



### Constant Voltage Driver

Model:LV(30-250)W24CG DALI



Model	Rated Input Voltage	Input Power	Input Current	PF	Output Power Range	Output Voltage	Output Current	Efficiency (typ.)
LV30W24CG DALI	220-240VAC	≤38W	≤0.19A	≥0.95	12-30W	24V	0.5-1.25A	85%
LV60W24CG DALI		≤72W	≤0.35A		24-60W		1-2.5A	88%
LV100W24CG DALI		≤115W	≤0.6A		30-100W		1.25-4.17A	93%
LV150W24CG DALI		≤168W	≤0.9A		45-150W		1.875-6.25A	93%
LV250W24CG DALI		≤275W	≤1.5A		75-250W		3.12-10.42A	93%

\* Test result @230V, 50Hz, Full Load.

### 1. Parameters

category	Item	Technical Norm			
Features	Output Type	Constant Voltage			
	Dimming Type	DALI-2			
	Output Features	Isolation SELV			
	IP Grade	IP20			
	Insulation Class	Class II			
Input	Rated Input Voltage	220-240VAC			
	Range of AC Input Voltage	176-264VAC			
	Range of DC Input Voltage	175-280VDC (EMI not evaluated)			
	Frequency	Rate:50/60Hz, Range:47~63Hz			
	Power Factor	≥0.95, 220-240VAC, Rated Load, see graphs			
	THD	30W	≤10% 230VAC, Rated Load, see graphs		
		60W/100W/150W /250W	≤7% 230VAC, Rated Load, see graphs		
	Standby Power Consumption	≤0.5W, @230VAC, Dim to OFF			
	Inrush Current	Model	IP (typ.)		
		30W	<100A	82A	Duration time
60W		<30A	26A	220us	
100W		<50A	45A	250us	
150W		<60A	56A	185us	
250W	<80A	76A	310us		
Connected quantity of 16A Breaker	30W	36pcs, 16A type B / 60pcs 16A type C			
	60W	18pcs, 16A type B / 30pcs 16A type C			

		100W	10pcs,16A type B / 17pcs 16A type C			
		150W	8pcs,16A type B / 13pcs 16A type C			
		250W	6pcs,16A type B / 8pcs 16A type C			
Output	Output Voltage	24VDC±3%				
	Output Voltage Ripple	30W	<480mV <sub>PK-PK</sub> (1%)			
		60W/100W/150W/250W	<240mV <sub>PK-PK</sub> (0.5%)			
	Line Regulation	±1%				
	Load Regulation	±2%				
	Overshoot	<105%Vo (<110%Vo, only for 30W)				
	Start-up Time	≤0.5S (220-240VAC)				
	Hold-up time & Turn off time	Model	Hold-up time(mS)	Turn-off time(mS)	230VAC, LED Rated Load, Hold-up time measure from AC input turn-off to output voltage drop to 90%, turn-off time measure from AC input turn-off to output voltage drop to 90%	
		30W	6.8	800		
		60W	22.8	62.8		
		100W	9.2	69.6		
		150W	10	384		
	Efficiency	30W	≥84%	85% typ.	230VAC, Rated Load, at output terminals, see graphs	
60W		≥86%	88% typ.			
100W		≥91%	93% typ.			
150W		≥91%	93% typ.			
250W		≥91%	93% typ.			
Protection	Short Circuit Protection	Auto Recovery				
	Over Current Protection	120%-180%Io, Auto Recovery				
	Over Voltage Protection	110%-150%Vo, Auto Recovery				
	Over Temperature Protection	90<Tc<110°C, Auto Recovery(only for 100W/150W/250W)				
	Insulation voltage	I/P to O/P,3KVac/5mA/1min				
	Insulation resistance	>100M ohm @ 500VDC				
	Leakage current	I/P to O/P < 250µA				
Control Method	Secondary PUSH dimming	Secondary PUSH dimming (Max. lead wire length: 20m,same port of DALI )				
	DALI function	DALI dimming (Max. lead wire length: 300m ) logarithm or linear dimming curve selectable				
	Dimming range	DALI dimming: 1%-100% (1KHz)				
Environment	Ta/Operation Temperature	-25....+45°C				
	Ts/Storage Temperature	-40....+85°C				
	Tc/Enclosure Temperature For Safety	30W/60W	80°C			
		100W/150W/250W	90°C			
	Humidity	5%....85%RH				
Atmosphere	86-108KPa					
Construction	Connection Method	Terminal (250V 10A)				
	Cable Terminals	Input	1 terminal block (300V/10A)			
		Output	30W/60W	1 terminal block (300V 10A)		

## Constant Voltage LED Driver

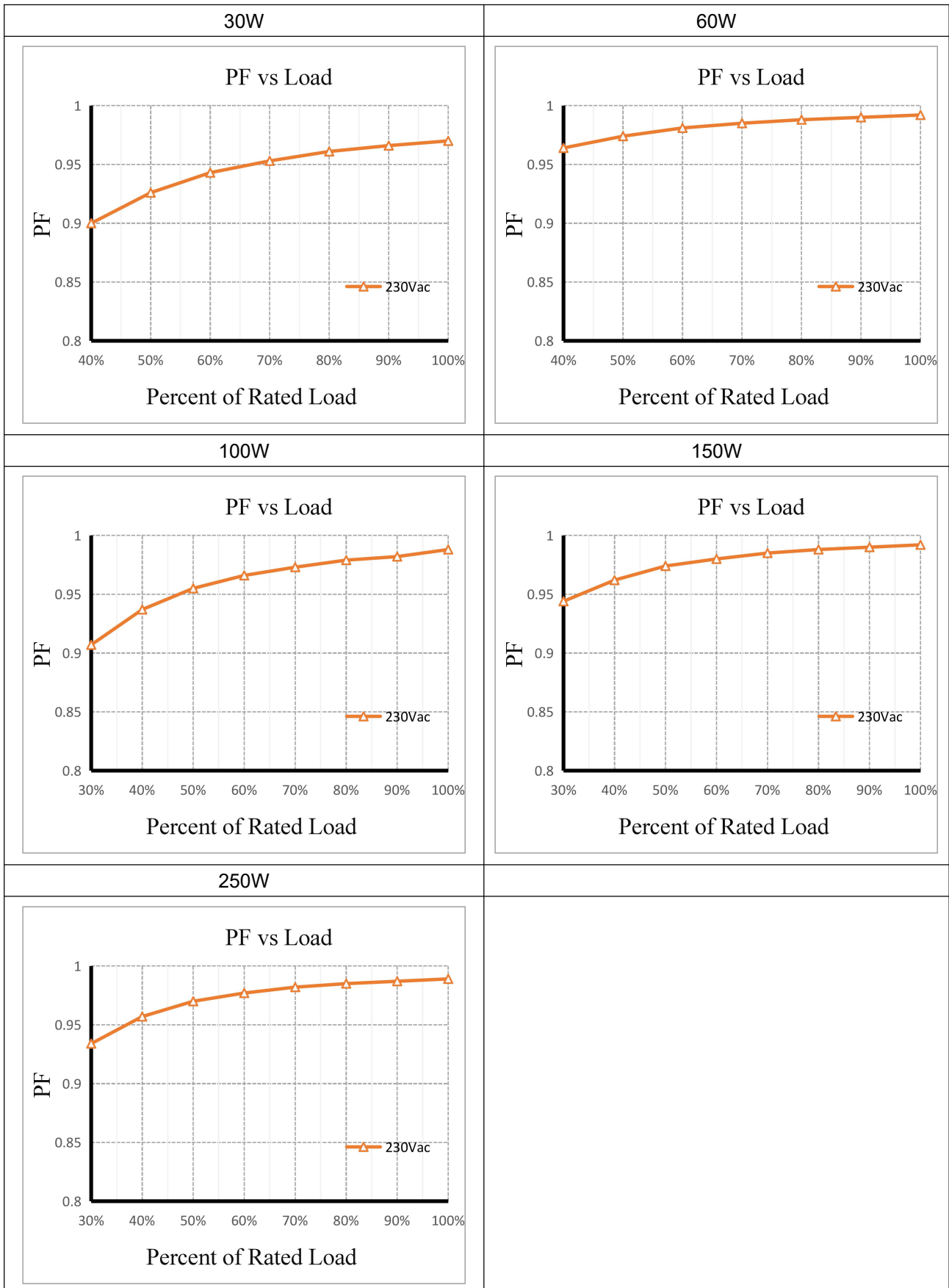
		100W/150W/250W	2 terminals block (300V 10A)		
		Dimming	1terminals block(min.150V/10A)		
	Installation	Independent			
	Input Wire Cross Section	0.75mm <sup>2</sup> -1.5 mm <sup>2</sup>			
	Output Wire Cross Section	30W	1*0.5mm <sup>2</sup> -1.5 mm <sup>2</sup>		
		60W	1*0.75mm <sup>2</sup> -1.5 mm <sup>2</sup>		
		100W/150W	2*0.75mm <sup>2</sup> -1.0 mm <sup>2</sup>		
		250W	2*0.75mm <sup>2</sup> -1.5 mm <sup>2</sup>		
	Dimming Wire Cross Section	30W/60W/250W	3.5-7mm <sup>2</sup> ,9.5-10.5mm <sup>2</sup>		
		100W/150W	2.2-4mm <sup>2</sup>		
Output Cable Length	Max. 3M				
Cable diameters range	Input	2.2-4mm or 9.5-10.5mm			
	Output & Dimming	2.2-4mm			
Dimension	30W	300*30*16mm (L*W*H)			
	60W/100W/150W	350*30*18mm (L*W*H)			
	250W	400*40*22mm (L*W*H)			
Standards	Certification	CE			
	Safety Standards	EN61347-1:2015,EN61347-2-13:2014/A1:2017,EN62493:2015, AS61347.2.13:2018,AS/NZS 61347.1:2016 Inc A1			
	EMC Standards	EN55015:2013/A1:2015,EN61000-3-2:2014,EN61000-3-3:2013, EN61547:2009			
	Performance	EN62384;IEC 62386-101 Edition2.0 2014-11; BS EN 62386-102:2014 ; BS EN 62386-207:2009			
	Surge	L-N:2KV			
Others	RoHS	2011/65/EU			
	MTBF	≥250KHours,Ta=25°C(MIL-HDBK-217F)			
	Audible Noise	<25dB @ 10cm distance, 20dB background			
	Life Time(@Ta max)	30W	≥80K Hrs	@230VAC , full load, End of Life: Failure Rate<10%	
		60W	≥65K Hrs		
		100W	≥60K Hrs		
150W		≥55K Hrs			
250W		≥52K Hrs			
Warranty	5years				

**Remark:**

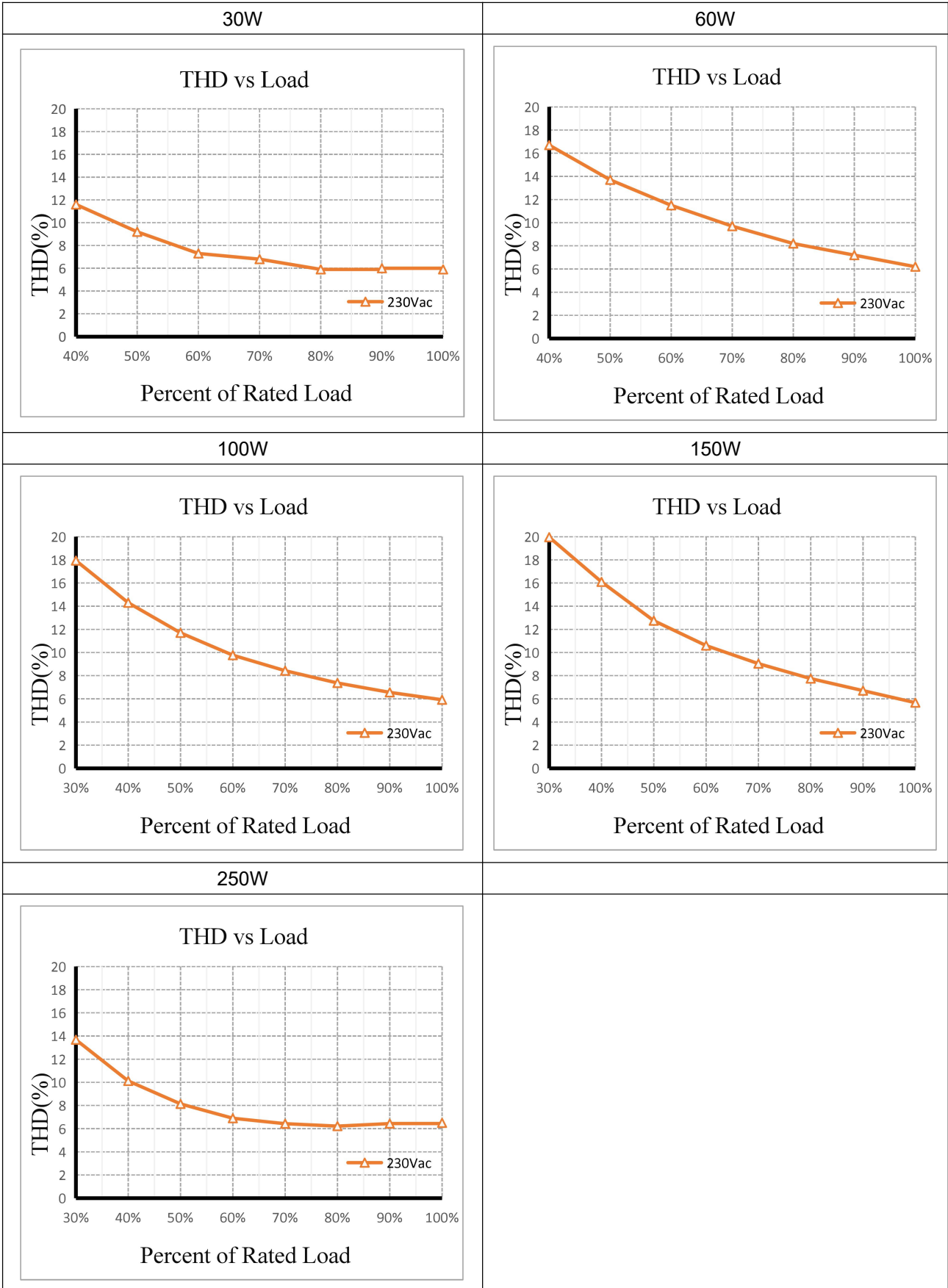
- All Parameters, if not specified, are measured at 230VAC/50Hz and 25°C ambient temperature.
- LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.
- Output ripple should be measured at the output end which has with 0.1uF/50V ceramic capacitance and 47uF/50V Aluminum capacitance connected in parallel. Measured using oscilloscope with bandwidth limited to 20MHz.

### 2. Graph

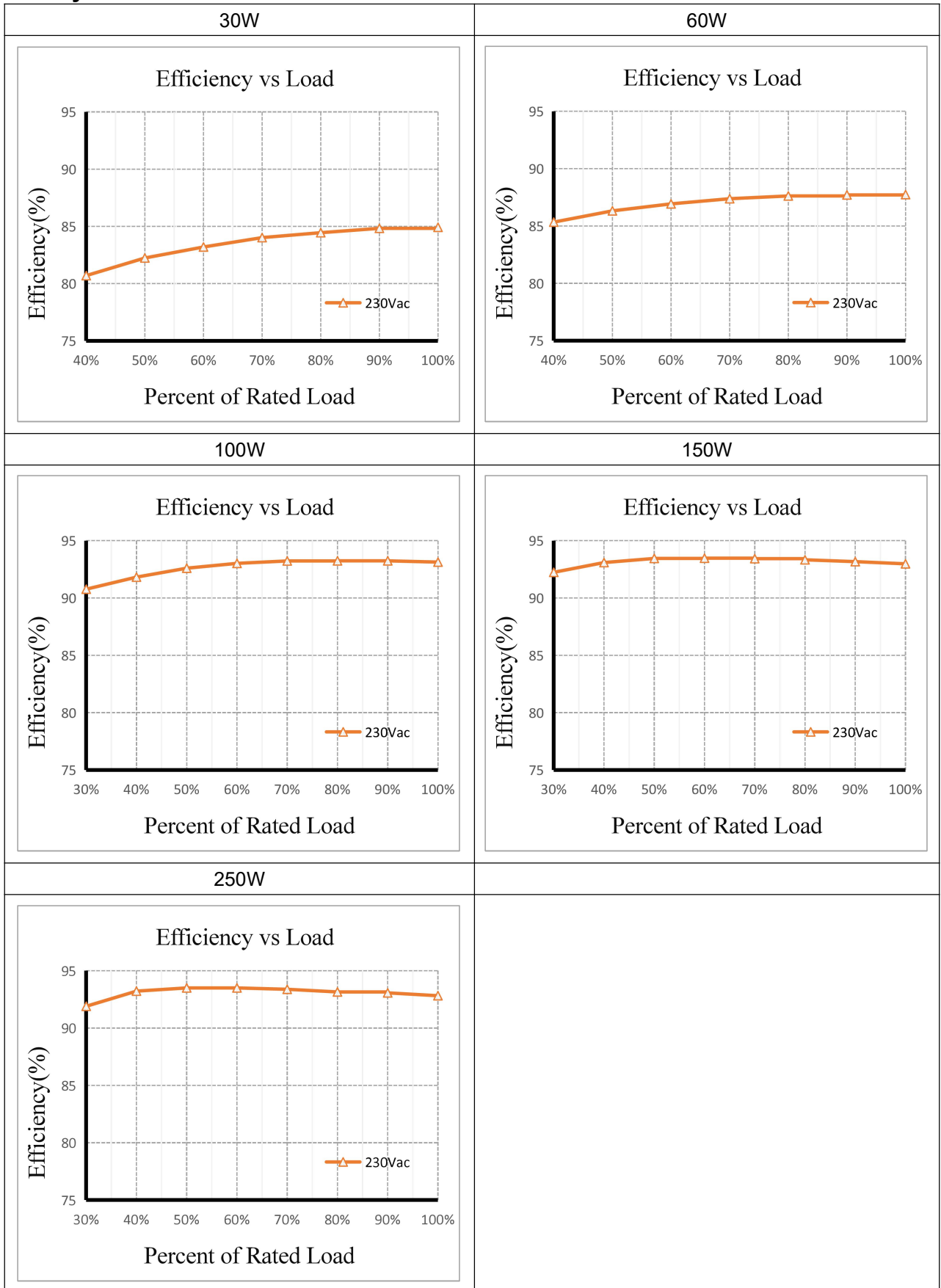
#### PF VS LOAD Curve



### THD VS LOAD Curve



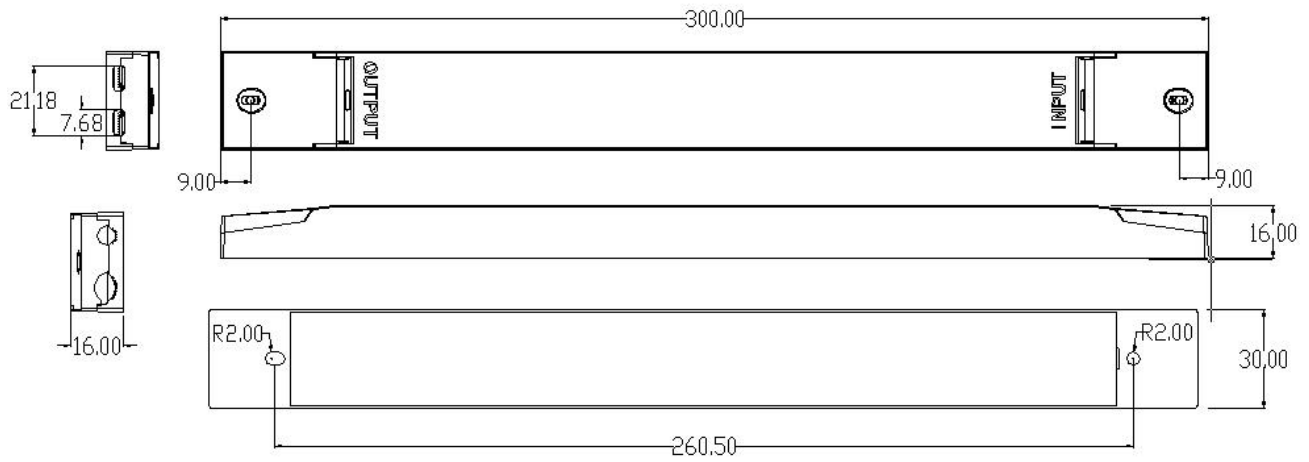
### Efficiency VS LOAD Curve



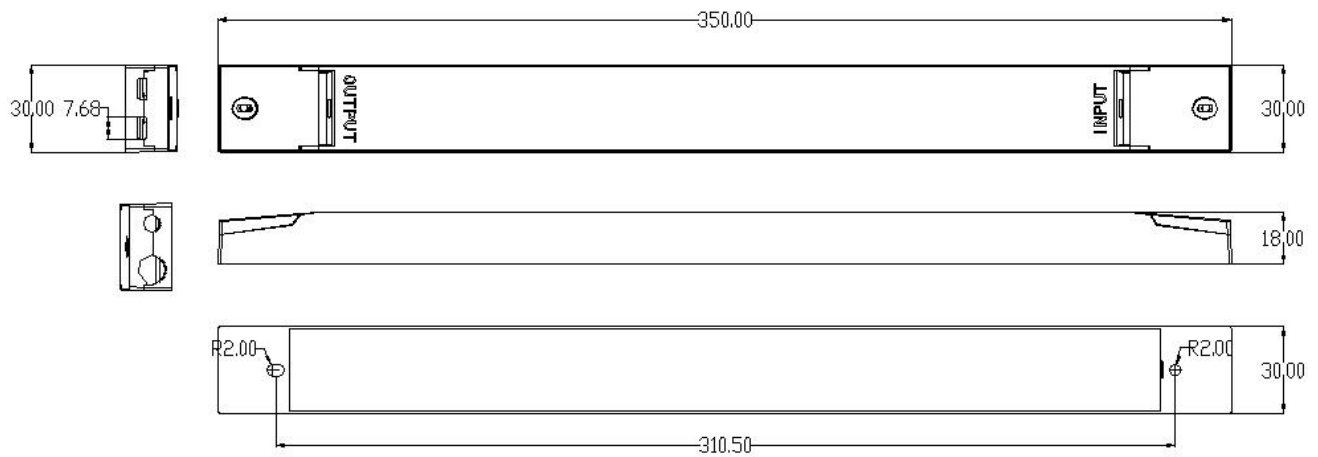


### 5.Dimension (Unit: mm)

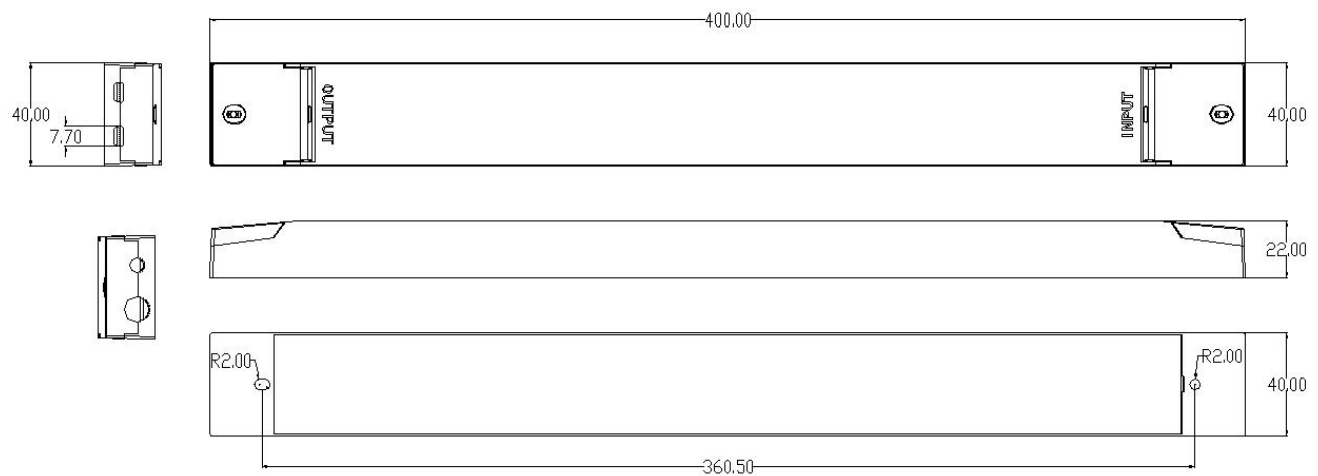
#### LV30W24CG DALI



#### LV60W24CG DALI&LV100W24CG DALI & LV150W24CG DALI:



#### LV250W24CG DALI:





**6.Packing information**

Packing way	Model	Carton L*W*H(mm)	Pcs/C arton	Net weight/ Pcs(kg)	Net weight/ Carton(kg)	Gross weight / Carton(kg)
With white box and manual	LV30W24CG DALI	450*240*200	45	0.143	6.44	6.96
	LV60W24CG DALI		45	0.23	10.35	10.87
	LV100W24CG DALI		35	0.21	7.35	7.87
	LV150W24CG DALI		35	0.31	10.78	11.3
	LV250W24CG DALI		30	0.53	15.9	16.42
Without white box and manual	LV30W24CG DALI		75	0.125	9.38	10.08
	LV60W24CG DALI		75	0.21	15.75	16.45
	LV100W24CG DALI		70	0.19	12.88	13.48
	LV150W24CG DALI		70	0.28	19.6	20.2
	LV250W24CG DALI		40	0.5	20	20.6