

KV-DP2A Series 100W

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



Features

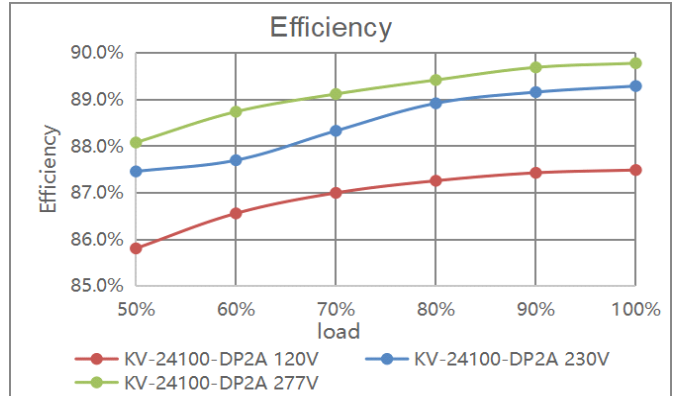
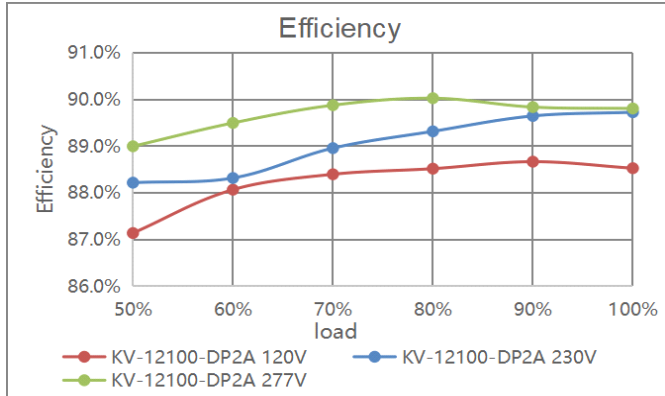
| | |
|-------------------------|---|
| Output: | Constant Voltage |
| Range: | 100-277VAC |
| PFC design: | Built-in active PFC function |
| Efficiency: | Up to 90% |
| Protections: | Short circuit/ over load/ over temperature |
| Heat dissipation: | Cooling by free air convection |
| Waterproof performance: | 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 |

DALI-2 & PUSH (2 in 1) Dimmable Constant Voltage LED driver 100W

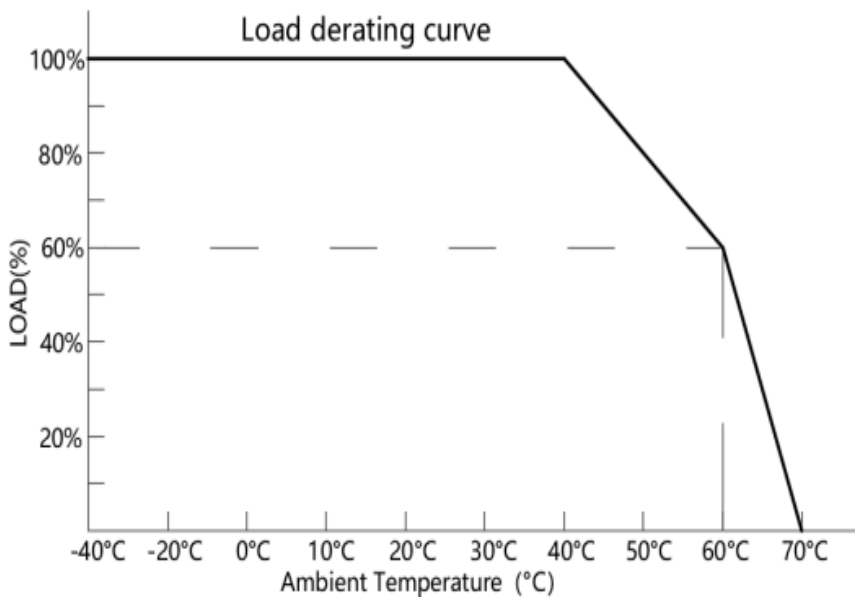
Specification

| Model | | KV-12100-DP2A | KV-24100-DP2A | KV-36100-DP2A | KV-48100-DP2A |
|--------------|--|---|--|--|--|
| Certificate | | UL / cUL / FCC / ENEC / SAA / CE / SELV /Rohs / Reach / DALI2 | | | |
| 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 | ±0.5V | | | |
| | Voltage Regulation | 0.5% | | | |
| | Rated current | 8.33A | 4.17A | 2.78A | 2.08A |
| | Rated power | 100W | | | |
| | Load Regulation | 2% | 1% | | |
| Input | Voltage Range | 100-277VAC | | | |
| | Frequency Range | 47 - 63Hz | | | |
| | Power Factor@ full load | PF≥0.99@120VAC PF≥0.98@230VAC PF≥0.96@277VAC | | | |
| | THD(Typ.) @ full load | ≤15% | | | |
| | Efficiency(Typ.) @ full load | 88.5%@120VAC 89.5%@230VAC 89.5%@277VAC | 87.5%@120VAC 89.5%@230VAC 89.5%@277VAC | 88%@120VAC 90%@230VAC 90%@277VAC | 88%@120VAC 90%@230VAC 90%@277VAC |
| | AC Current (Max.) | 1.3A | | | |
| | Inrush Current (Typ.) | 23.2A,360us@50%120VAC 80A,104us@50%230VAC 54A,280us@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°C ± 10°C shut down o/p voltage,automatically recover after the temperature drops. | | | |
| Environment | Working TEMP. | -40~+60°C (see below derating curve) | | | |
| | Working Humidity | 20 - 95%RH non-condensing | | | |
| | Storage TEM.,Humidity | -40 - +80°C,10 - 95% RH non-condensing | | | |
| | TEMP.coefficient | ±0.03%/°C(0 - 50°C) | | | |
| | 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:1.8KVAC 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 | 0.83Kg | | | |
| | Dimension | 232*78*25.1mm (L*W*H) | | | |
| | Packing | 300*280*210mm 20pcs /CTN | | | |
| Notes | 1. All parameters NOT specially mentioned are measured at rated load and 25°C of ambient temperature. 2. Tolerance: includes set up tolerance and load regulation . | | | | |

Efficiency Curve (efficiency vs output load)

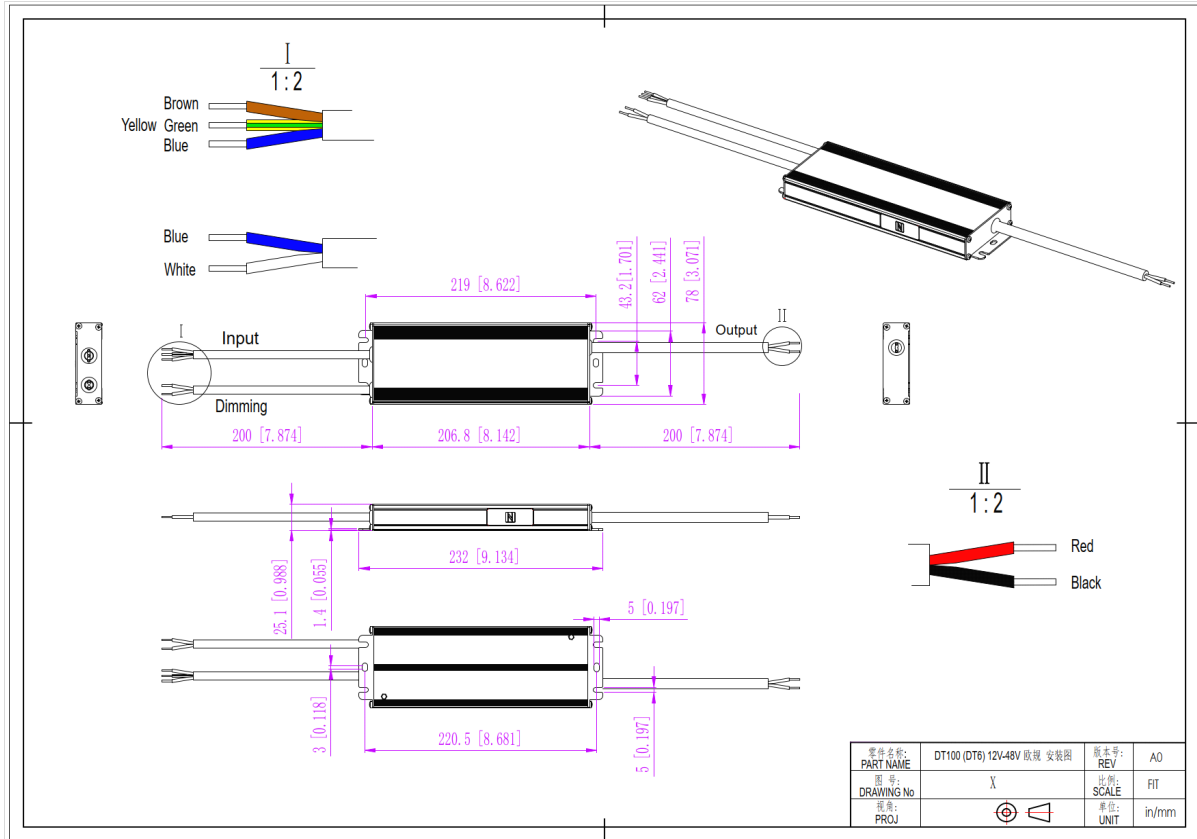


Derating Curve (output load vs TEMP.)



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 .

Mechanical Specification (For European Market)



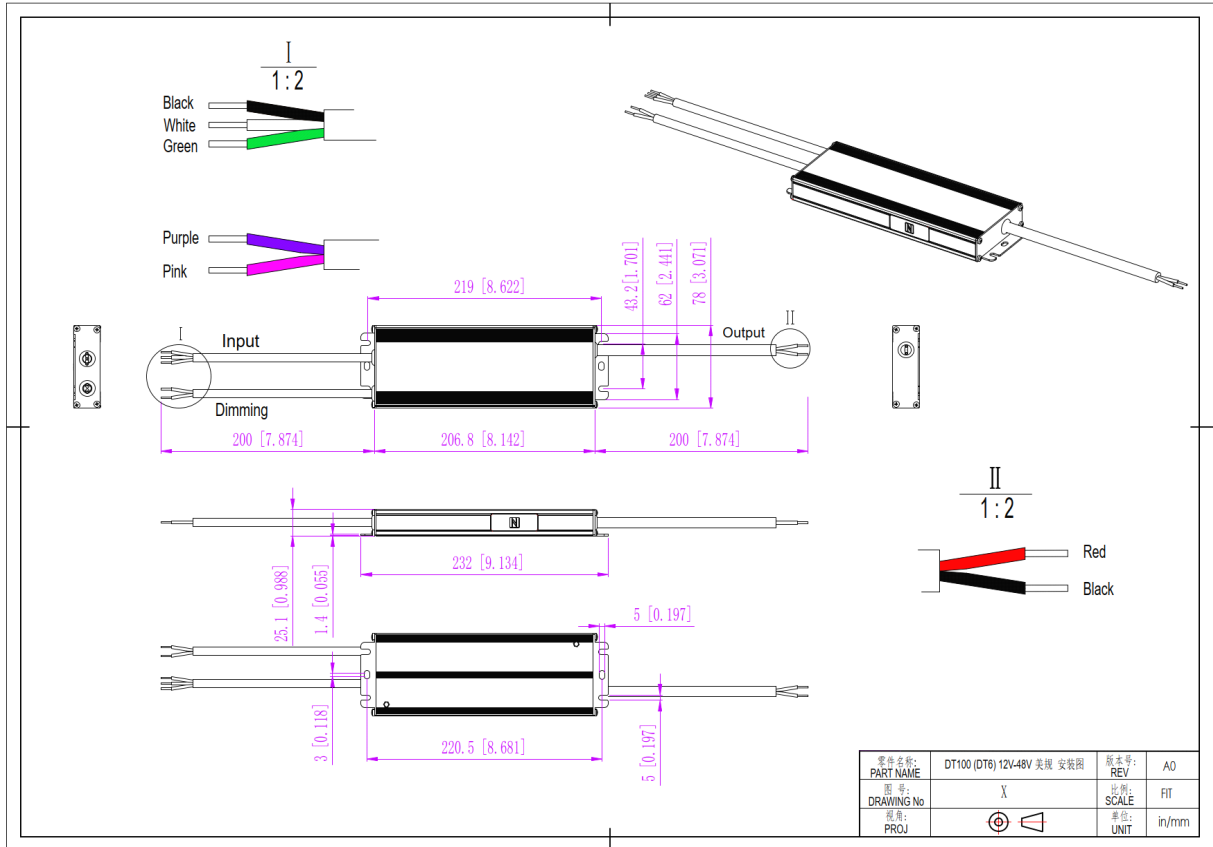
12V&24V&36V&48V Version

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*1.5mm² (12V), 2*1.0mm² (24V/36V/48V), 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

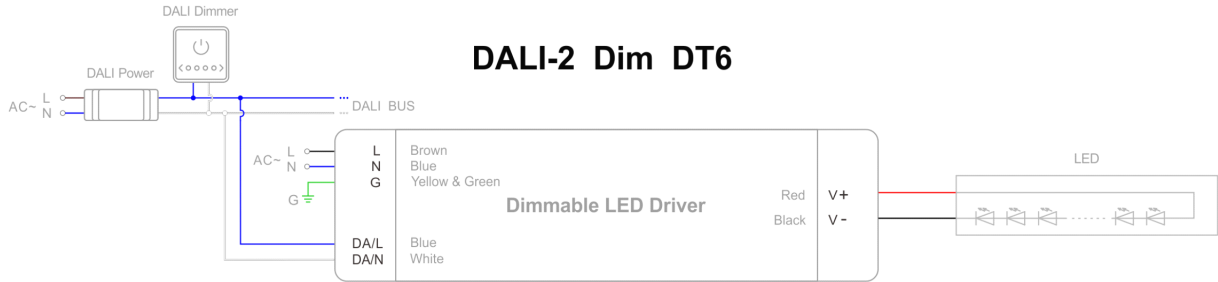
1. Input cable 3*18AWG, the Black cable to (L), the White cable to (N), and the Green cable to (G).
2. Output cable 2*16AWG (12V), 2*18AWG (24V/36V/48V), Black cable (+) to Positive side(+), Red cable (+) to Negative side (-).
3. Dimming cable 2*18AWG, Purple DA/N and Pink DA/L (No polar) connected to 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:

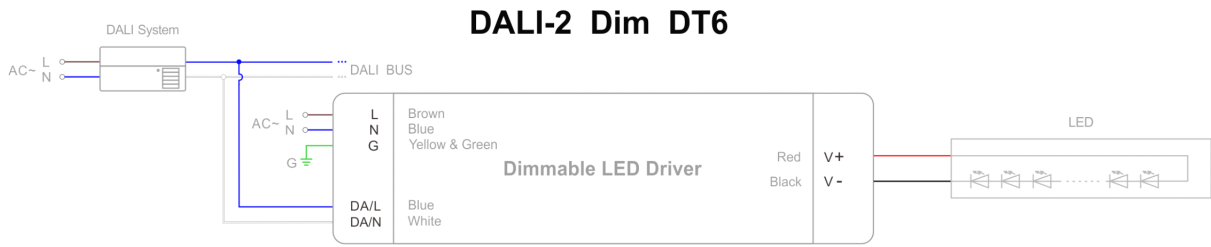
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Dimming Operation and Connecting Diagram (For European Market)

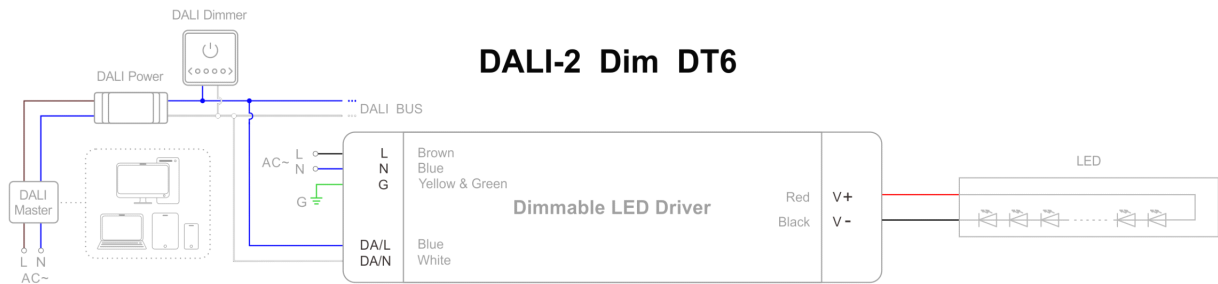
- **Using DALI-2 dimming with DALI power and dimmer**



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

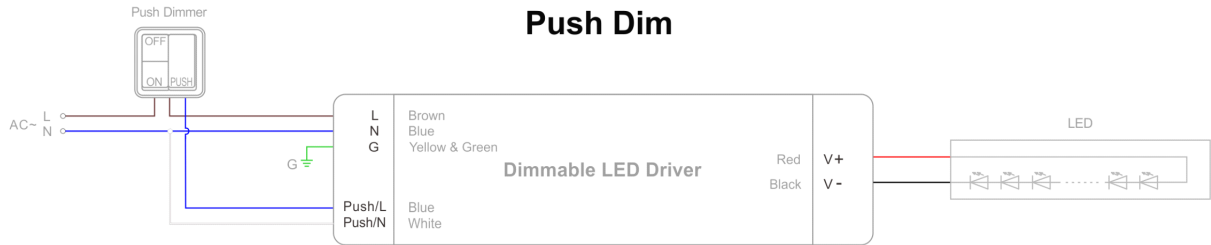
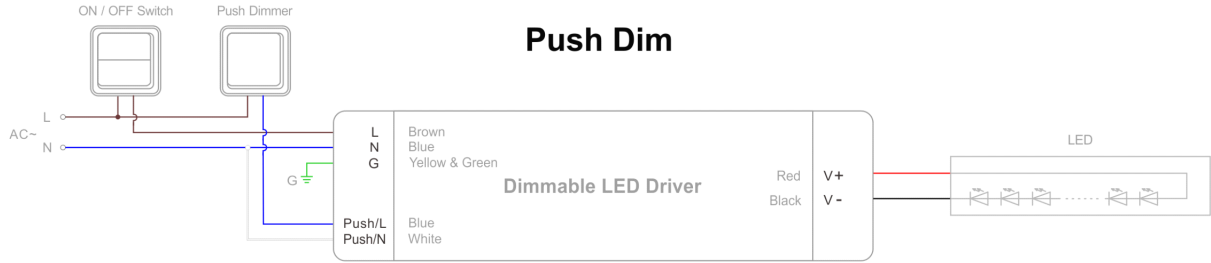


- **Using DALI-2 dimming with intelligent device, DALI master and dimmer**



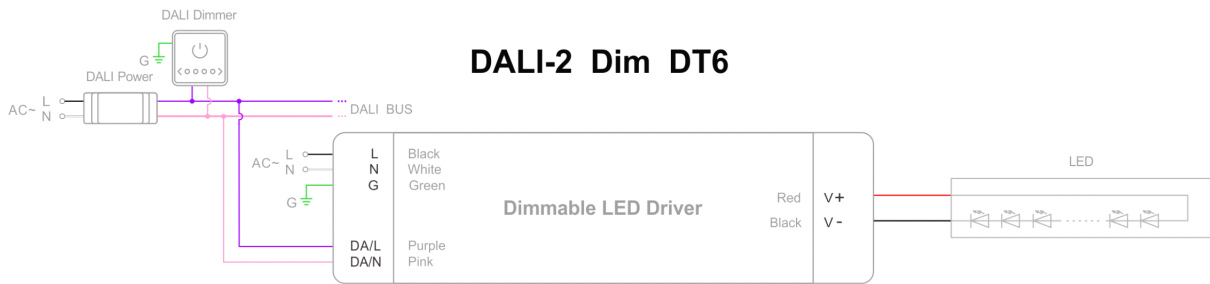
DALI-2 & PUSH (2 in 1) Dimmable Constant Voltage LED driver 60W

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

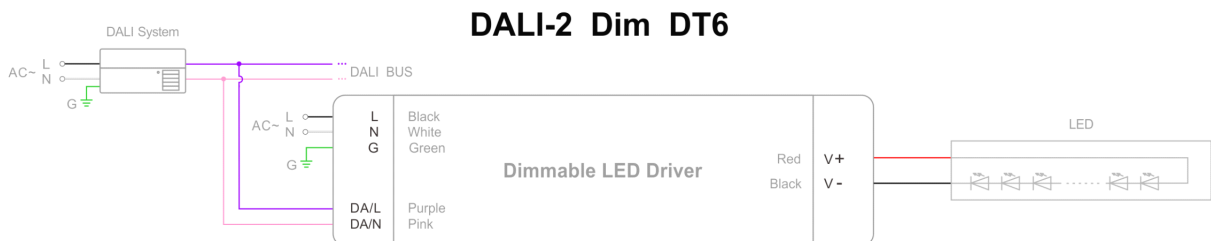


Dimming Operation and Connecting Diagram (For North American Market)

- Using DALI-2 dimming with DALI power and dimmer

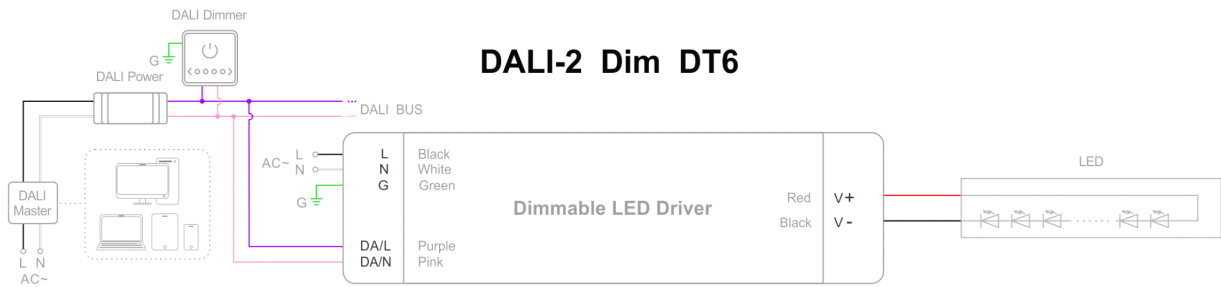


- Using DALI-2 dimming with DALI system and DALI bus

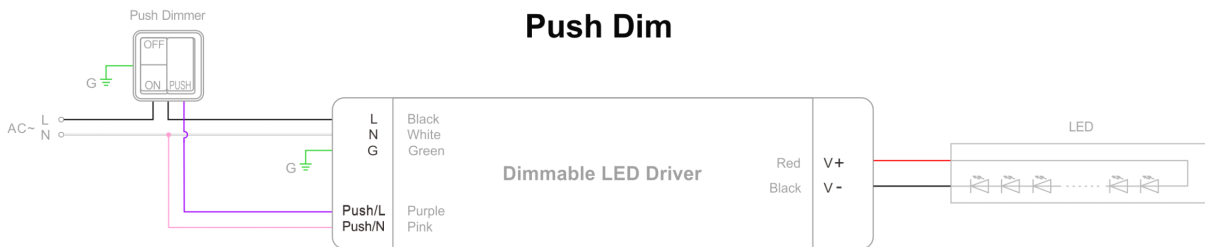
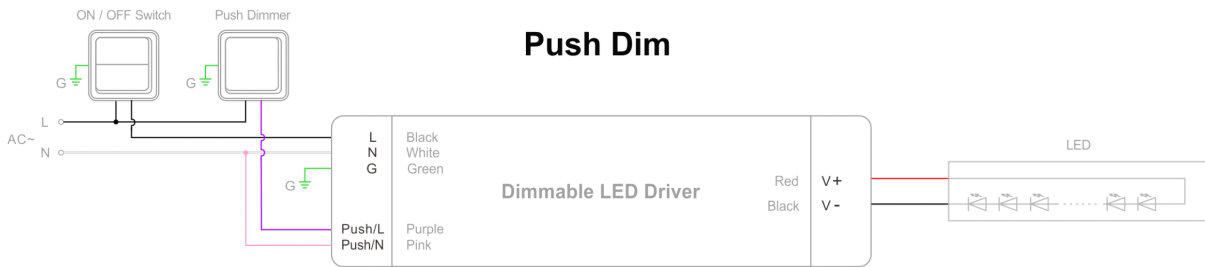


DALI-2 & PUSH (2 in 1) Dimmable Constant Voltage LED driver 60W

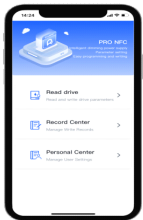
- **Using DALI-2 dimming with intelligent device, DALI master and dimmer**



- **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 | 12.16V | 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.