

DALI-2/PUSH 2 in 1 Dimmable LED driver 100W

KV-2C-DP2A Series 100W

Whole Family: KV-XXXXX-2C-DP2A 12V/ 24V/ 36V/ 48V DC - [60W 100W 200W]



Features

Output:	Constant Voltage
Range:	100-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 89.5%
Protections:	Short circuit/ over load/ over temperature
Heat dissipation:	Cooling by free air convection
Waterproof performance:	Full protection aluminum housing, for dry, damp, wet locations; IP66
Dimming function:	DALI & PUSH 2 in 1 dimming (CCT) , PWM output frequency 4KHz Stroboscopic exemption
Dimming range:	0-100% dimming depth: 0.1%
NFC function	Fine tune the output voltage, write and read address
Application:	Suitable for LED lighting and moving sign applications
Warranty:	5 years warranty

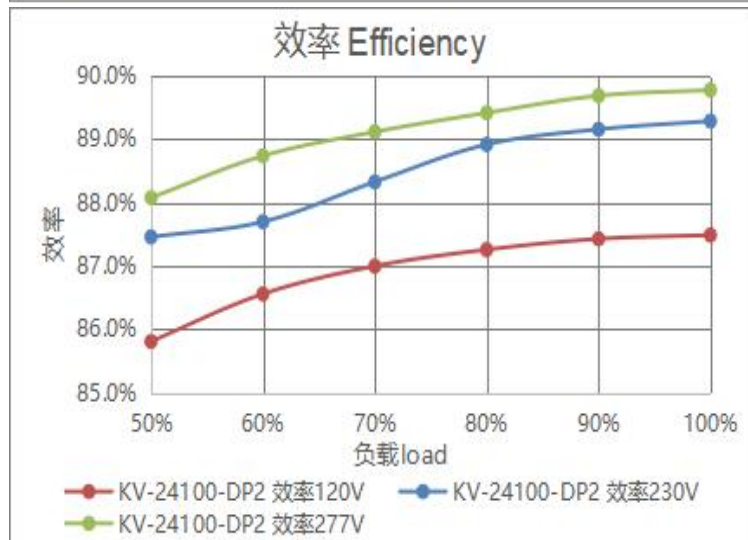
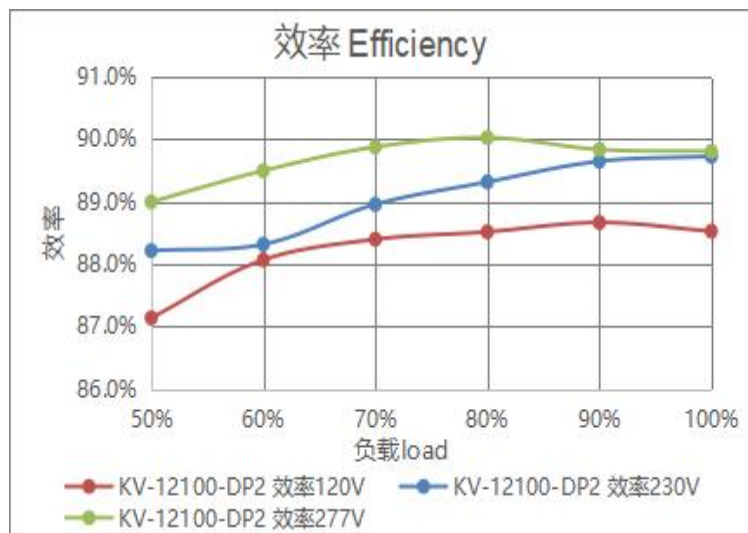
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Specification

Model		KV-12100-2C-DP2A	KV-24100-2C-DP2A	KV-36100-2C-DP2A	KV-48100-2C-DP2A
Certificate		CE、ENEC、UL、FCC、SELV、DALI2			
Output	DC Voltage	12V (12-13.5Vadjust 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	CW+WW=8.34A	CW+WW=4.17A	CW+WW=2.78A	CW+WW=2.08A
	Rated power	100W			
	Load Regulation	2%	1%	1%	1%
Input	Voltage Range	100-277VAC			
	Frequency Range	47 - 63Hz			
	Power Factor (Typ.) @ full	PF≥0.98@120VAC PF≥0.96@230VAC PF≥0.95@277VAC			
	THD(Typ.) @ full load	≤10%@120VAC ≤10%@230VAC ≤15%@277VAC			
	Efficiency(Typ.) @ full load	88.5%@120VAC	88.5%@120VAC	88%@120VAC	88%@120VAC
		89.5%@230VAC	89.5%@230VAC	90.5%@230VAC	90.5%@230VAC
		89.5%@277VAC	89.5%@277VAC	90.5%@277VAC	90.5%@277VAC
	AC Current (Max.)	1.3A			
	No-load power	1.15W@120V	1.00W@120V	1.10W@120V	1.17W@120V
		0.95W@230V	0.85W@230V	0.95W@230V	1.00W@230V
		1.05W@277V	0.95W@277	1.05W@277V	1.10W@277V
Protection	Standby power	0.20W@120V	0.25W@120V	0.20W@120V	0.20W@120V
		0.39W@230V	0.42W@230V	0.43W@230V	0.43W@230V
		0.47W@277V	0.47W@277V	0.48W@277V	0.48W@277V
Environment	Inrush Current (Typ.)	23.2A, 50%, 360us @120VAC; 80A, 50% , 104us @230VAC 54A, 50% , 280us @277VAC			
	Leakage current	<0.5mA			
	Short Circuit	Hiccup mode, recover automatically after fault condition is removed			
Safety & EMC	Over Load	≤120% ,hiccup mode, recover automatically after fault condition is removed			
	Over temperature	Ambient temp. over 55℃±10℃, output will be off; recovers automatically after temp. drops.			
	Working TEMP.	-40~+60℃ (see below derating curve)			
Safety & EMC	Working Humidity	20 - 90%RH non-condensing			
	Storage TEM.,Humidity	-40 - +80℃,10 - 95% RH non-condensing			
	TEMP.coefficient	±0.03%/℃(0 - 50℃)			
Safety & EMC	Vibration	10~500Hz, 5G 10min./1 cycle, period for 60min. each along X,Y,Z axes			
	Safety standards	EN61347-1 EN61347-2-13 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 (Europe) I/P-O/P:1.80KVAC I/P-FG:1.8KVAC O/P-FG:1.8KVAC (America)			

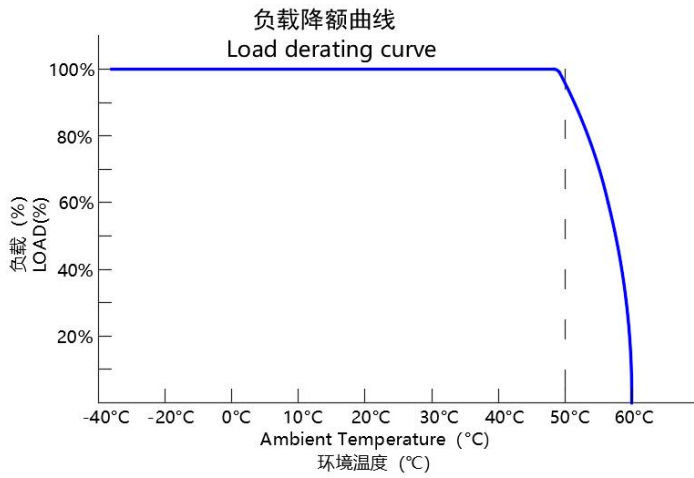
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	Isolation resistance	I/P-O/P: 100M Ω /500VDC/25℃/70%RH			
	EMC Emission	EN55015 EN61000-3-2,3 (≥50%load) FCC Part 15 Subpart B			
Others	Net Weight	0.82Kg	0.82Kg	0.82Kg	0.82Kg
	Dimension	279*78*25.1mm (L*W*H)			
	Packing	300*280*215mm 20pcs /CTN			
Notes	1. All America parameters NOT specially mentioned are measured at 120VAC input, rated load and 25℃of ambient temperature. 2. All Europe parameters NOT specially mentioned are measured at 230VAC input, rated load and 25℃of ambient temperature. 3. Tolerance: includes set up tolerance and load regulation .				

Efficiency Curve (efficiency vs output load)


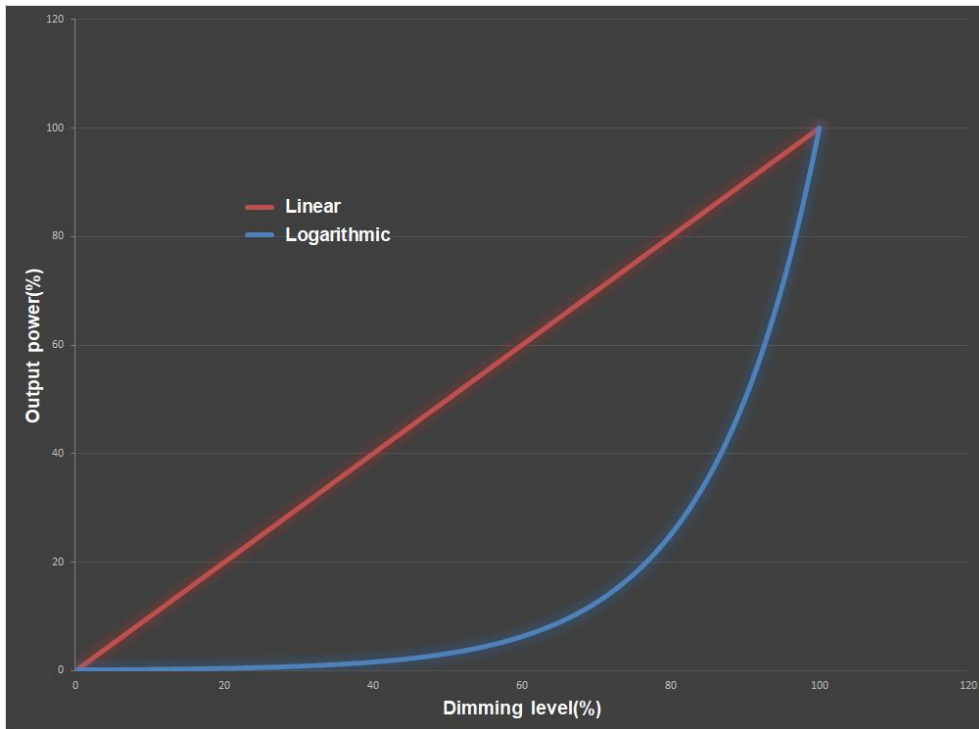
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Derating Curve (output load vs TEMP.)



❖ To extend their life, please refer to the Derating Curve and derate according to the temperature.

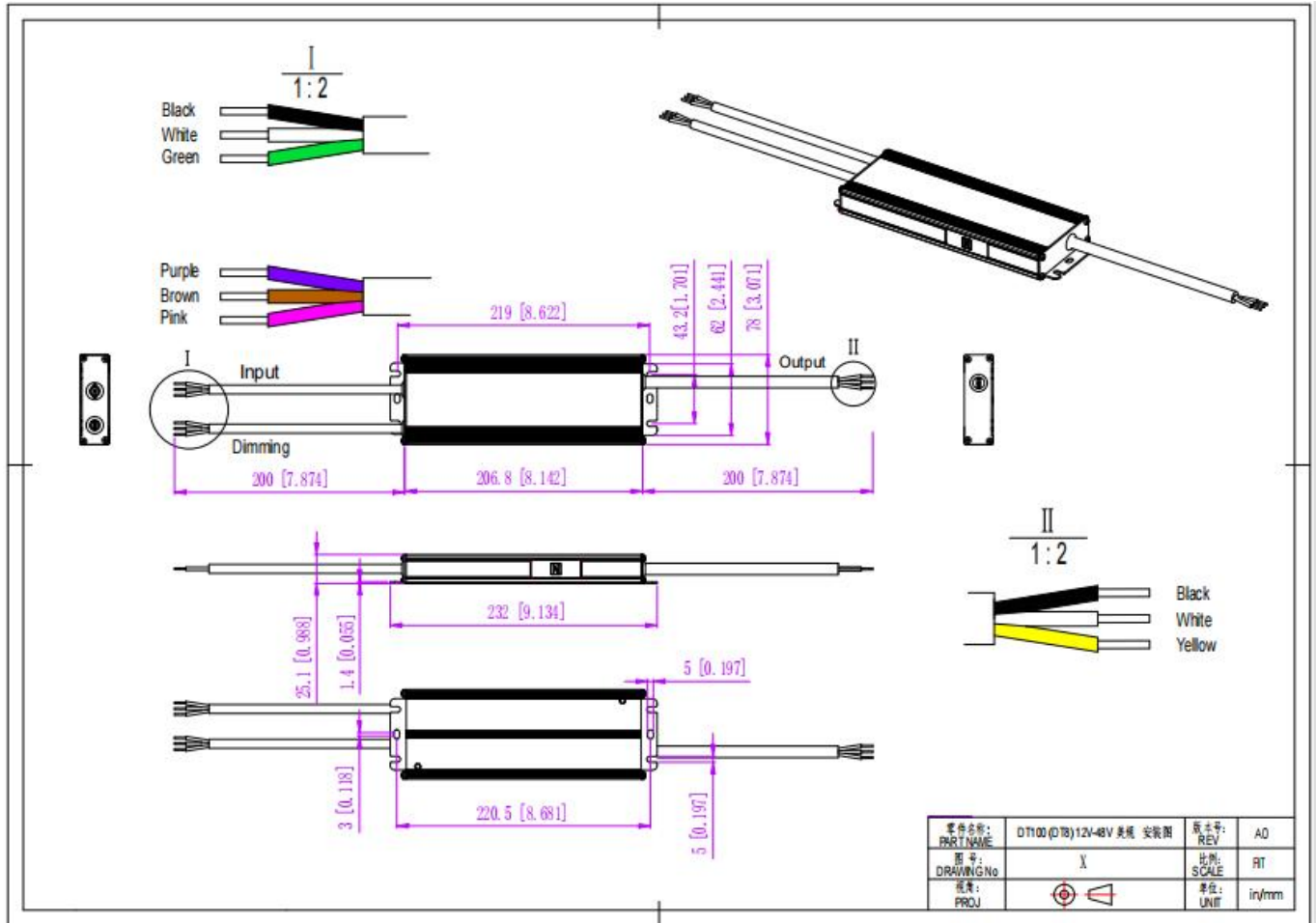
Whole Brightness Dimming Curve



Note: Logarithmic dimming curve and Linear dimming curve for choice
Logarithmic (default)

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Mechanical Specification (For North American Market)



12-48V 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 3*16AWG (12V), 3*18AWG (24V/36V/48V), Black cable (+) to Positive side(+), White cable (-) and Yellow cable (-) to Negative side (-).
3. Dimming cable 3*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) and Brown (CCT Push)connected to CCT Push dim switch dimmer(L) when use Push function.

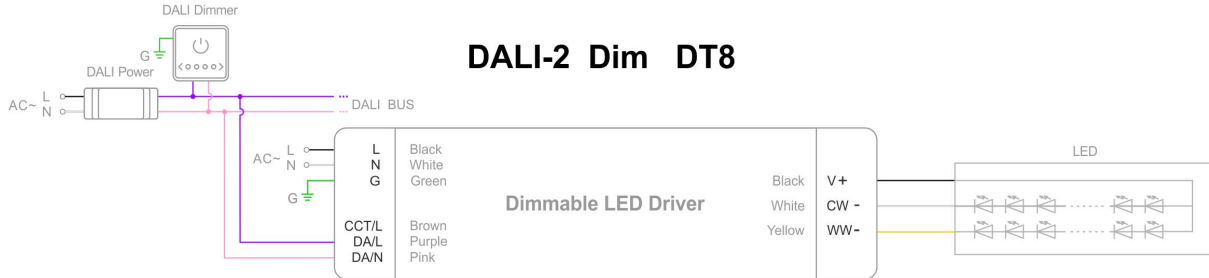
Warm tips:

1. Any other requests for cable, we can customized.

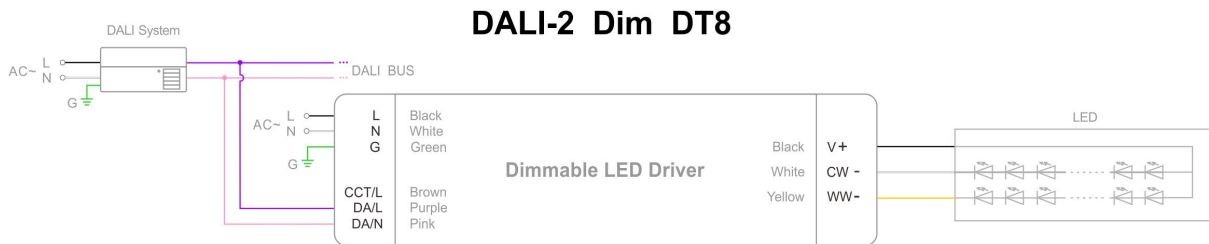
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Dimming Operation and Connecting Diagram

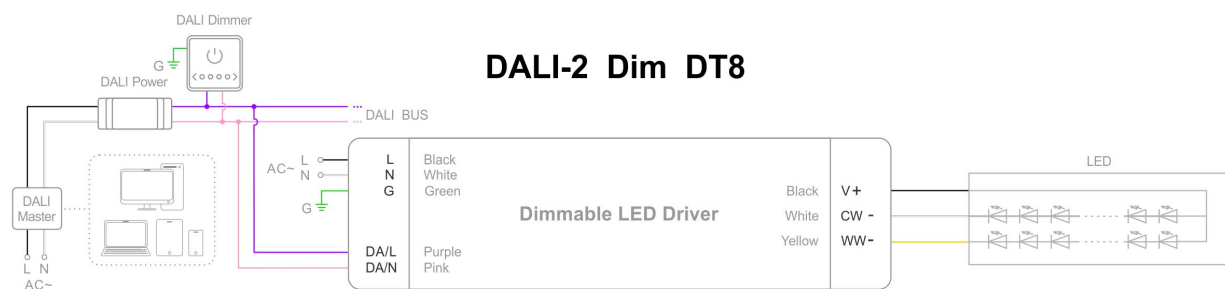
- Using DALI-2 dimming with DALI power and dimmer



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

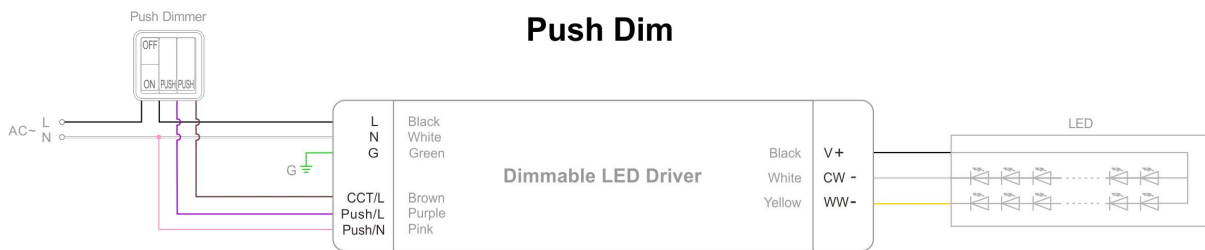
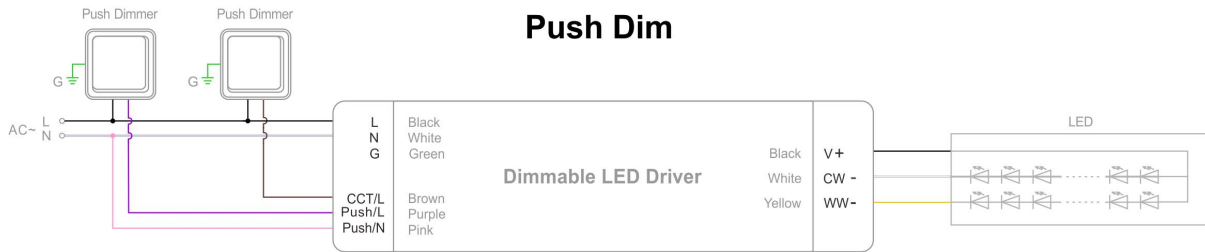


- Using DALI-2 dimming with intelligent device, DALI master and dimmer



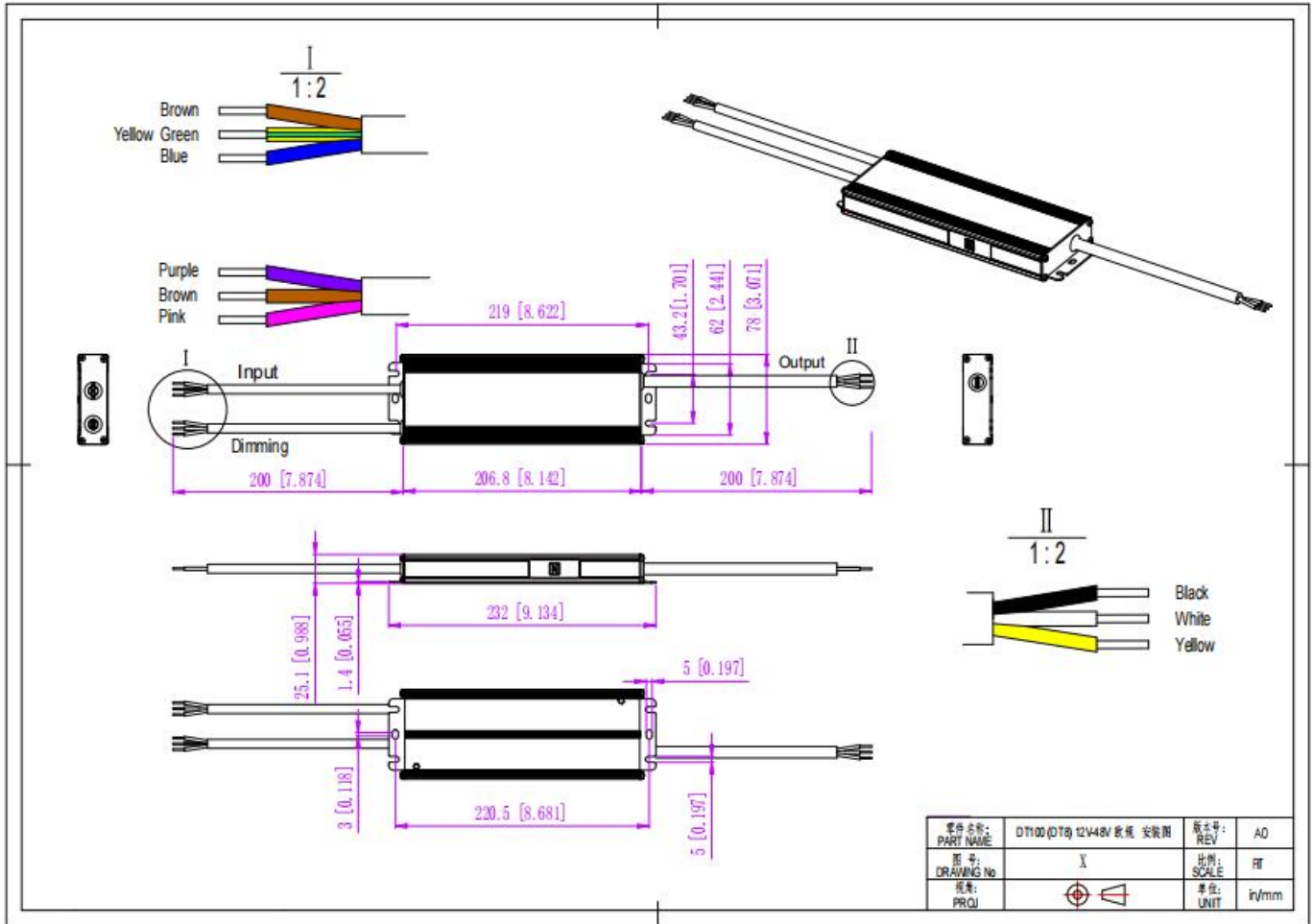
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- Using PUSH dimming with dimmer (on & off function)



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Mechanical Specification (For European Market)



12-48V 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 3*1.31mm² (12V), 3*0.824mm² (24V/36V/48V), Black cable (+) to Positive side(+), White cable (-) and Yellow cable (-) to Negative side (-).
3. Dimming cable 3*0.824mm², 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) and Brown (CCT Push)connected to CCT Push dim switch dimmer(L) when use Push function.

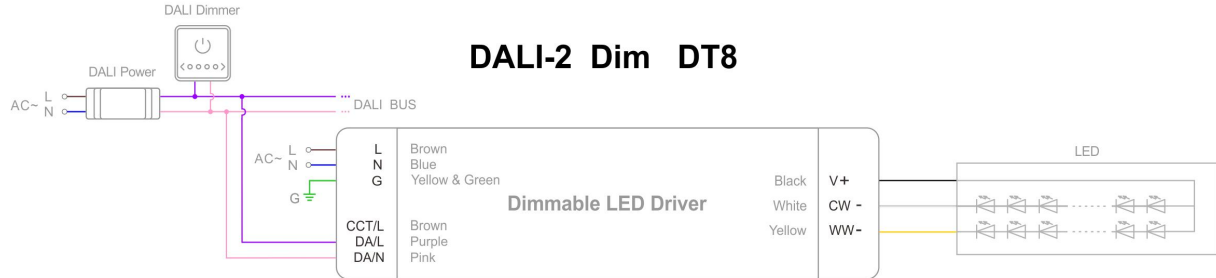
Warm tips:

1. Any other requests for cable, we can customized.

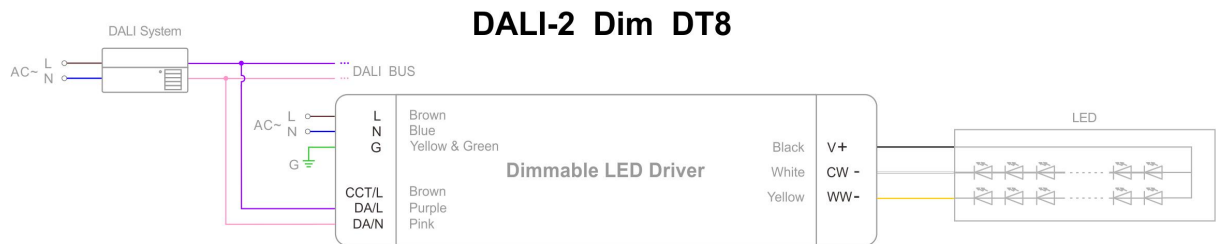
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Dimming Operation and Connecting Diagram

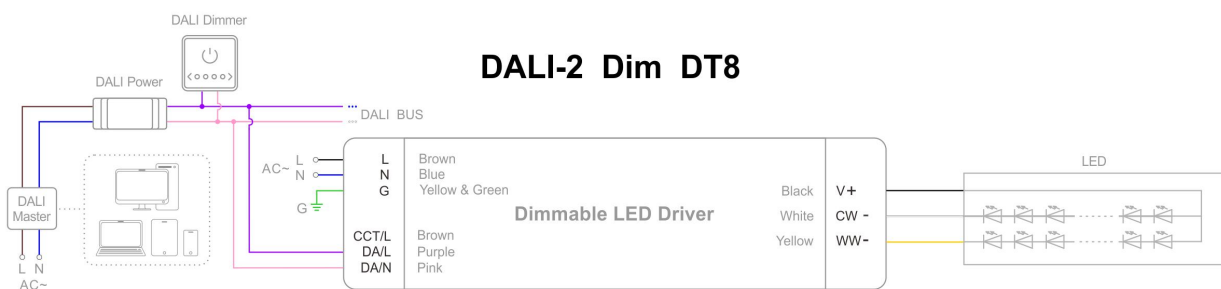
- Using DALI-2 dimming with DALI power and dimmer



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

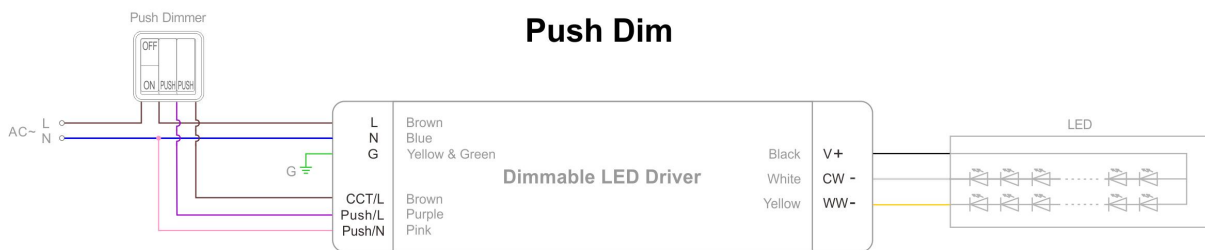
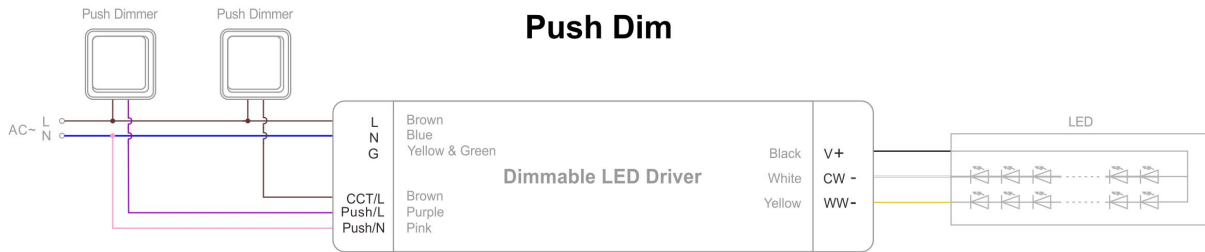


- Using DALI-2 dimming with intelligent device, DALI master and dimmer



DALI-2/PUSH 2 in 1 Dimmable LED driver 200W

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



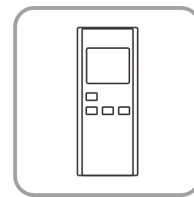
NFC Function



RDM



SetNFC APP



NFC Handheld devices

● Address settings:

① RDM setting address:

Set the address by the RDM device. For detailed operation, please refer to RDM device instruction manual.

② NFC setting address:

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

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