

## LKAD360V-T



**Class2 SELV TYPE HL**



### Features

<b>Output:</b>	Constant Voltage
<b>Range:</b>	120-277VAC
<b>PFC design:</b>	Built-in active PFC function
<b>Efficiency:</b>	Up to 85%
<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. 0-10V dimming: 0-10V/1-10V/Potentiometer/10V PWM 4 in 1
<b>Dimming Range:</b>	0-100%
<b>Application:</b>	Suitable for LED lighting and moving sign applications
<b>Warranty:</b>	5 years warranty



## Specification

Model:		LKAD360DVK00012T	LKAD360DVC48024T	LKAD360DV624048T
Certificate		UL,CUL		
Output	DC Voltage	12V	24V	48V
	Voltage Tolerance	±0.5V		
	Voltage Regulation	±0.5%		
	Rated current	25A	12.5A	6.25A
	Rated power	300W		
	Load Regulation	±2%	±1%	±1%
Input	Voltage Range	120-277VAC		
	Frequency Range	50/60hz		
	Power Factor(Typ. ) @full load		0.990@120VAC 0.994@277VAC	0.999@120VAC 0.988@277VAC
	THD(Typ. ) @ full load	<15%@120VAC & 277VAC		
	Efficiency(Typ.) @ full load		≥90.4%@120VAC ≥92.5%@277VAC	≥90.1%@120VAC ≥93.6%@277VAC
	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	260*133*45mm(L*W*H)		
	Packing	1 pc in 1 inner box		
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>			

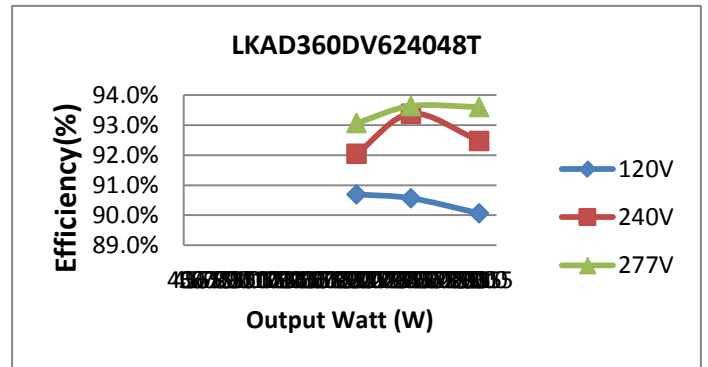
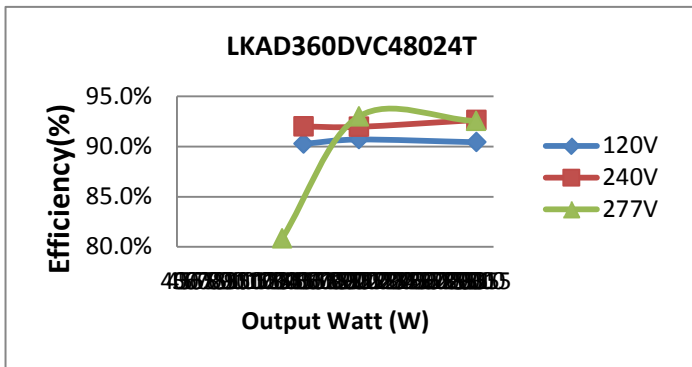


## Electrical Characteristics

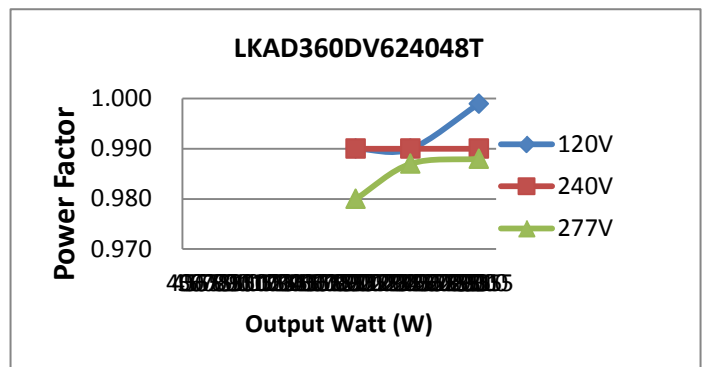
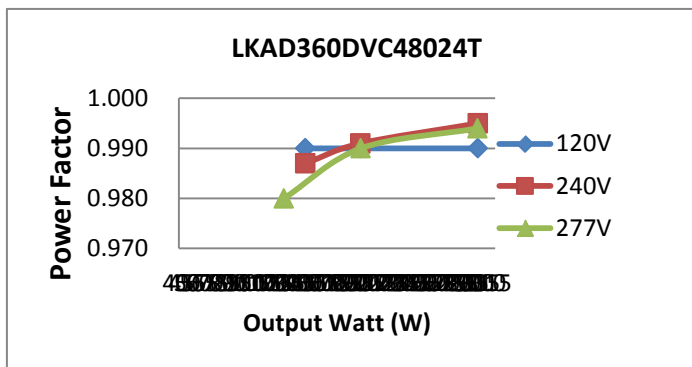
Model: LKAD360DVC48024T							
Input voltage ( Vac)	Input Current (mA)	Input Power (W)	Power Factor	Output Voltage ( Vdc)	Output Current ( MA)	Output Power (W)	Efficiency (%)
120V	2681.00	331.60	0.990	23.99	12500	299.88	90.4%
	1761.00	218.20	0.990	23.99	8250	197.92	90.7%
	1340.00	166.10	0.990	23.99	6250	149.94	90.3%
240V	1302.00	323.80	0.995	24.00	12500	300.00	92.6%
	865.00	215.20	0.991	23.99	8250	197.92	92.0%
	663.30	162.90	0.987	23.98	6250	149.88	92.0%
277V	1167.00	323.90	0.994	23.98	12500	299.75	92.5%
	776.60	212.90	0.990	24.00	8250	198.00	93.0%
	596.70	162.40	0.980	21.00	6250	131.25	80.8%

Model: LKAD360DV624048T							
Input voltage ( Vac)	Input Current (mA)	Input Power (W)	Power Factor	Output Voltage ( Vdc)	Output Current ( MA)	Output Power (W)	Efficiency (%)
120V	2786.00	333.10	0.999	48.00	6250	300.00	90.1%
	2214.00	265.00	0.990	48.00	5000	240.00	90.6%
	1767.00	211.70	0.990	48.00	4000	192.00	90.7%
240V	1348.00	324.40	0.990	48.00	6250	300.00	92.5%
	1080.00	257.00	0.990	48.00	5000	240.00	93.4%
	886.90	208.60	0.990	48.00	4000	192.00	92.0%
277V	1165.00	320.50	0.988	48.00	6250	300.00	93.6%
	936.10	256.30	0.987	48.00	5000	240.00	93.6%
	751.20	206.30	0.980	48.00	4000	192.00	93.1%

### Efficiency Curve (efficiency vs output watt)



### Power Factor Curve



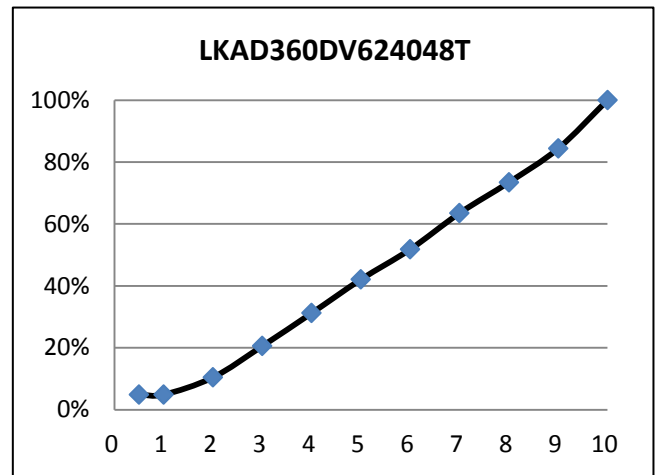
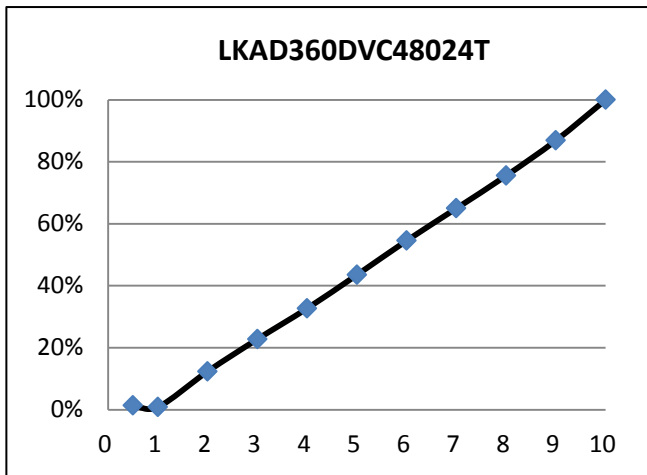
## Compatibility Testing for Phase Dimmer

Test by EU Standard 240V dimmers				
Model: LKAD360DVC48024T				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	T&J 25-1000W	30.15	281	10.72%
2	Lautrupvang DK-275D	10.60	236	4.49%
3	European-No 2	13.20	237	5.57%
4	TENGEN V5-TG/G	15.00	252	5.96%
5	Junnon	16.77	281	5.97%
6	CLIPSAL 500VA	0.15	241	0.06%
7	Midea 220V 630W	53.53	282	19.01%
8	LTECH	1.99	281	0.71%
9	TCL 630W 220V	0.17	281	0.06%
Model: LKAD360DV624048T				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	T&J 25-1000W	18.00	304	5.92%
2	Lautrupvang DK-275D	7.52	241	3.12%
3	European-No 2	10.96	260	4.22%
4	TENGEN V5-TG/G	12.50	213	5.87%
5	Junnon	12.30	237	5.18%
6	CLIPSAL 500VA	1.87	241	0.78%
7	Midea 220V 630W	31.00	305	10.17%
8	LTECH	1.45	304	0.48%
9	TCL 630W 220V	1.70	305	0.56%

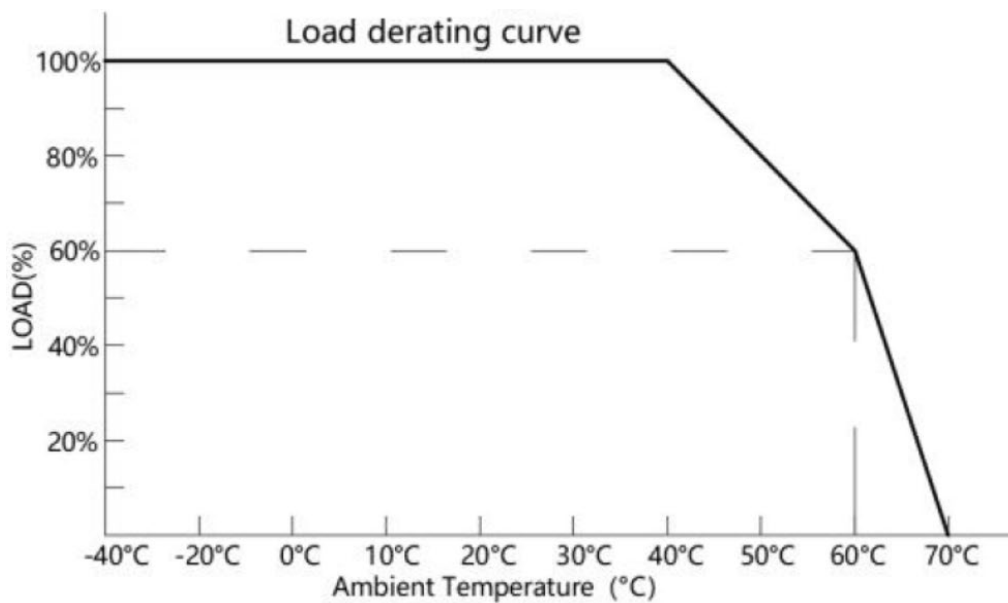
Test by US Standard 120V dimmers				
Model: LKAD360DVC48024T				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	Lutron SB-1 600W	10.73	267	4.01%
2	LC211	16.77	273	6.14%
3	Lutron DVCL-253P-WH	7.40	288	2.57%
4	TLC-0005	10.32	250	4.12%
5	PEC-002	10.12	250	4.05%
6	TLC-0003	10.00	249	4.02%
7	LEVLTON 150W	12.31	268	4.59%
8	LEVLTON DSL06	13.21	277	4.77%
9	Lutron scl-153P	17.32	267	6.49%
Model: LKAD360DV624048T				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	Lutron SB-1 600W	2.73	279	0.98%
2	LC211	2.33	269	0.87%
3	Lutron DVCL-253P-WH	2.67	243	1.10%
4	TLC-0005	2.20	249	0.88%
5	PEC-002	2.32	250	0.93%
6	TLC-0003	2.62	252	1.04%
7	LEVLTON 150W	6.41	278	2.31%
8	LEVLTON DSL06	15.12	249	6.08%
9	Lutron scl-153P	2.32	267	0.87%



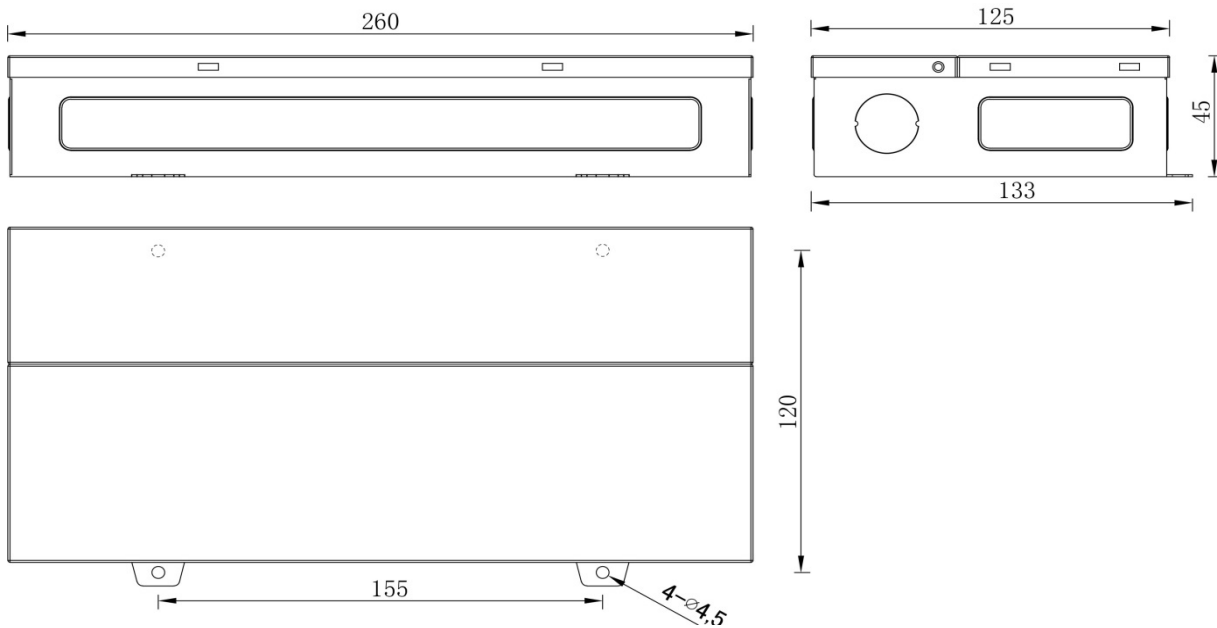
### 0-10V Dimming Curve



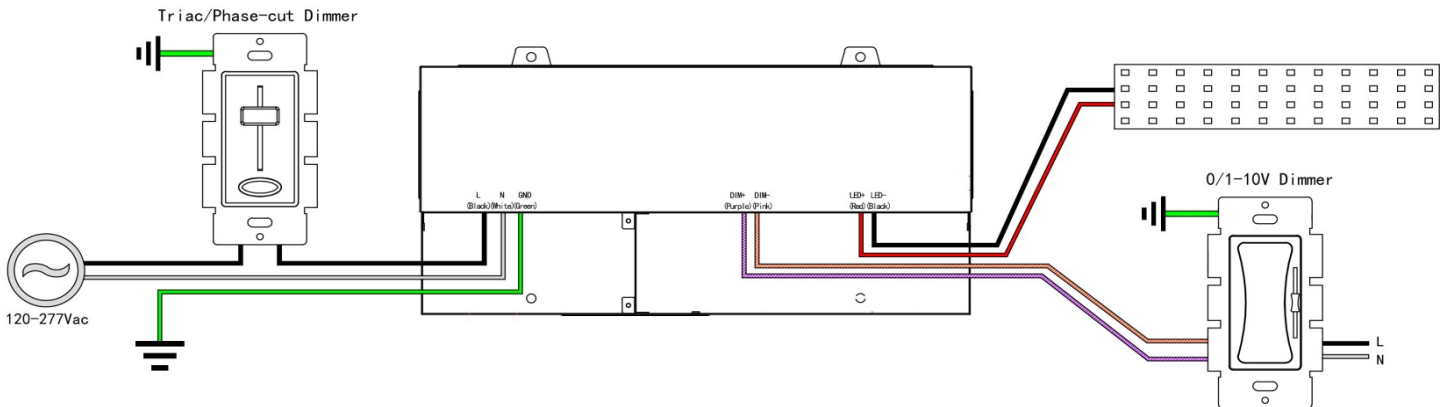
### Derating Curve (output load vs TEMP.)



## Installation Dimension



## Wiring Diagram



1. Input cable 3\*18AWG, the Green cable to GND, 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 DO NOT connect "DIM-" to "LED-", "DIM+" to "LED+", or other incorrect connection.
5. Please make sure your connect these correctly otherwise your product will not function correctly and could be damaged



## Dimming Operation

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This driver can dimming in two ways at the same time, you must be assured that LED lighting is up to the max. Brightness then you could operate with the other dimming.

### 1. TRIAC/Phase cut dimming

- 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.

### 2. 0-10/ 1-10V/ 10V PWM/ Potentiometer dimming

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

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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\***