



# LKAD025D



**Class2**

**SELV**

**TYPE HL**



**RoHS**



## Features

<b>Output:</b>	Constant Current
<b>Range:</b>	400-700m@18-40V (fixed & preset by factory)
<b>PFC design:</b>	Built-in active PFC function
<b>Efficiency:</b>	Up to 84%
<b>Protections:</b>	Short circuit/ over load/ over temperature
<b>Heat dissipation:</b>	Cooling by free air convection
<b>Waterproof Performance:</b>	For dry, damp, wet locations
<b>Dimming function:</b>	Phase dimming: work with forward phase, MLV and Reverse phase, ELV, TRIAC dimmers.
<b>Dimming Range:</b>	0-100%
<b>Application:</b>	Suitable for LED lighting and moving sign applications
<b>Warranty:</b>	5 years warranty



## Triac/Phase-Cut Dimmable LED driver 28W

## Specification

Model:		LKAD025DC060040	LKAD025DC070040
Certificate		CUL,CE,Rosh,	
Output	DC Voltage	18-40V	18-40V
	Voltage Tolerance	±0.5V	
	Voltage Regulation	±0.5%	
	Rated current	600mA	700mA
	Rated power	28W	
	Load Regulation	±2%	±1%
Input	Voltage Range	100-132VAC	
	Frequency Range	50/60hz	
	Power Factor(Typ. ) @full load	0.98@90VAC	0.99@120VAC
	THD(Typ. ) @ full load	<15%@120VAC & 277VAC	
	Efficiency(Typ.) @ full load	≥78.7%@90VAC	≥83%@120VAC
	AC Current (Max.)	0.58A	
	Inrush Current (Typ.)	15A, 50%, 1.4ms @120VAC	
	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	φ75*25mm(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>		

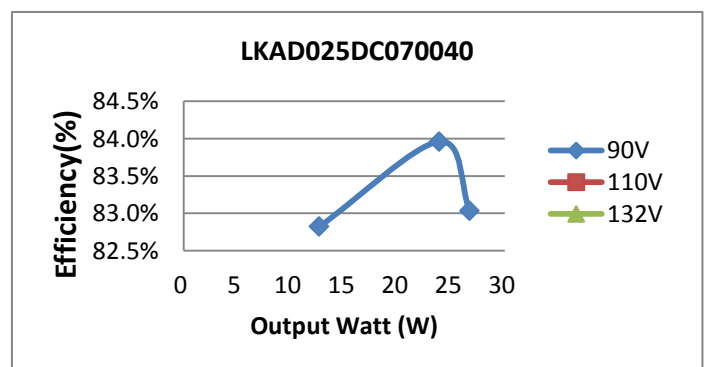
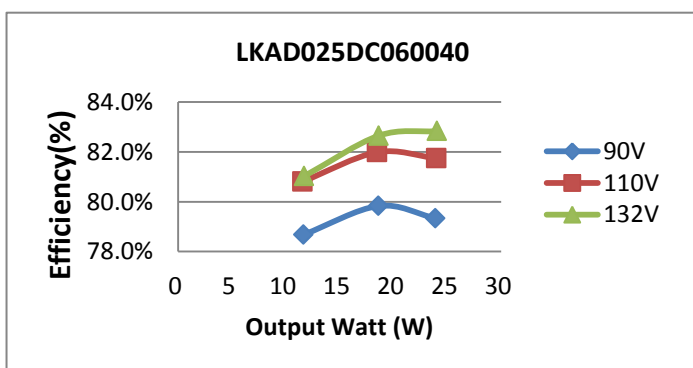


### Electrical Characteristics

Model: LKAD025DC060040							
Input voltage ( Vac)	Input Current (mA)	Input Power (W)	Power Factor	Output Voltage ( Vdc)	Output Current ( MA)	Output Power (W)	Efficiency (%)
90	168.00	14.78	0.98	18.00	646	11.63	78.7%
	262.80	23.30	0.99	30.00	620	18.60	79.8%
	338.50	30.10	0.99	40.00	597	23.88	79.3%
110	134.60	14.30	0.97	18.00	642	11.56	80.8%
	209.40	22.54	0.99	30.00	616	18.48	82.0%
	272.00	29.31	0.99	40.00	599	23.96	81.7%
130	113.70	14.44	0.96	18.00	650	11.70	81.0%
	175.00	22.54	0.98	30.00	621	18.63	82.7%
	224.10	29.02	0.99	40.00	601	24.04	82.8%

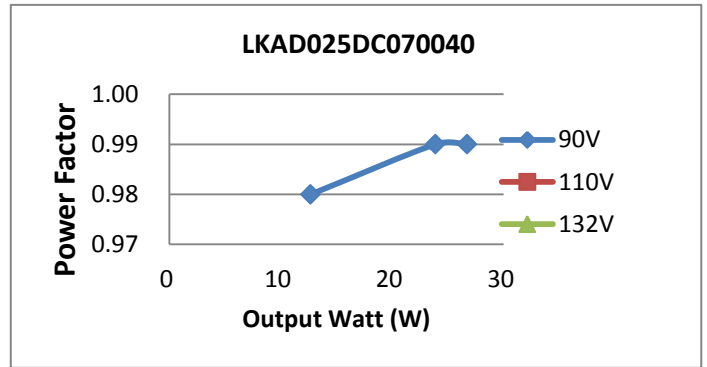
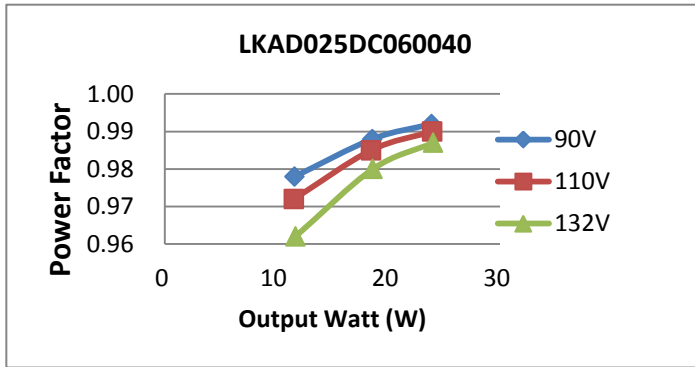
Model: LKAD025DC070040							
Input voltage ( Vac)	Input Current (mA)	Input Power (W)	Power Factor	Output Voltage ( Vdc)	Output Current ( MA)	Output Power (W)	Efficiency (%)
120	268.70	32.18	0.99	40.00	668	26.72	83.0%
	237.30	28.43	0.99	35.00	682	23.87	84.0%
	130.10	15.30	0.98	18.00	704	12.67	82.8%

### Efficiency Curve (efficiency vs ouput watt)



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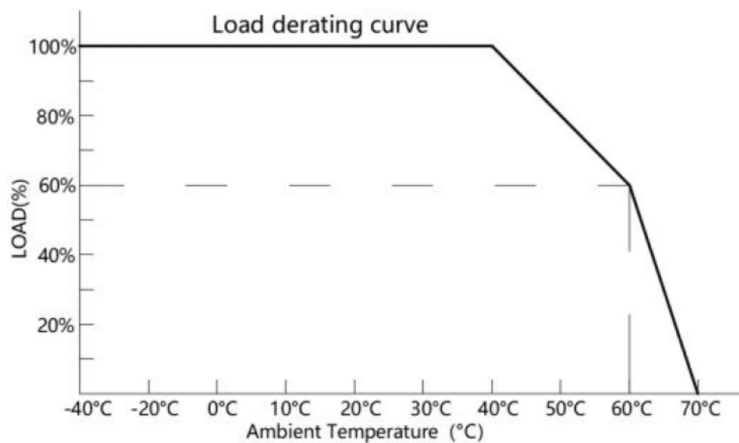
**Power Factor Curve**



**Compatibility Testing for Phase Dimmer**

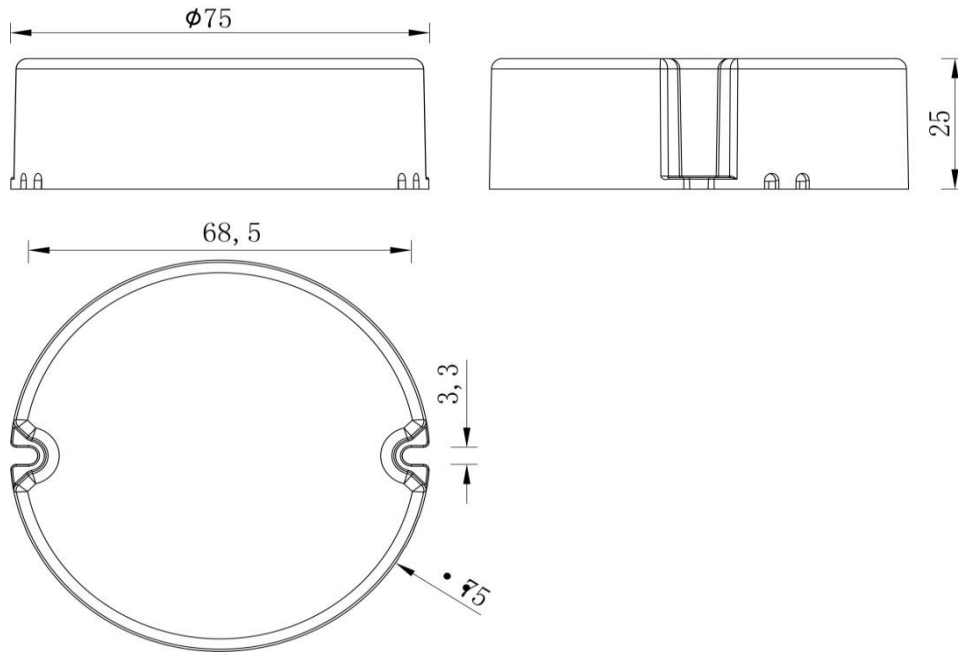
Test by US Standard 120V dimmers				
Model: LKAD025DC070040				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	LEVITON 666 150W	0.00	29.52	0.00%
2	TCL-004 800W	1.75	29.52	5.93%
3	LC211 300W	0.00	29.52	0.00%
4	TLC-003 300W	1.75	29.52	5.93%
5	LUTRON-TTCL-100 250W	2.45	29.52	8.30%
6	DINNER SB-1 600W	0.00	29.52	0.00%

**Derating Curve (output load vs TEMP.)**

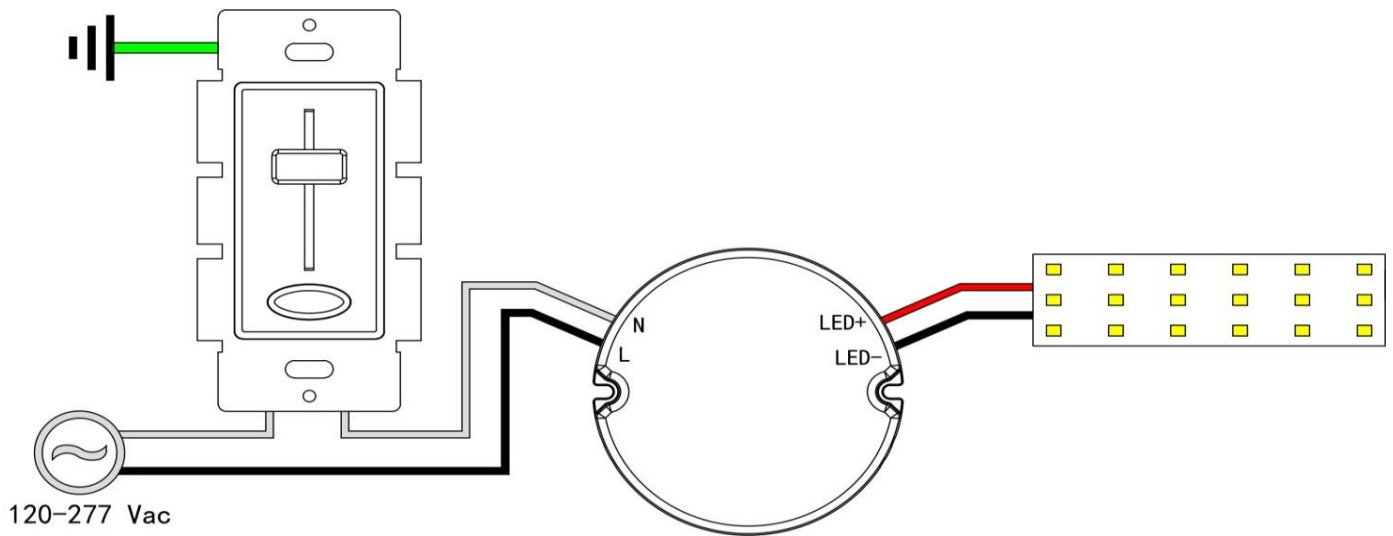




## Installation Dimension



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



## Dimming Operation

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- 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

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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\***