



LKAD340V-T



Class2 SELV TYPE HL



Features

Output:	Constant Voltage
Range:	120-277VAC
PFC design:	Built-in active PFC function
Efficiency:	Up to 85%
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

Model:		LKAD340DVQ00012T	LKAD340DVC50024T	LKAD340DV625048T
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		0.999@120VAC 0.998@277VAC	0.99@120VAC 0.99@277VAC
	THD(Typ.) @ full load	<15%@120VAC & 277VAC		
	Efficiency(Typ.) @ full load		≥85.8%@120VAC ≥91.72%@277VAC	≥90.99%@120VAC ≥93.22%@277VAC
	AC Current (Max.)			
	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	385*70.5*43.5mm(L*W*H)		
	Packing	1 pc in 1 inner box		
Notes	1. All parameters NOT specially mentioned are measured at 120VAC input, rated load and 25℃of ambient temperature. 2. Tolerance: includes set up tolerance and load regulation.			



Electrical Characteristics

Model: LKAD340DVC50024T

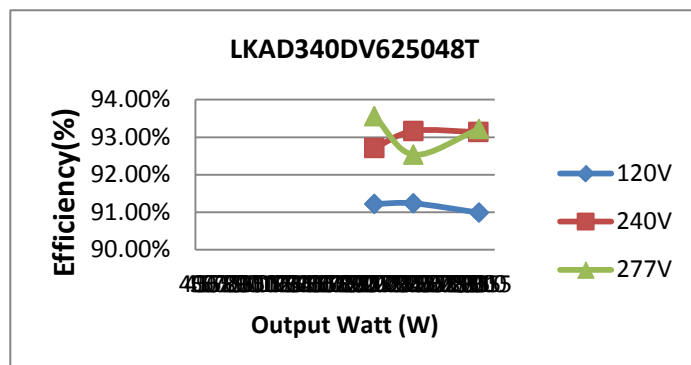
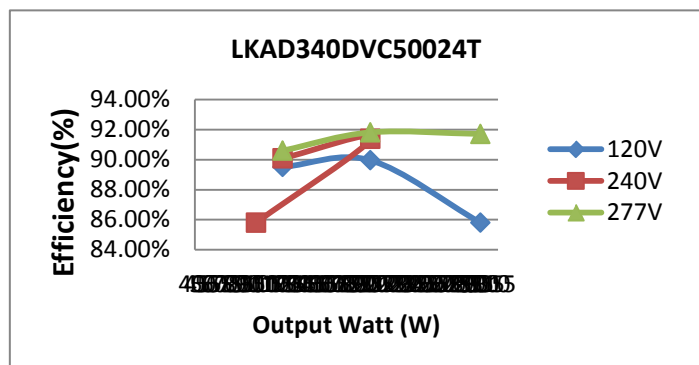
Input voltage (Vac)	Input Current (mA)	Input Power (W)	Power Factor	Output Voltage (Vdc)	Output Current (MA)	Output Power (W)	Efficiency (%)
120V	2900.00	338.00	0.999	23.92	12500	299.00	85.80%
	1867.00	221.50	0.999	23.92	8330	199.25	89.96%
	1120.00	133.60	0.998	23.92	5000	119.60	89.52%
240V	1380.00	327.10	0.998	23.92	12500	95.40	85.80%
	920.00	218.00	0.997	23.92	8330	199.25	91.40%
	184.60	132.74	0.995	23.92	5000	119.60	90.10%
277V	1190.00	326.00	0.998	23.92	12500	299.00	91.72%
	790.00	217.00	0.996	23.92	8330	199.25	91.82%
	480.00	132.00	0.990	23.92	5000	119.60	90.61%

Model: LKAD340DV625048T

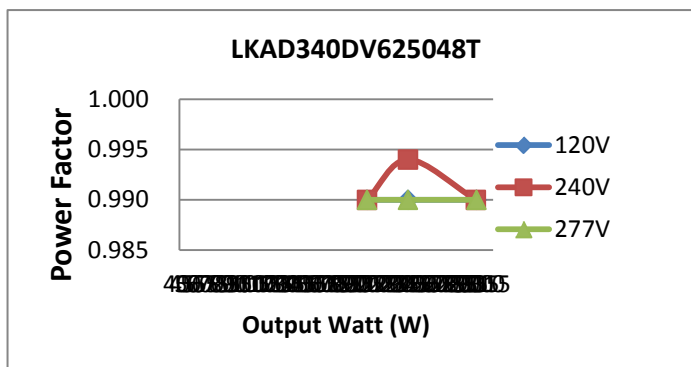
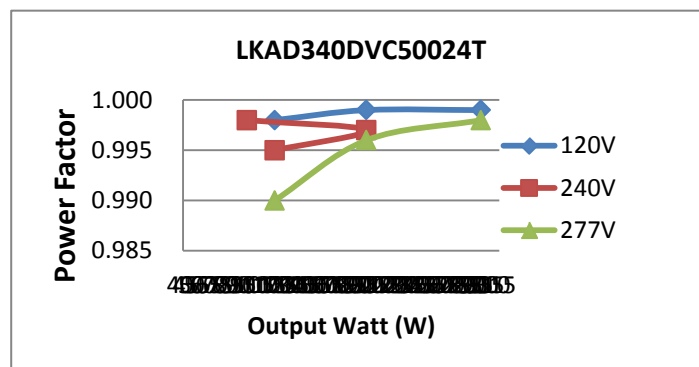
Input voltage (Vac)	Input Current (mA)	Input Power (W)	Power Factor	Output Voltage (Vdc)	Output Current (MA)	Output Power (W)	Efficiency (%)
120V	2750.00	330.40	0.990	48.10	6250	300.63	90.99%
	2193.00	263.60	0.990	48.10	5000	240.50	91.24%
	1865.00	224.10	0.990	48.10	4250	204.43	91.22%
240V	1333.00	322.10	0.990	48.00	6250	300.00	93.14%
	1069.00	258.14	0.994	48.10	5000	240.50	93.17%
	912.40	220.50	0.990	48.10	4250	204.43	92.71%
277V	115.20	322.50	0.990	48.10	6250	300.63	93.22%
	924.70	259.90	0.990	48.10	5000	240.50	92.54%
	789.20	218.50	0.990	48.10	4250	204.43	93.56%



Efficiency Curve (efficiency vs output watt)



Power Factor Curve





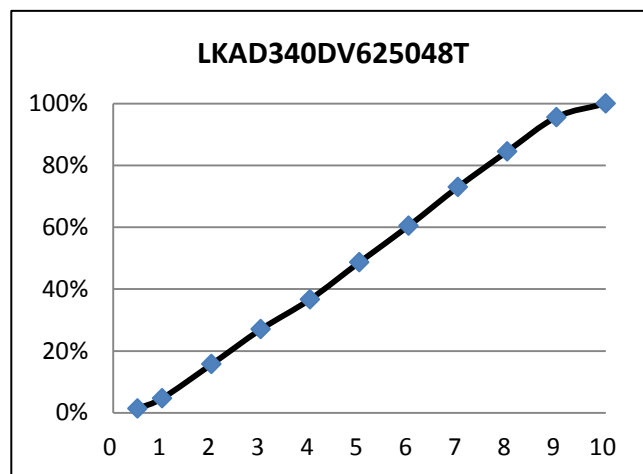
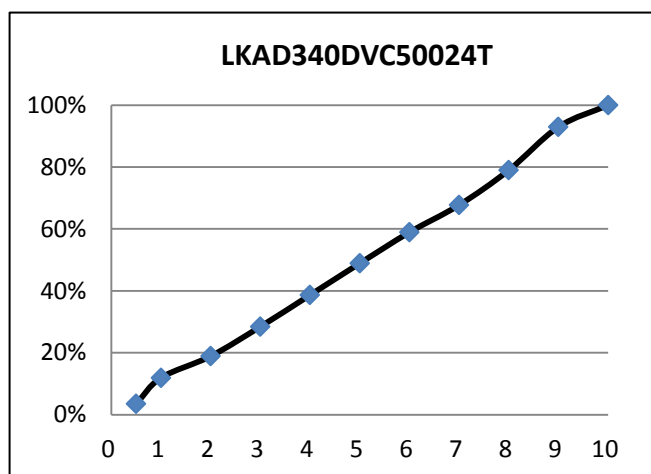
Compatibility Testing for Phase Dimmer

Test by EU Standard 240V dimmers				
Model: LKAD340DVC50024T				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	T&J 25-1000W	39.00	276.00	14.13%
2	Lautrupvang DK-275D	41.00	243.00	16.87%
3	European-No 2	17.30	260.00	6.65%
4	TENGEN V5-TG/G	54.70	292.00	18.73%
5	Nader	37.00	285.00	12.98%
6	CLIPSAL 500VA	10.50	240.00	4.38%
7	Midea 220V 630W	55.00	295.00	18.64%
8	European-No 1	9.30	240.00	3.88%
9	TCL 630W 220V	15.00	309.00	4.85%
Model: LKAD340DV625048T				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	T&J 25-1000W	39.00	282.90	13.79%
2	Lautrupvang DK-275D	61.65	259.60	23.75%
3	European-No 2	27.30	260.50	10.48%
4	TENGEN V5-TG/G	16.30	278.70	5.85%
5	Nader	23.70	280.30	8.46%
6	CLIPSAL 500VA	15.00	257.60	5.82%
7	Midea 220V 630W	67.30	287.90	23.38%
8	European-No 1	1.55	287.00	0.54%
9	TCL 630W 220V	0.15	288.00	0.05%

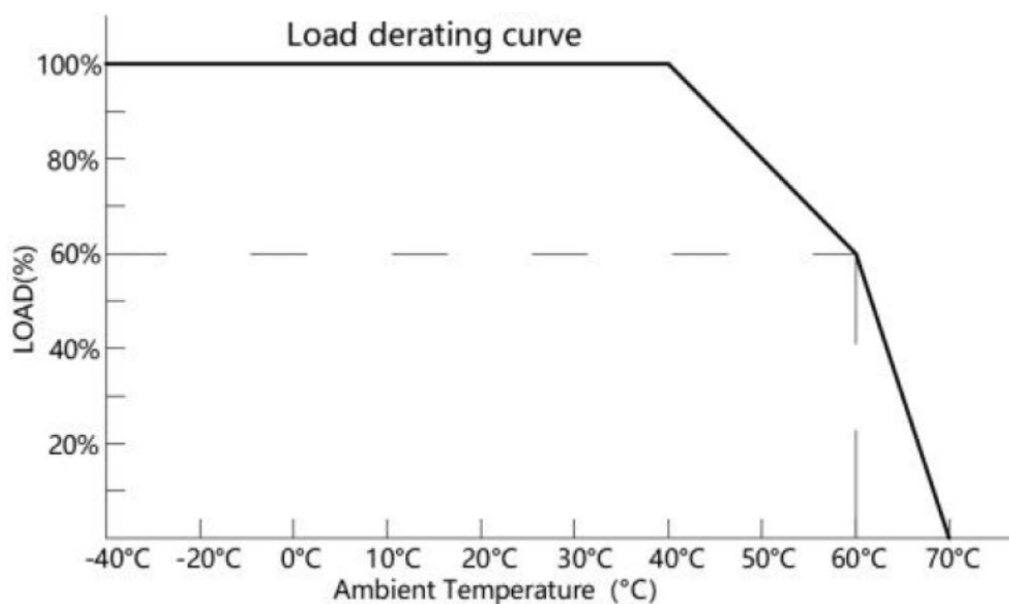
Test by US Standard 120V dimmers				
Model: LKAD340DVC50024T				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	Lutron SB-1 600W	1.58	245	0.64%
2	LC211	2.09	230	0.91%
3	Lutron TTCL100	11.50	218	5.28%
4	TLC-0005	11.50	249	4.62%
5	PEC-002	11.00	243	4.53%
6	TLC-0003	10.90	243.5	4.48%
7	LEVLTON 150W	13.40	230	5.83%
8	PanaSonic Wn3020	10.20	241	4.23%
Model: LKAD340DV625048T				
NO	Dimmer Model	Min Watt (W)	Max Watt (W)	Dimming ratio (%)
1	Lutron SB-1 600W	37.15	289.5	12.83%
2	LC211	2.40	253.4	0.95%
3	Lutron DVCL-253P-WH	3.60	277	1.30%
4	TLC-0005	24.00	267.8	8.96%
5	PEC-002	31.06	271.3	11.45%
6	TLC-0003	28.70	272	10.55%
7	LEVLTON 150W	2.40	254.6	0.94%
8	LEVLTON DSL06	2.40	277	0.87%
9	Lutron SELV-300P	2.50	267	0.94%



0-10V Dimming Curve

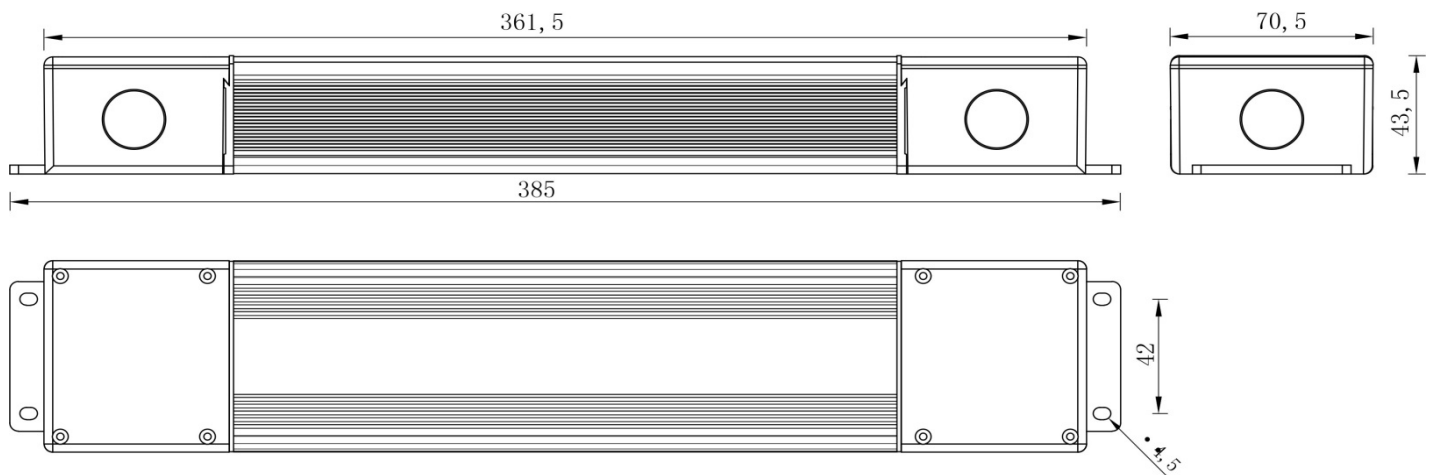


Derating Curve (output load vs TEMP.)

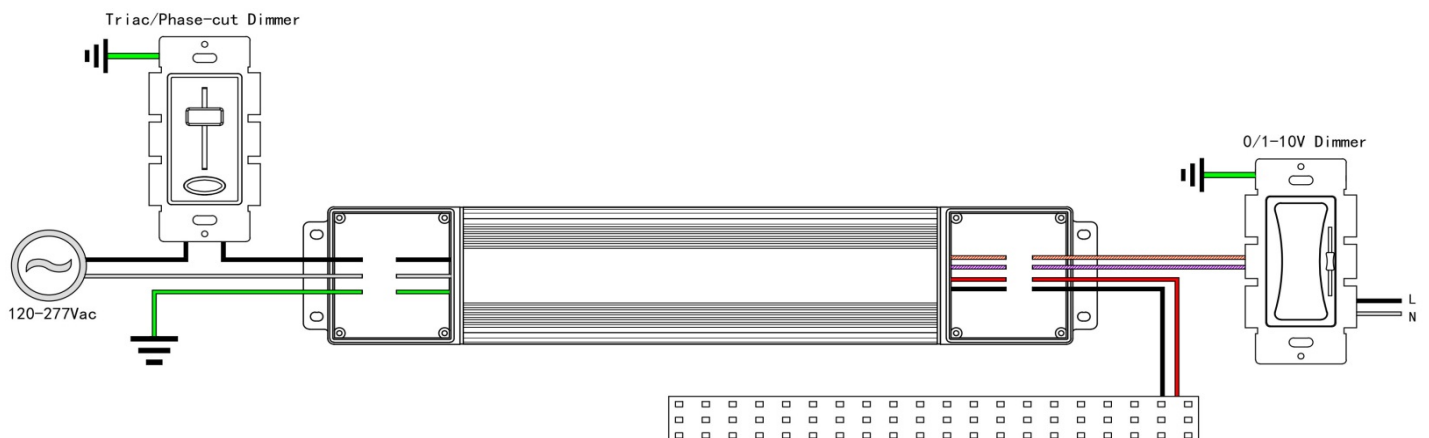




Installation Dimension



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

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