

SPECIFICATION

Product Name: Constant Current LED Driver

Model No.: KL20C-PDV

Issue Date: November 2, 2017

CUSTOMER APPROVED

Type	Model	Updating	Date
A0	KL20C-PDV Constant Current LED Driver		2017-11-2

1. Features



- Flicker-free for whole dimming range
- Stand-by power $\leq 0.5W$
- Primary dimming with push button
- Secondary dimming with 1-10V dimmer and potentiometer
- Built-in DALI interface
- Supports 10V PWM dimming (3KHz-8KHz)
- Protection: short circuit / over temperature/ over voltage
- Derating current for over high ambient temperature
- Push dim with memory function
- 5 year warranty

2. Parameters

Input	Voltage range	198~264Vac 50Hz /60Hz
	Rated supply voltage	220~240Vac 50Hz /60Hz
	DC voltage range	200~240Vdc
	Input current	0.13A Max.@230Vac
	Inrush Current	10A (twidh=50us measured at 50% Ipeak@230Vac) (Cold start 100% load)
	Power factor	≥ 0.90 (@230Vac, 100% load)
	Total harmonic distortion	$\leq 20\%$ (@230Vac, output load>50%)
	Stand-by power	$\leq 0.5W$ (@230Vac when PUSH or DALI turn off)
	Efficiency	86% (@230Vac, 500mA current of 100% load)
	Wiring method	Push terminal, wire cross section:0.75-1.5mm ²
Output	Operating mode	Constant current
	Load type	LED
	Flickering / Flickering-Free	Flicker value: less than 2% for whole dimming range
	Start up time	<1s (@230Vac,100% load)
	Ripple current	$\pm 5\%$ (@230Vac, 100% load: LED load)
	No-load output voltage	68Vdc Max.
	Load output voltage range	6-60Vdc
	Full load output power	20W Max.
	Load output current	250mA(6-60V)/350mA (6-58V)/500mA(6-40V)/700mA(6-28.5V)
	Constant current/voltage accuracy	Constant current accuracy $\pm 5\%$
	Wiring method	Push terminal, wire cross section:0.75-1.5mm ²
Control Method	Primary PUSH dimming	Primary PUSH dimming (Max. lead wire length: 20m)
	1-10V (0-10V) dimming	1-10V dimming (Port current<1mA), (Max. lead wire length: 20m)

	Dimming range	Primary PUSH & DALI dimming: 0%-100% 1-10V dimming: 1%-100%
	Secondary PWM dimming	1-10V port PWM dimming (3KHz-8KHz)
	Potentiometer	Yes, 100kΩ
	DALI function	DALI dimming (Max. lead wire length: 300m) logarithm or linear dimming curve selectable
Exception Protection Requirements	Input over voltage protection	300Vac, 50Hz/60Hz, 2hours
	Output no load protection	Yes,
	Output over temperature protection	Yes, reset power on to recover
	Output short circuit protection	Yes, reset power on to recover
Operating Environment	Operating temperature/humidity	-25℃~50℃, humidity:20%~85% (Non-condensing)
	Storage temperature/humidity	-40℃~80℃, humidity:10%~95%
	Max. case temp (Tc)	85℃
Safety & EMC	Withstand voltage	3750Vac, 5mA, 60s (Input "L N"- Output "SEC+ SEC- 1-10V")
	EMC standard	EN55015, EN61547, EN61000-3-2, EN61000-3-3
	DALI standard	IEC62386-102, IEC62386-207
	Safety standard	EN61347-1, EN61347-2-13
	Certification	Semko, CB, RoHS
Others	Degrees of protection	IP20
	Type of protection	Class II
	Installation type	Independent installation
	Installation dimension	150*52*28mm
	Memory function	Yes, (PUSH with memory function)
	PUSH dimming synchronization	15 units Max.
	Packaging requirements	PE bag+ white box+ Instruction+ clapboard+ outer carton (K=A)
	Weight	142.1g
	Life	50000h @Ta 230V full load
Note: All parameters are tested at the input voltage of 230Vac and 25 degree environment unless specified.		

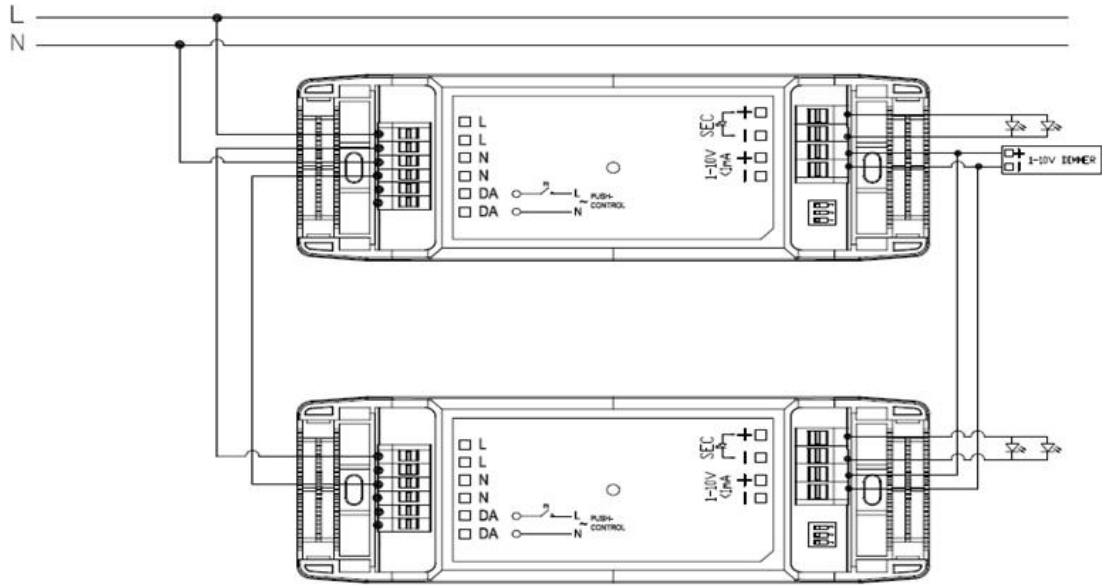


Fig. B 1-10V Dimming

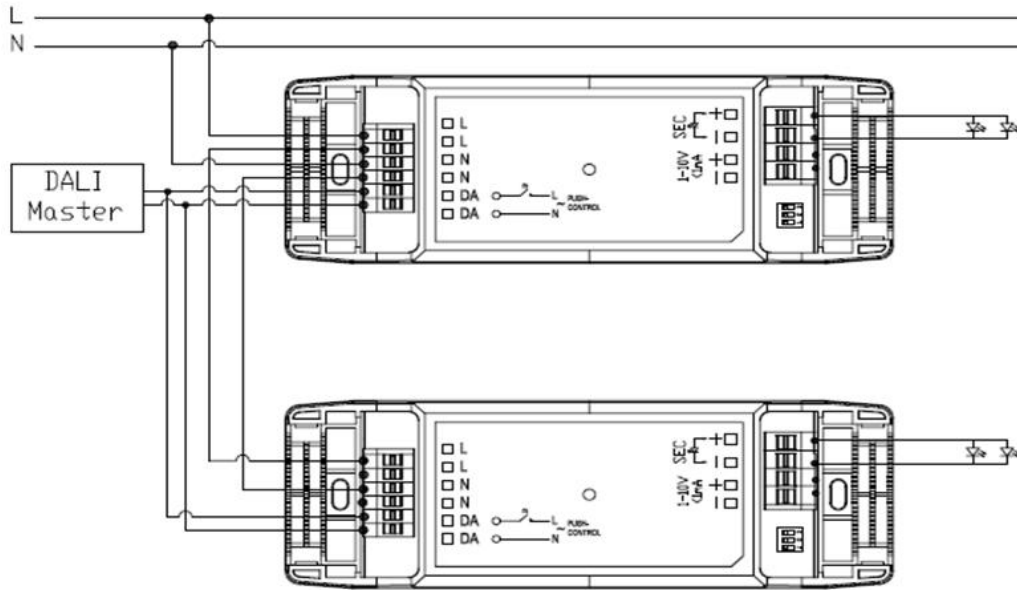
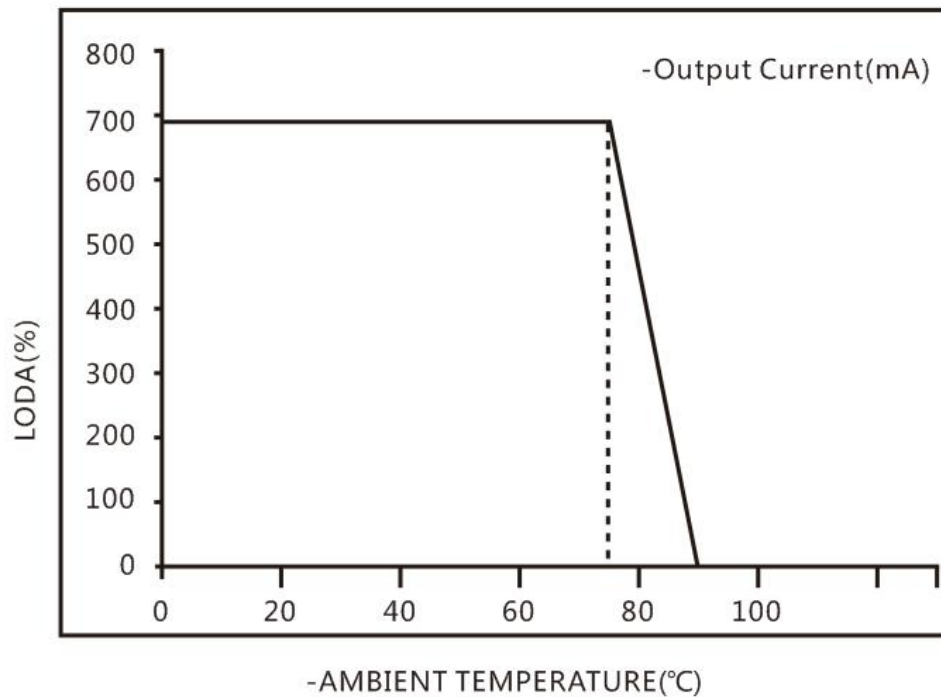


Fig.C DALI Dimming

5. Derating



6.ON/OFF & Description of Dimming Operation

1)Push Dimming:

- ON/OFF:Short press(0.1S-1S)on he switch,LED driver will turn on or switch off.
- Dimming:Long press on(1S-8S)on the switch,LED driver switch to be dimmable and the dimming range is 1%-100%.
- Memory:PUSH dim with memory function.
- Synchronization:When the dimming is inconsistent,pressandholdthebuttonforatleast15sec,the brightness of All lamp swill be synchronized to 50%.

2)DALI Dimming:

Connect the driver into DALI system,dimming via DALI master,dimming range:0-100%

3)1-10VDimming:

Connect the 1-10V DC voltage(100K resistance potentiometer)tothe1-10Vdimmingport,adjust the voltage(value of resistance)to adjust the light,and the dimming range is 2-100%.

7.Application Notice

- 1) Under power-on state, load operation is not allowed and the LED may be damaged.
- 2) After the power is turned off, there will be residual voltage, which can be maintained for about 1 minute.
- 3) If the indicator light is off, the input power is less than 1 watt, please short-circuit the 1-10V port for 10 seconds to restore the factory value.