### LKAD035D



# Class2 SELV TYPE HL CE RoHS



#### **Features**

Output: Constant Current

Range: 750mA-1000mA@25-40V (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**

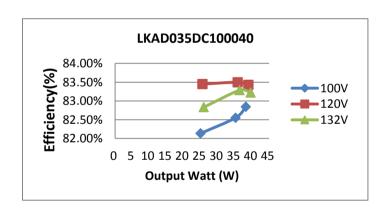
Model:		LKAD035DC100040						
Certificate		CUL,CE,Rosh,						
	DC Voltage	25-40V						
Output	Voltage Tolerance	±0.5V						
	Voltage Regulation	±0.5%						
	Rated current	1000mA						
	Rated power	40W						
	Load Regulation	±2%						
	Voltage Range	100-132VAC						
	Frequency Range	50/60hz						
	Power Factor(Typ.) @full load	0.997@100VAC						
Input	THD(Typ.) @ full load	<15%@120VAC & 277VAC						
Input	Efficiency(Typ.) @ full load	≥82.1%@100VAC						
	AC Current (Max.)	0.58A						
	Inrush Current (Typ.)	15A, 50%, 1.4ms @120VAC 65A, 50%, 1.4ms @277VAC						
	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℃±10℃ 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 °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 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°C/ 70% RH						
	EMC Emission	FCC 47 CFR Part 15 ,Subpart B						
Others	Net Weight							
	Dimension	155*43*25.5mm(Dia * H)						
	Packing	Cartons						
	1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25 ℃ of ambient temperature.							
Notes	2. Tolerance: includes set up tolerance and load regulation.							



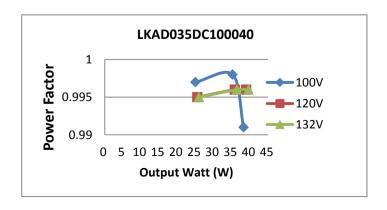
## **Electrical Characteristics**

Model: LKAD035DC100040							
Input voltage ( Vac)	Input Current (mA)	Input Power (W)	Power Factor	Output Voltage ( Vdc)	Output Current ( MA)	Output Power (W)	Efficiency (%)
100	305	30.447	0.997	24	1042	25.01	82.14%
	425	42.65	0.998	36	978	35.21	82.55%
	464	46.16	0.991	40	956	38.24	82.84%
120	255	30.6	0.995	24	1064	25.54	83.45%
	357	42.9	0.996	36	995	35.82	83.50%
	389	46.7	0.996	40	974	38.96	83.43%
132	238.7	31.32	0.995	24	1081	25.94	82.84%
	331	43.7	0.996	36	1011	36.40	83.29%
	361.00	47.63	0.996	40	991	39.64	83.22%

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



### **Power Factor Curve**

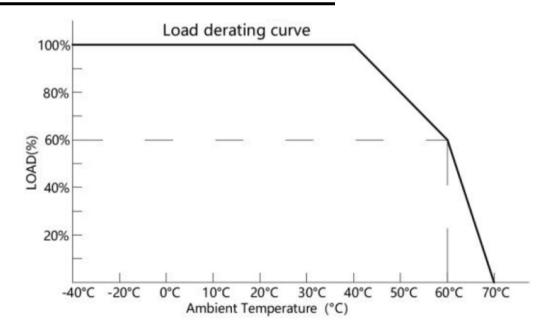




# **Compatibility Testing for Phase Dimmer**

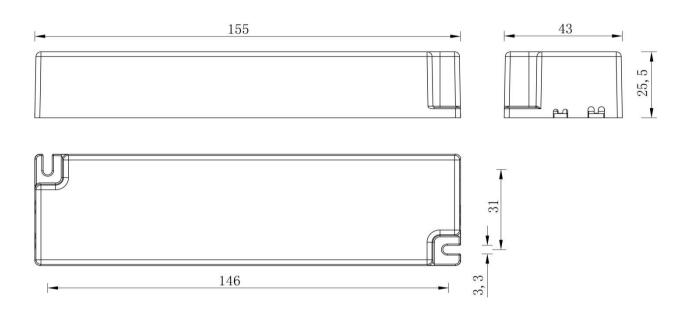
Test by US Standard 120V dimmers									
Mode	el:								
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)					
1	Lutron SB-1 600W	0.21	43	0.49%					
2	LC211	0.43	42	1.01%					
3	Lutron DVCL-253P-WH	1.01	44	2.32%					
4	TLC-0005	2.56	43	5.97%					
5	PEC-002	0.98	43	2.27%					
6	TLC-0003	1.18	43	2.77%					
7	LEVLTON 150W	1.08	44	2.48%					
8	LEVLTON DSL06	1.15	43	2.70%					
9	Lutron Scl-153P	0.79	43	1.82%					
10	Lutron SELV-300P	0.90	43	2.10%					

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

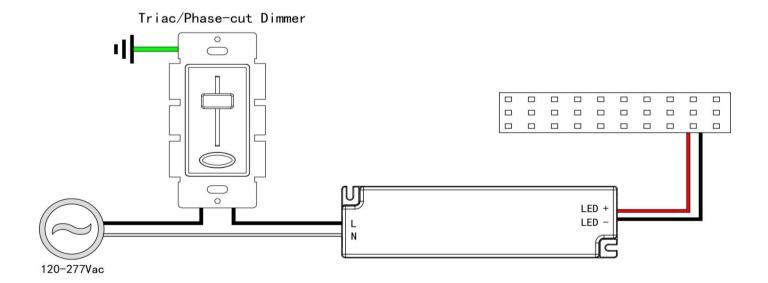




## **Installation Dimension**



## **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\*