



LKAD029D-T



Class P SELV TYPE HL  **RoHS**



Features

- Output:** Constant Current
- Range:** 360-700mA@20-42V
- PFC design:** Built-in active PFC function
- Efficiency:** Up to 84%
- Protections:** Short circuit/ over load/ over temperature
- Heat dissipation:** Cooling by free air convection
- Waterproof Performance:** For dry, damp, wet locations
- Dimming function:** Phase dimming: work with forward phase, MLV and Reverse phase, ELV, TRIAC dimmers.
- Dimming Range:** 0-100%
- Application:** Suitable for LED lighting and moving sign applications
- Warranty:** 5 years warranty



Triac/Phase-Cut Dimmable LED driver 28W

Specification

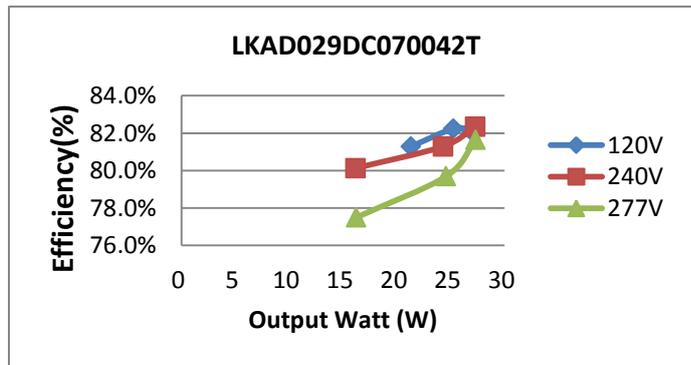
Model:		LKAD029DC070042T	
Certificate		CUL,CE,Rosh,	
Output	DC Voltage	20-42V	
	Voltage Tolerance	±0.5V	
	Voltage Regulation	±0.5%	
	Rated current	700mA	
	Rated power	29.4W	
	Load Regulation	±2%	
Input	Voltage Range	120-277VAC	
	Frequency Range	50/60hz	
	Power Factor(Typ.) @full load	0.996@120VAC	
	THD(Typ.) @ full load	<15%@120VAC & 277VAC	
	Efficiency(Typ.) @ full load	≥82.2%@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°C±10°C shut down o/p voltage, automatically recover after cooling	
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	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°C/ 70% RH	
	EMC Emission	FCC 47 CFR Part 15 ,Subpart B	
Others	Net Weight		
	Dimension	110.5*40.5*25.5mm(Dia * H)	
	Packing	Cartons	
Notes	<p>1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25°C of ambient temperature.</p> <p>2. Tolerance: includes set up tolerance and load regulation.</p>		



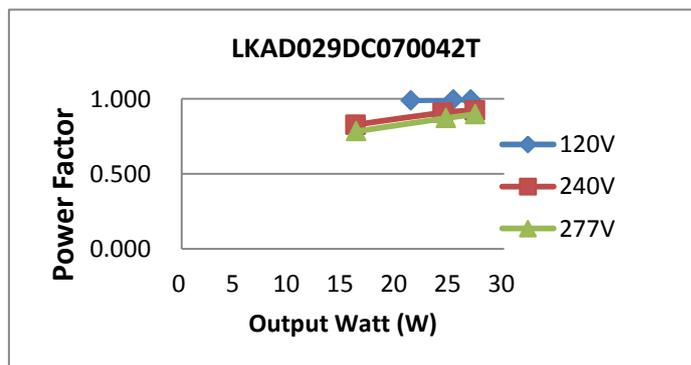
Electrical Characteristics

Model: LKAD029DC070042T							
Input voltage (Vac)	Input Current (mA)	Input Power (W)	Power Factor	Output Voltage (Vdc)	Output Current (MA)	Output Power (W)	Efficiency (%)
120V	270.20	32.72	0.996	39.30	684	26.88	82.2%
	254.00	30.71	0.995	36.50	692	25.26	82.2%
	216.50	26.21	0.990	30.35	702	21.31	81.3%
240V	144.00	33.13	0.924	40.00	682	27.28	82.3%
	132.00	29.88	0.909	35.00	694	24.29	81.3%
	104.00	20.18	0.828	22.00	735	16.17	80.1%
277V	136.00	33.46	0.898	40.00	683	27.32	81.6%
	129.00	30.83	0.872	35.00	702	24.57	79.7%
	97.00	20.95	0.784	22.00	738	16.24	77.5%

Efficiency Curve (efficiency vs ouput watt)



Power Factor Curve

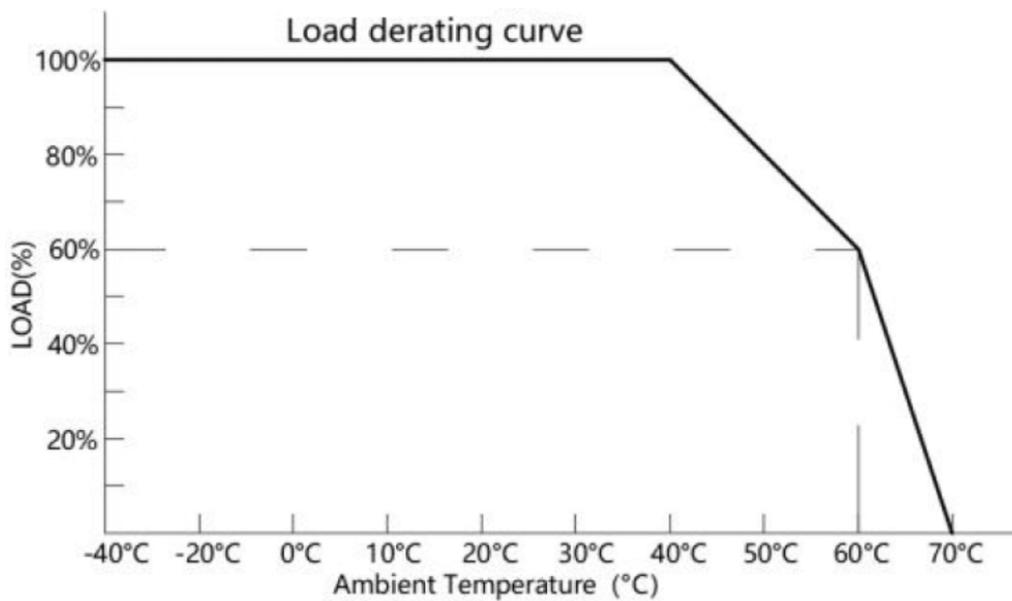




Compatibility Testing for Phase Dimmer

Test by US Standard 120V dimmers				
Model: LKAD029DC070042T				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	Lutron SB-1 600W	2.21	31	7.05%
2	LC211	1.18	31	3.78%
3	Lutron DVCL-253P-WH	0.89	32	2.77%
4	TLC-0005	1.01	31	3.26%
5	PEC-002	0.87	32	2.75%
6	TLC-0005	1.08	32	3.36%
7	LEVELTON 150W	1.25	32	3.96%
8	LEVELTON DSL06	1.16	32	3.65%
9	Lutron Scl-153P	1.37	32	4.35%
10	Lutron SELV-300P	0.95	32	2.95%

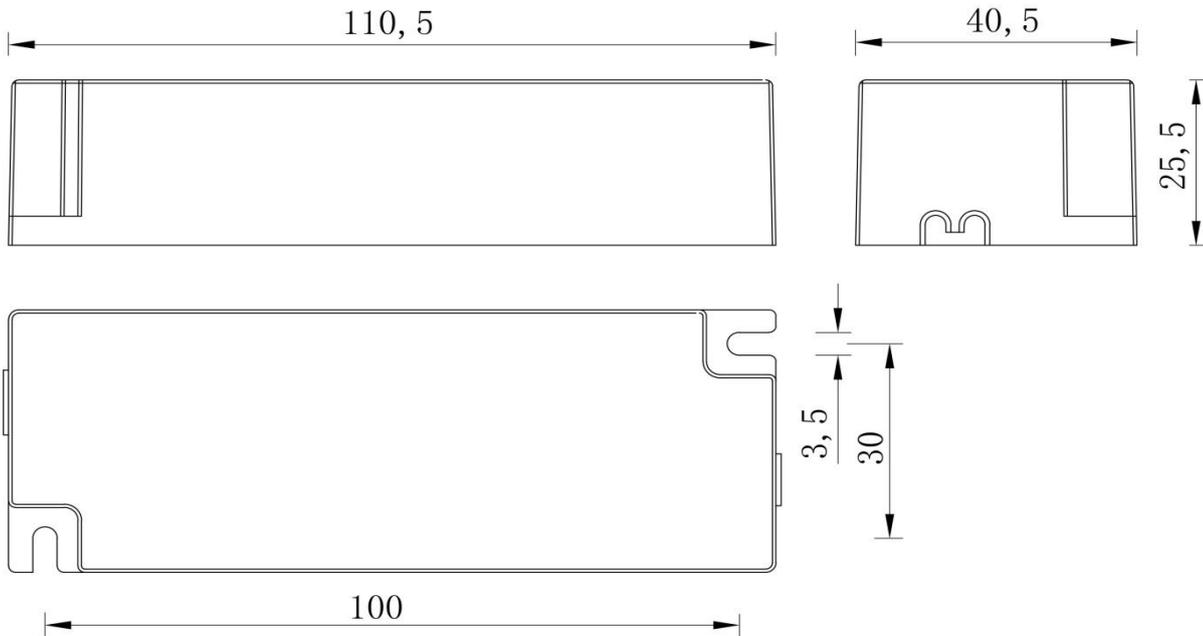
Derating Curve (output load vs TEMP.)



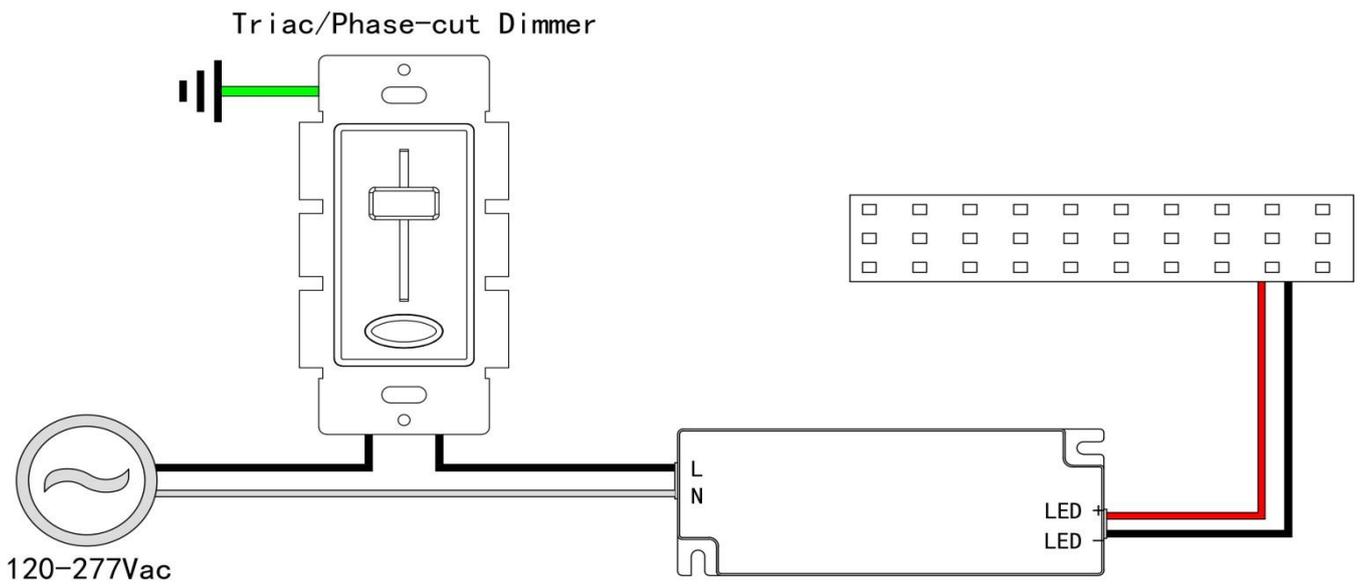


Triac/Phase-Cut Dimmable LED driver 28W

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. Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged



Dimming Operation

- The Pulse-Width Modulation (PWM) of output voltage can be adjusted through input terminal of the AC phase line(L) by connection a phase /Triac dimmer or lighting system.
- Working with forward phase, MLV and Reverse phase , ELV, TRIAC dimmers or light system.
- Min. loading is about 10%
- Please try to use dimmers with power at least 1.5 times as the output power of the driver.

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