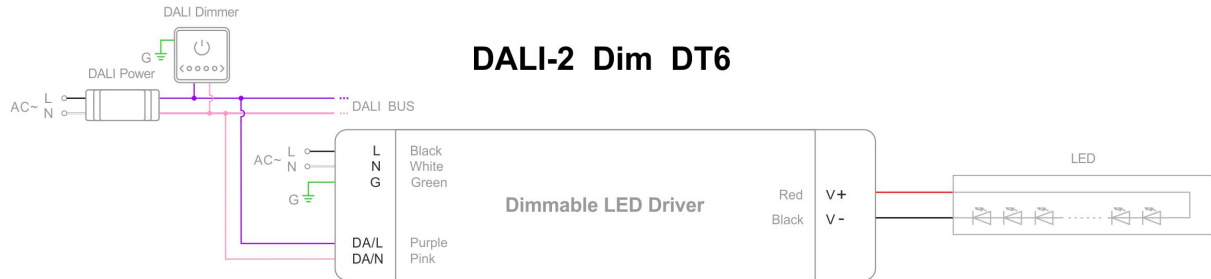
- Using PUSH dimming with dimmer (on & off function)



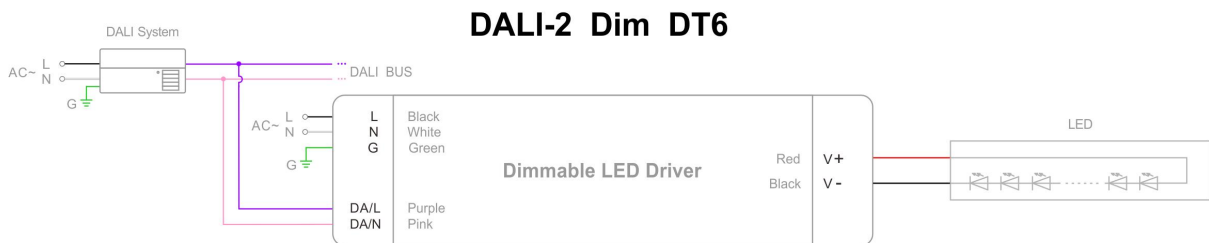
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Dimming Operation and Connecting Diagram (For North American Market)

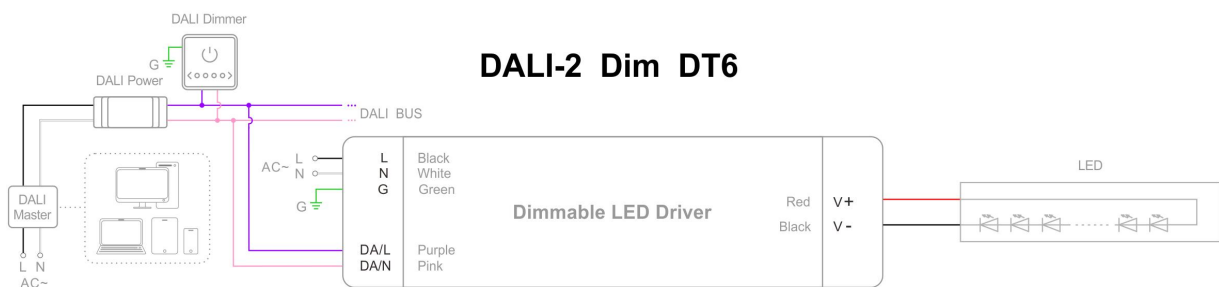
- Using DALI-2 dimming with DALI power and dimmer



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

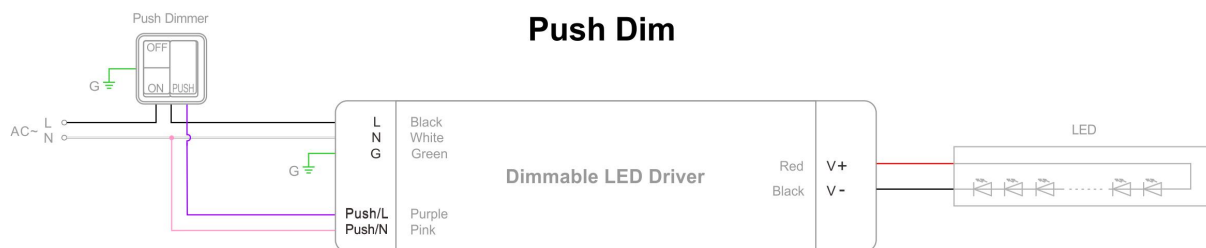
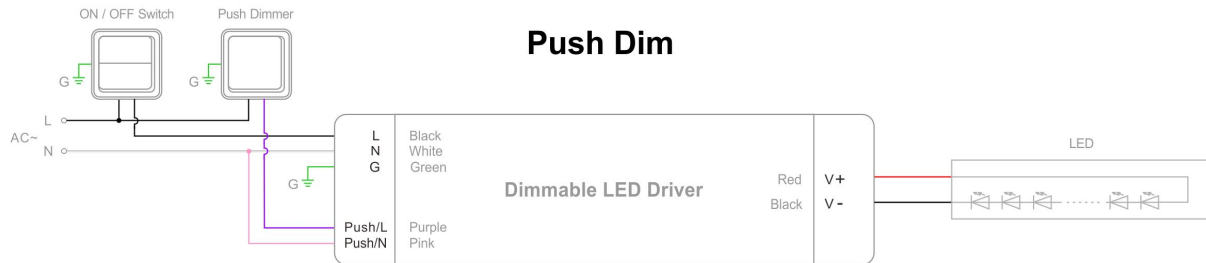


- Using DALI-2 dimming with intelligent device, DALI master and dimmer



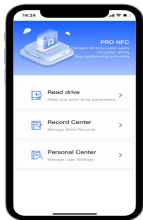
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- Using PUSH dimming with dimmer (on & off function)



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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	12.16V	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.

Have any questions, please contact Zhuhai Shengchang.

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