### LKAD062D



# Class2 SELV TYPE HL ( RoHS



### **Features**

Output: Constant Current

Range: 700mA-1200mA@20-42V (fixed & preset by factory)

**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

# **Specification**

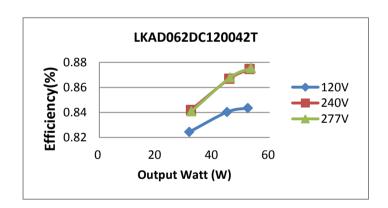
Model:		LKAD062DC120042T					
Certificate		CUL,CE,Rosh,					
•	DC Voltage	20-42V					
	Voltage Tolerance	±0.5V					
	Voltage Regulation	±0.5%					
Output	Rated current	1200mA					
	Rated power	50.4W					
	Load Regulation	±2%					
	Voltage Range	120-277VAC					
	Frequency Range	50/60hz					
	Power Factor(Typ.) @full load	0.99@120VAC					
Innut	THD(Typ.) @ full load	<15%@120VAC & 277VAC					
Input	Efficiency(Typ.) @ full load	≥84.4%@120VAC					
	AC Current (Max.)	0.58A					
	Inrush Current (Typ.)	15A, 50%, 1.4ms @120VAC	65A, 50%, 1.4ms @2	77VAC			
	Leakage current	<0.5mA					
	Short Circuit	shut down o/p voltage, re-power on to recover after fault condition removed					
Protection	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					
	Working TEMP.	-40~+60°C (see below derating curve)					
	Working Humidity	20 - 95%RH non-condensing					
Environment	Storage TEM.,Humidity	-40 - +80 ℃,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 standards	UL8750 , CAN/CSA-C22.2 No.250.13					
Safety & EMC	Withstand voltage	I/P-O/P: 1.8KVAC I/P-FG: 1.8KVAC O/P-FG1.8KVAC					
Salety & LIVIC	Isolation resistance	I/P-O/P: 100MΩ/ 500VDC/ 25℃/ 70% RH					
	EMC Emission	FCC 47 CFR Part 15 ,Subpart B					
Others	Net Weight						
	Dimension	155*43*25.5mm(Dia * H)					
	Packing	Cartons					
Notes	<ol> <li>All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25 <sup>o</sup>C of ambient temperature.</li> <li>Tolerance: includes set up tolerance and load regulation.</li> </ol>						



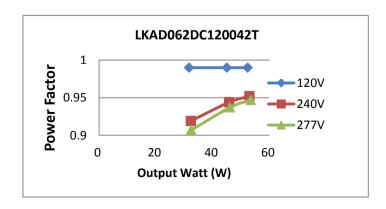
## **Electrical Characteristics**

Model: LKAD062DC120042T							
Input voltage ( Vac)	Input Current (mA)	Input Power (W)	Power Factor	Output Voltage ( Vdc)	Output Current ( MA)	Output Power (W)	Efficiency (%)
120V	537.20	62.04	0.990	42	1246	52.33	84.4%
	469.70	53.55	0.990	36	1250	45.00	84.0%
	340.20	38.45	0.990	25	1268	31.70	82.4%
240V	265.60	60.55	0.952	42	1261	52.96	87.5%
	233.80	52.82	0.944	36	1272	45.79	86.7%
	174.30	38.36	0.919	25	1292	32.30	84.2%
277V	232.60	60.97	0.947	42	1271	53.38	87.6%
	204.90	53.09	0.937	36	1280	46.08	86.8%
	153.70	38.59	0.907	25	1298	32.45	84.1%

# **Efficiency Curve (efficiency vs ouput watt)**



## **Power Factor Curve**

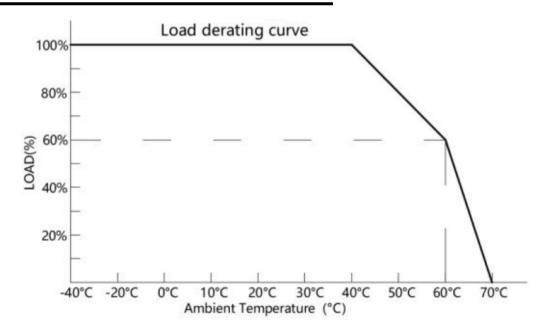




# **Compatibility Testing for Phase Dimmer**

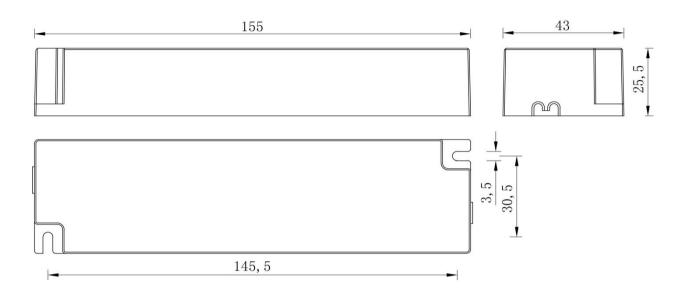
	Test by US Standard 120V dimmers								
Mode	l: LKAD062DC12004								
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)					
1	LUTRON TTCL-100	1.97	52	3.81%					
2	TLC-005	0.29	53	0.56%					
3	TLC-0003	1.34	52	2.57%					
4	LC211	0.55	52	1.05%					
5	LUTRON SCL-153P	0.38	51	0.75%					
6	TLC-0004	1.30	53	2.47%					
7	LISTED SB-1	0.00	53	0.00%					
8	Panssonic 120V	0.88	54	1.62%					

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

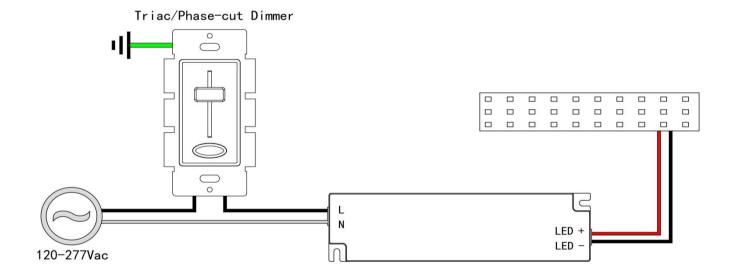




## **Installation Dimension**



## **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 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\*