



LKAD021D



Class2

SELV

TYPE HL



RoHS



Features

Output:	Constant Current
Range:	150mA-500mA @ 10-42Vdc (fixed & preset by factory)
PFC design:	Built-in active PFC function
Efficiency:	Up to 86%
Protections:	Short circuit/ over load/ over temperature
Heat dissipation:	Cooling by free air convection
Waterproof Performance:	For dry, damp, wet locations
Dimming function:	0-10V dimming: 0-10V/1-10V/Potentiometer/10V PWM 4 in 1
Dimming Range:	0-100%
Application:	Suitable for LED lighting and moving sign applications
Warranty:	5 years warranty

Specification



Triac/Phase-Cut Dimmable LED driver 20W

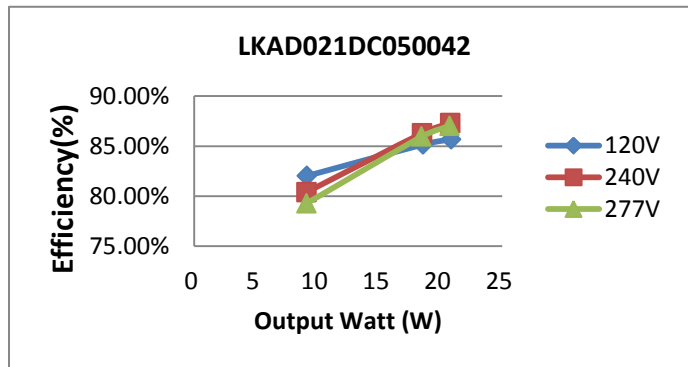
Model:		LKAD021DC050042		
Certificate		CUL,CE,Rosh,		
Output	DC Voltage	10-42V		
	Voltage Tolerance	±0.5V		
	Voltage Regulation	±0.5%		
	Rated current	500mA		
	Rated power	21W		
	Load Regulation	±2%		
Input	Voltage Range	120-277VAC		
	Frequency Range	50/60hz		
	Power Factor(Typ.) @full load	0.989@120VAC		
	THD(Typ.) @ full load	<15%@120VAC & 277VAC		
	Efficiency(Typ.) @ full load	≥85.69%@120VAC		
	AC Current (Max.)	0.58A		
	Inrush Current (Typ.)	15A, 50%, 1.4ms @120VAC	65A, 50%, 1.4ms @277VAC	
	Leakage current	<0.5mA		
Protection	Short Circuit	shut down o/p voltage, re-power on to recover after fault condition removed		
	Over Load	≤120% constant current limiting, auto-recovery after fault condition removed		
	Over temperature	100℃±10℃ shut down o/p voltage, automatically recover after cooling		
Environment	Working TEMP.	-40~+60℃ (see below derating curve)		
	Working Humidity	20 - 95%RH non-condensing		
	Storage TEM.,Humidity	-40 - +80℃,10 - 95% RH non-condensing		
	TEMP.coefficient	±0.03%/℃(0 - 50℃)		
	Vibration	10~500Hz, 5G 12min./1 cycle, period for 72min. each along X,Y,Z axes		
Safety & EMC	Safety standards	UL8750 , CAN/CSA-C22.2 No.250.13		
	Withstand voltage	I/P-O/P: 1.8KVAC I/P-FG: 1.8KVAC O/P-FG1.8KVAC		
	Isolation resistance	I/P-O/P: 100MΩ/ 500VDC/ 25℃/ 70% RH		
	EMC Emission	FCC 47 CFR Part 15 ,Subpart B		
Others	Net Weight			
	Dimension	195 * 30* 20.5mm(L*W*H)		
	Packing	Cartons		
Notes	<p>1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25℃ of ambient temperature.</p> <p>2. Tolerance: includes set up tolerance and load regulation.</p>			



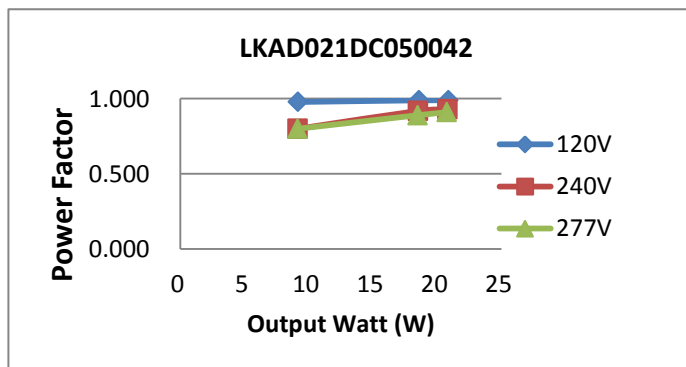
Electrical Characteristics

Model: LKAD021DC050042							
Input voltage (Vac)	Input Current (mA)	Input Power (W)	Power Factor	Output Voltage (Vdc)	Output Current (MA)	Output Power (W)	Efficiency (%)
120V	208	24.36	0.989	42.00	497	20.87	85.69%
	187	21.81	0.989	37.00	502	18.57	85.16%
	97	11.17	0.978	18.00	509	9.16	82.02%
240V	108	23.81	0.930	42.00	495	20.79	87.32%
	99	21.44	0.919	37.00	500	18.50	86.29%
	60	11.35	0.800	18.00	507	9.13	80.41%
277V	97	23.84	0.910	42.00	494	20.75	87.03%
	89	21.48	0.890	37.00	499	18.46	85.95%
	58	11.51	0.800	18.00	507	9.13	79.29%

Efficiency Curve (efficiency vs ouput watt)

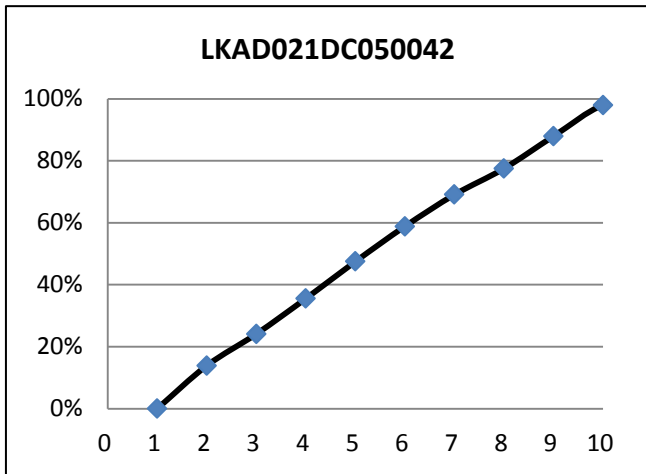


Power Factor Curve

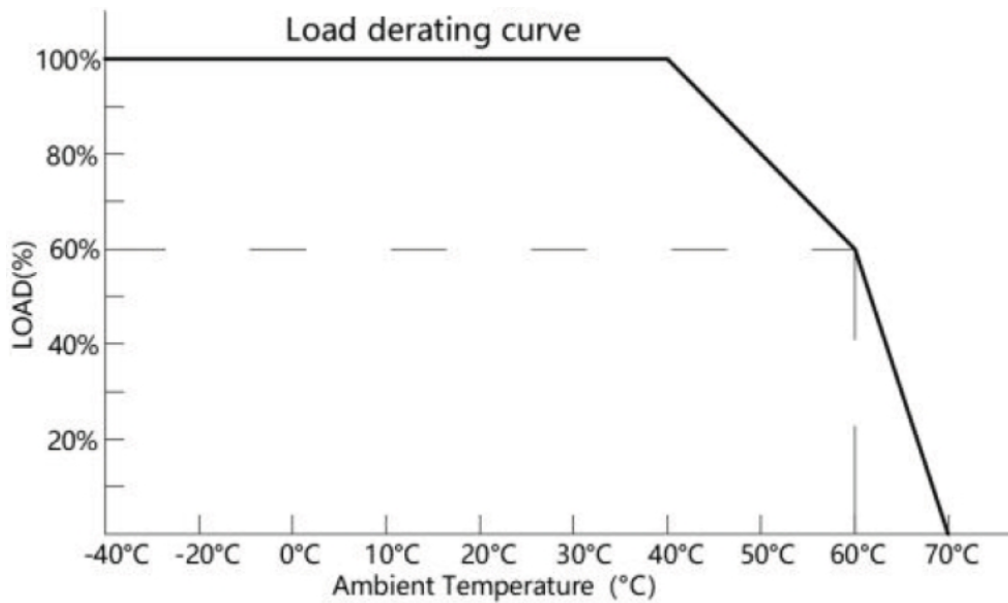




0-10V Dimming Curve

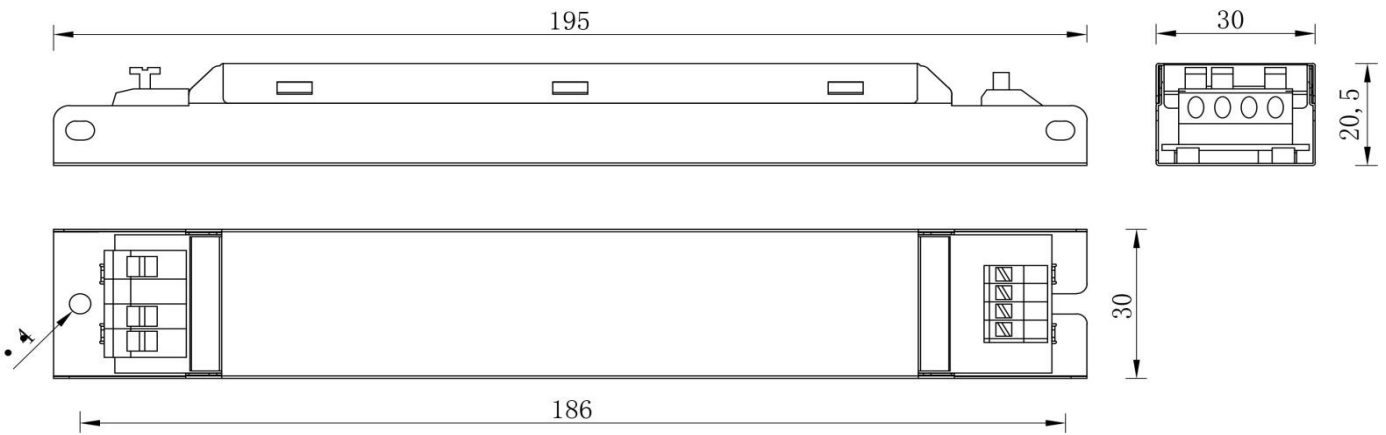


Derating Curve (output load vs TEMP.)

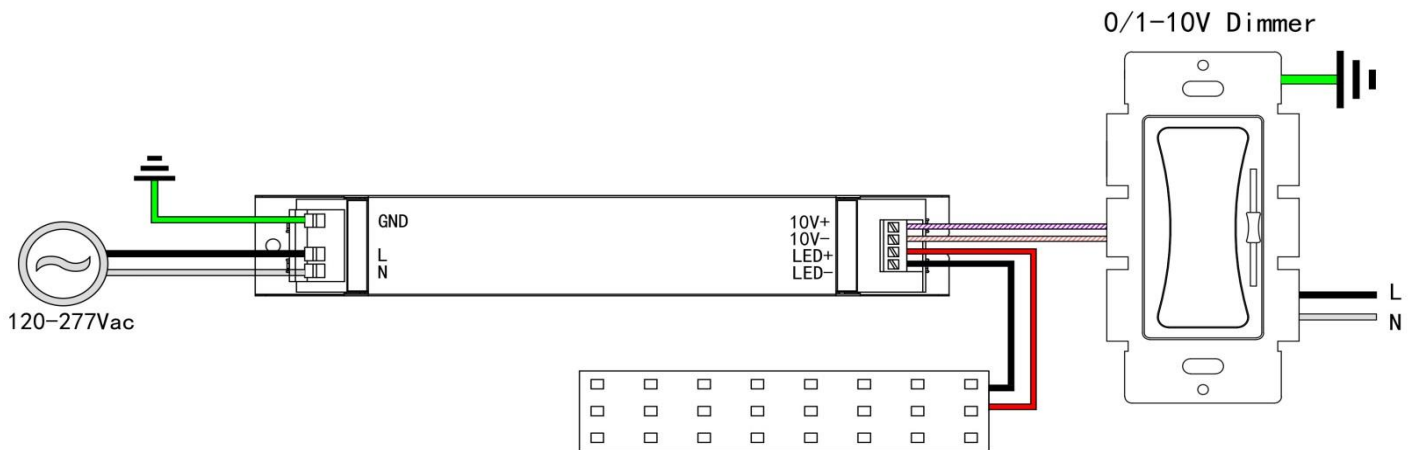




Installation Dimension



Wiring Diagram



1. Input cable 2*18AWG, Black cable to L, and White cable to N of Mains AC.
2. Output cable 2*18AWG, Red cable (+) to LED Positive side (+) , Black cable (-) to LED Negative side (-).
3. Dimming cable 2*22AWG, Purple cable DIM (+) to 0/1-10V dimmer signal(+), Pink cable DIM (-) to 0/1-10V dimmer signal (-).
4. Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged



Dimming Operation

Working well with most EU and US brands of 0/1-10V dimmers, 10V PWM dimmers or dimming system as well as potentiometer dimming system.

Notices

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.

If still have any questions, please contact us directly