

LKAD360V-T



Class2

SELV

TYPE HL



RoHS



Features

Output:	Constant Voltage
Range:	120-277VAC
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. 0-10V dimming: 0-10V/1-10V/Potentiometer/10V PWM 4 in 1
Dimming Range:	0-100%
Application:	Suitable for LED lighting and moving sign applications
Warranty:	5 years warranty



Specification

Output Chanel		LKAD360DVC48024T	LKAD360DV624048T	
Certificate		cUL,CE,Rosh,		
Output	DC Voltage	24V	48V	
	Voltage Tolerance	±0.5V		
	Voltage Regulation	±0.5%		
	Rated current	3.12A * 4ch	1.56A * 4ch	
	Rated power	300W		
	Load Regulation	±1%	±1%	
Input	Voltage Range	120-277VAC		
	Frequency Range	50/60hz		
	Power Factor(Typ.) @full load	0.990@120VAC * 4 ch 0.982@277VAC * 4 ch	0.997@120VAC * 4 ch 0.982@277VAC * 4 ch	
	THD(Typ.) @ full load	<15%@120VAC & 277VAC		
	Efficiency(Typ.) @ full load	≥89.2%@120VAC ≥91.1%@277VAC	≥90.5%@120VAC ≥92.2%@277VAC	
	AC Current (Max.)	0.70A		
	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	≤110% 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*125*45mm(L*W*H)		
	Packing	1pc 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>			



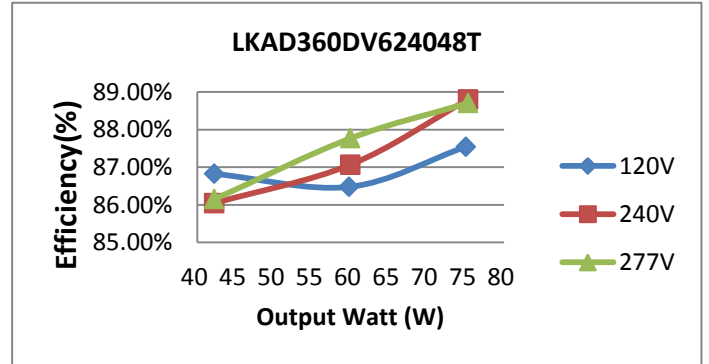
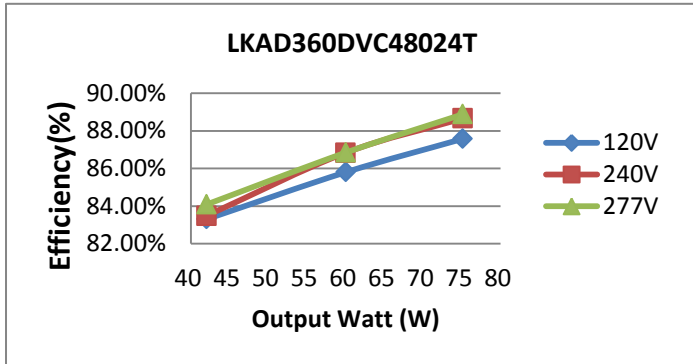
Electrical Characteristics

Model: LKAD360DVC48024T							
Input voltage (Vac)	Input Current (mA)	Input Power (W)	Power Factor	Output Voltage (Vdc)	Output Current (MA)	Output Power (W)	Efficiency (%)
120V	703	85.74	0.990	23.99	3130	75.09	87.58%
	573	69.90	0.990	23.99	2500	59.98	85.80%
	573	50.40	0.990	23.99	1750	41.98	83.30%
240V	359	84.69	0.962	23.99	3130	75.09	88.66%
	299	69.04	0.942	23.98	2500	59.95	86.83%
	225	50.29	0.910	23.99	1750	41.98	83.48%
277V	328	84.48	0.929	23.99	3130	75.09	88.88%
	267	69.06	0.930	23.99	2500	59.98	86.84%
	238	49.95	0.755	24.00	1750	42.00	84.08%

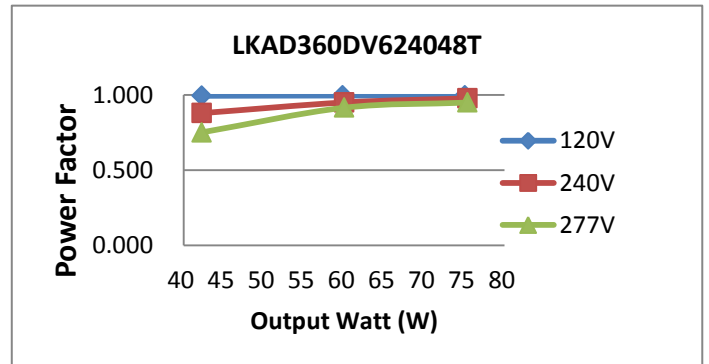
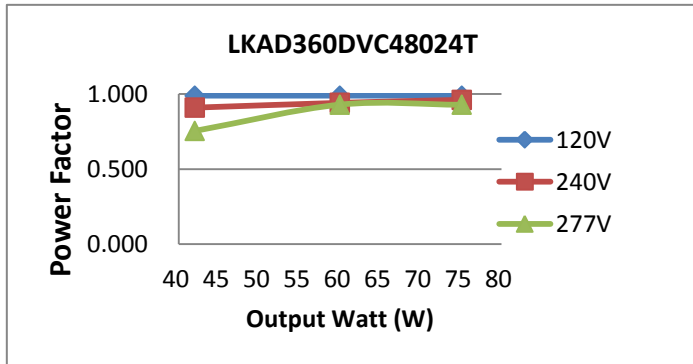
Model: LKAD360DV624048T							
Input voltage (Vac)	Input Current (mA)	Input Power (W)	Power Factor	Output Voltage (Vdc)	Output Current (MA)	Output Power (W)	Efficiency (%)
120V	695	85.75	0.997	48.00	1564	75.07	87.55%
	560	69.16	0.997	48.00	1246	59.81	86.48%
	402	48.65	0.995	48.00	880	42.24	86.82%
240V	350	84.86	0.978	48.00	1570	75.36	88.81%
	293	68.91	0.951	48.00	1250	60.00	87.07%
	225	49.09	0.880	48.00	880	42.24	86.05%
277V	322	84.95	0.950	48.00	1570	75.36	88.71%
	269	68.36	0.916	48.00	1250	60.00	87.77%
	235	49.03	0.752	48.00	880	42.24	86.15%



Efficiency Curve (efficiency vs ouput watt)



Power Factor Curve



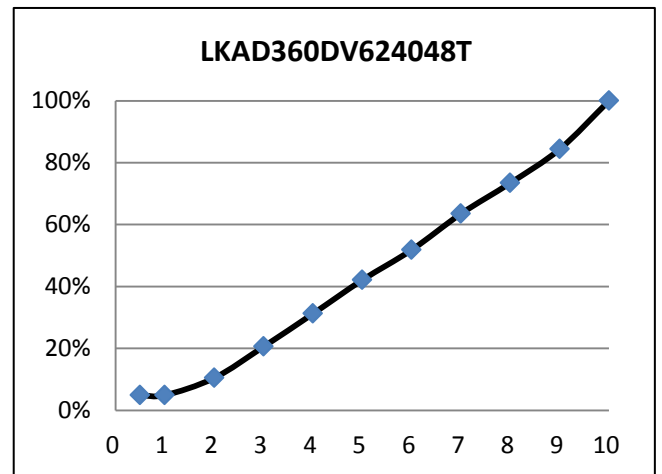
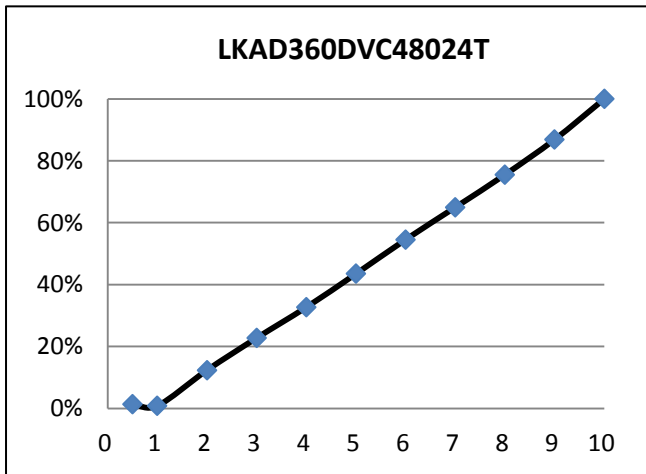


Compatibility Testing for Phase Dimmer

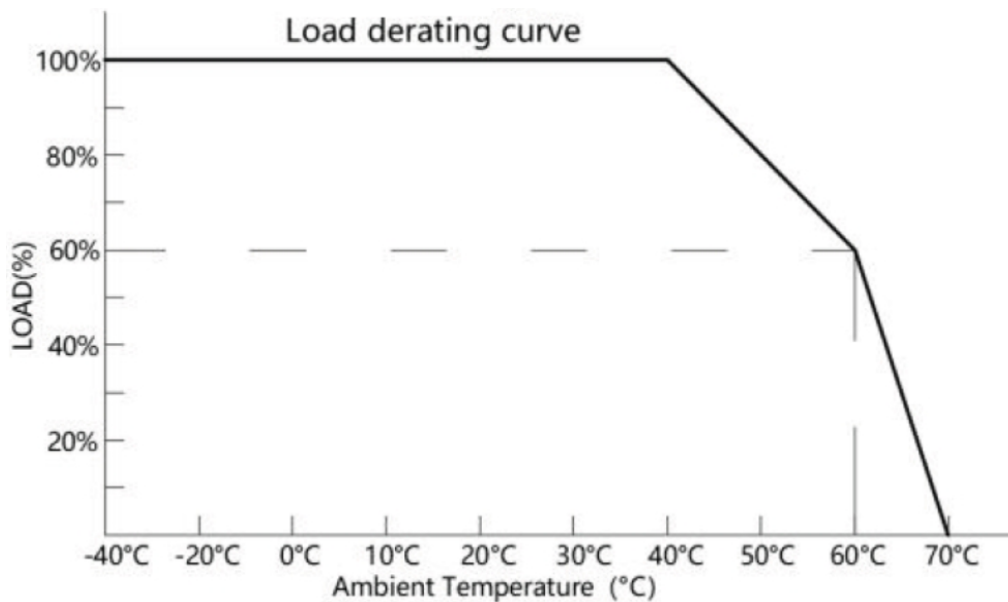
Test by EU Standard 240V dimmers				
Model: LKAD360DVC48024T				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	T&J 25-1000W	30.15	281.20	10.72%
2	Lautrupvang DK-275D	10.60	235.90	4.49%
3	TENGEN V5-TG/G	13.20	237.00	5.57%
4	Nader	15.00	251.60	5.96%
5	CLIPSAL 500VA	16.77	280.70	5.97%
6	Midea 220V 630W	0.15	240.50	0.06%
7	European-No 1	53.53	281.60	19.01%
8	TCL 630W 220V	1.99	280.60	0.71%
9	SHYUSLC UK-PRD400VA	0.17	280.70	0.06%
Model: LKAD360DV624048T				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	T&J 25-1000W	18.00	304.00	5.92%
2	Lautrupvang DK-275D	7.52	241.30	3.12%
3	European-No 2	10.96	259.80	4.22%
4	TENGEN V5-TG/G	12.50	212.80	5.87%
5	Nader	12.30	237.40	5.18%
6	CLIPSAL 500VA	1.87	241.00	0.78%
7	Midea 220V 630W	31.00	304.90	10.17%
8	European-No 1	1.45	304.00	0.48%
9	TCL 630W 220V	1.70	304.60	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	267.30	4.01%
2	LC211	16.77	273.30	6.14%
3	Lutron TTCL100	7.40	288.20	2.57%
4	TLC-0005	10.32	250.30	4.12%
5	PEC-002	10.12	249.90	4.05%
6	TLC-0003	10.00	248.90	4.02%
7	LEVLTON 150W	12.31	268.30	4.59%
8	PanaSonic Wn3020	13.21	276.70	4.77%
9	Lutron scl-153P	17.32	266.70	6.49%
Model: LKAD360DV624048T				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	Lutron SB-1 600W	2.73	279.30	0.98%
2	LC211	2.33	269.10	0.87%
3	Lutron DVCL-2539-WH	2.67	243.00	1.10%
4	TLC-0005	2.20	249.00	0.88%
5	PEC-002	2.32	250.00	0.93%
6	TLC-0003	2.62	251.90	1.04%
7	LEVLTON 150W	6.41	278.00	2.31%
8	LEVLTON DSL06	15.12	248.70	6.08%
9	Lutron scl-153P	2.32	267.10	0.87%

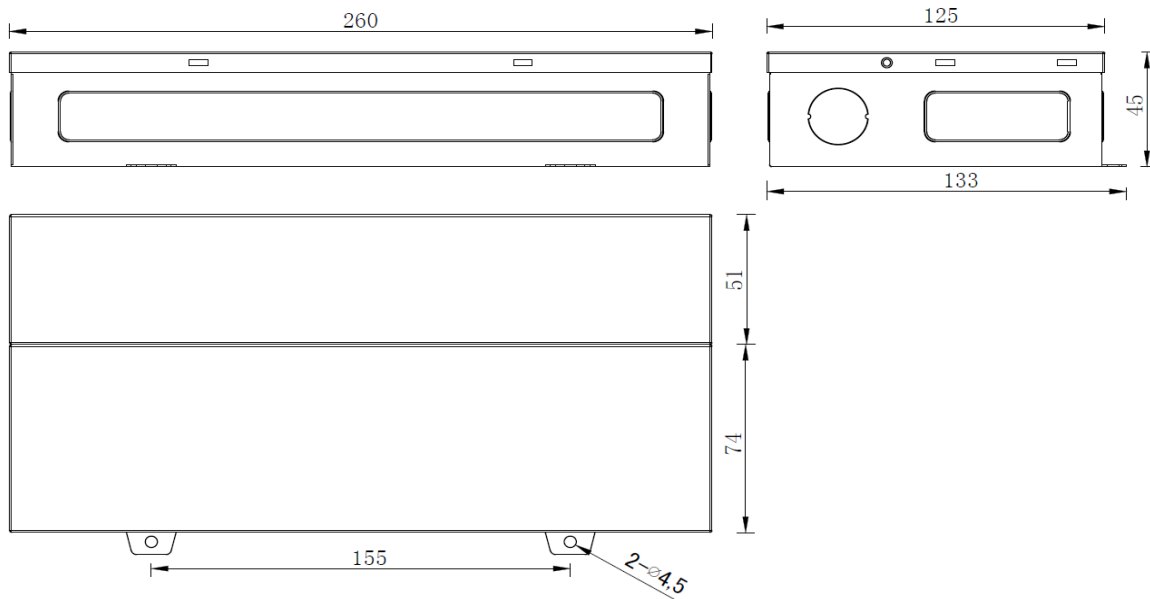
0-10V Dimming Curve



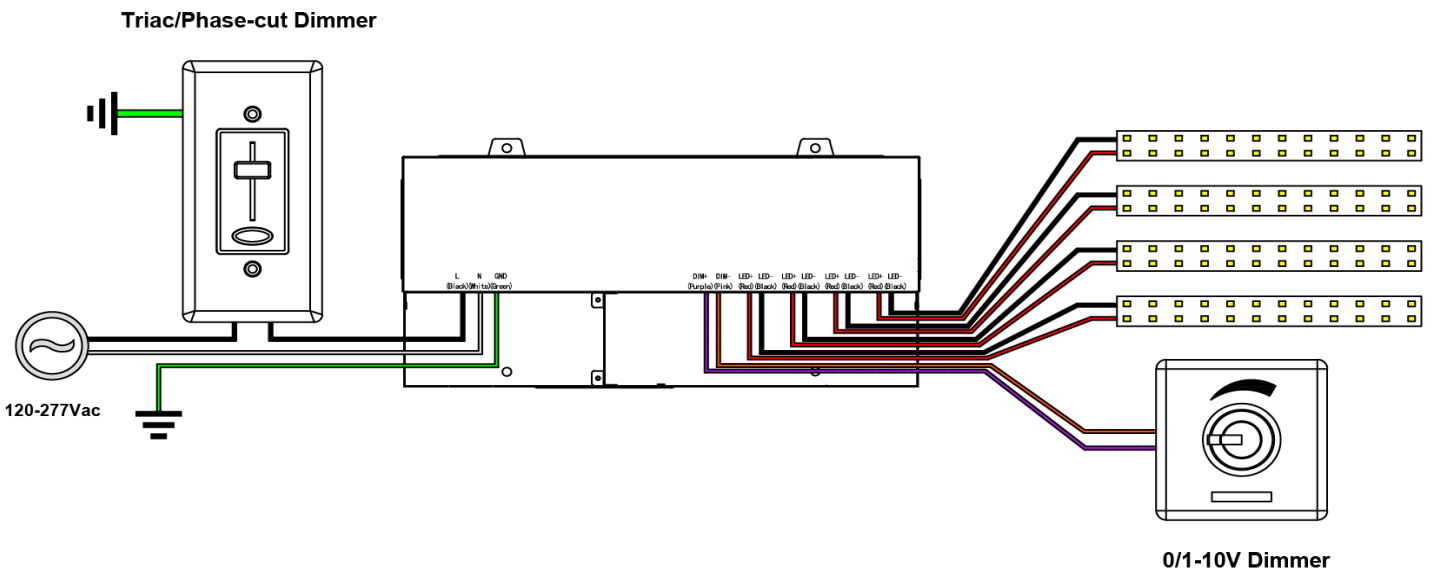
Derating Curve (output load vs TEMP.)



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 (-).
 Noted: 24V/48V 300W with 4 groups of 2*18AWG output wires to separate the output current.
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

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

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