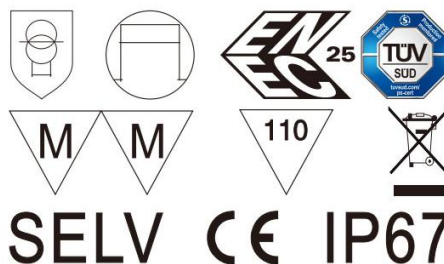




Constant Voltage Driver

Model: XSV Series



Model	Rated Input Voltage	Input Power	Input Current	PF	Output Power Range	Output Voltage	Output Current	Efficiency (typ.)
XSV30W24	220-240VAC	≤36W	≤0.2A	≥0.95	0-30W	24V	1.25A	86%
XSV60W24		≤72W	≤0.4A		0-60W		2.5A	88%
XSV100W24		≤115W	≤0.6A		0-100W		4.17A	90%
XSV160W24		≤180W	≤0.9A		0-160W		6.67A	92%
XSV240W24		≤265W	≤1.5A		0-240W		10A	92%
XSV400W24		≤435W	≤2.3A		0-400W		16.67A	93%

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

1.Parameters

category	Item	Technical Norm					
Features	Output Type	Constant Voltage					
	Dimming Type	NA					
	Output Features	Isolation SELV					
	IP Grade	IP67					
	Installation	Independent					
	Insulation Class	Class I					
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	≤10%, 230VAC, Rated Load, see graphs					
	No Load Power Consumption	≤0.5W, @230VAC					
	Inrush Current	Model	IP	IP (typ.)	Duration time	240Vac/50Hz, 90-degree phase, full load, cold start-up, duration time measure from 50%Ipk to	
		30W	<30A	25A	200us		
		60W	<30A	26A	220us		
		100W	<50A	45A	250us		

		160W	<60A	56A	250us	50%Ipk
		240W	<80A	76A	320us	
		400W	<100A	88A	430us	
	Connected quantity of 16A Breaker	30W	16pcs,16A type B / 26pcs 16A type C			
		60W	16pcs,16A type B / 26pcs 16A type C			
		100W	10pcs,16A type B / 16pcs 16A type C			
		160W	8pcs,16A type B / 13pcs 16A type C			
		240W	6pcs,16A type B / 8pcs 16A type C			
		400W	4pcs,16A type B / 5pcs 16A type C			
	Output	Output Voltage	24VDC±3%			
Rated Load Range		30W	12-30W			
		60W	24-60W			
		100W	30-100W			
		160W	48-160W			
		240W	72-240W			
		400W	120-400W			
Output Voltage Ripple		<240mV _{PK-PK} (0.5%)				
Line Regulation		±1%				
Load Regulation		±2%				
Overshoot		<105%Vo (<110%Vo, only for 30W)				
Start-up Time		<0.5S (220-240VAC)				
Efficiency		30W	≥84%	86% typ.	230VAC, Rated Load, at output terminals, see graphs	
		60W	≥86%	88% typ.		
		100W	≥90%	92% typ.		
		160W	≥90%	92% typ.		
		240W	≥90%	92% typ.		
	400W	≥91%	93% typ.			
Protection	Short Circuit Protection	Auto Recovery				
	Over Current Protection	120%-200%Io, Auto Recovery				
	Over Voltage Protection	120%-150%Vo, Auto Recovery				
	Over Temperature Protection	90<Tc<110℃, Auto Recovery				
	Insulation voltage	I/P to O/P,3KVac/5mA/1min				
	Insulation resistance	>100M ohm @ 500VDC				
	Leakage current	I/P to O/P < 250μA				
Environment	Ta/Operation Temperature	-25....+50℃				
	Ts/Storage Temperature	-40....+85℃				
	Tc/Enclosure Temperature For Safety	30W/60W/100W			75℃	
		160W			85℃	
		240W/400W			90℃	
	Humidity	5%....85%RH				
Atmosphere	86-108KPa					
Standards	Certification	CE				

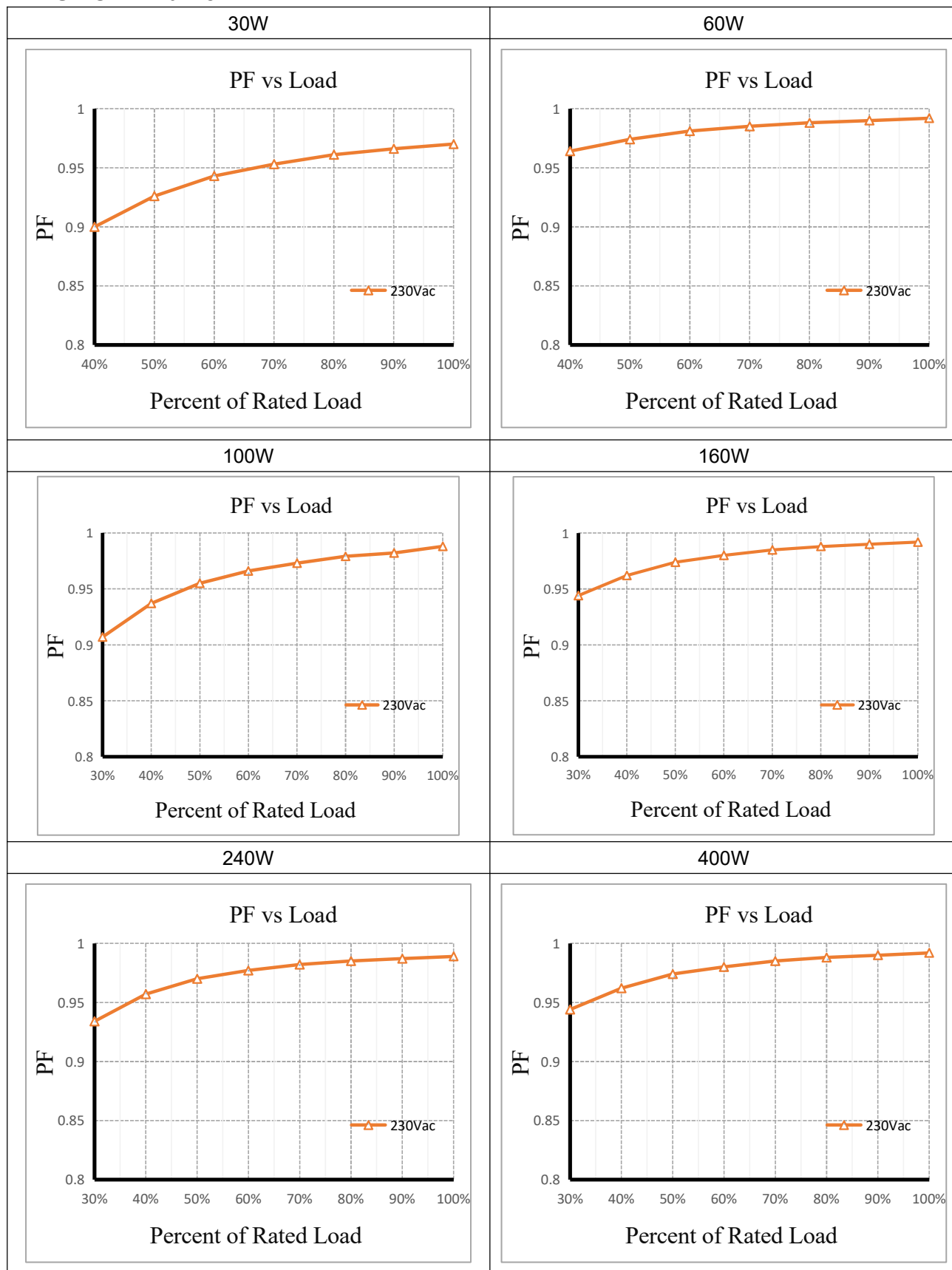
	Safety Standards	EN61347-1:2015, EN61347-2-13:2014/A1:2017, EN62493:2015, AS61347.2.13:2018, AS/NZS 61347.1:2016 Inc A1	
	EMC Standards	EN55015:2013/A1:2015, EN61000-3-2:2014, EN61000-3-3:2013, EN61547:2009	
	Performance	EN62384	
	Surge	L-N:4KV, L/N-PE:6KV	
Others	RoHS	2011/65/EU	
	MTBF	≥250KHours, Ta=25℃ (MIL-HDBK-217F)	
	Audible Noise	<25dB @ 10cm distance, 20dB background	
	Life Time	30W/60W/100W/160W	≥100K Hrs 65 °C case temperature, refer to life vs. Tc curve
		240W/400W	≥100K Hrs 75 °C case temperature, refer to life vs. Tc curve
	Warranty	5years	
	Dimensions (L*W*H)	30W	235*30*21MM (body), 250*30*21MM (endcaps included)
		60W	275*30*21MM (body), 290*30*21MM (endcaps included)
		100W	305*30*21MM (body), 320*30*21MM (endcaps included)
		160W	335*30*21MM (body), 350*30*21MM (endcaps included)
		240W	385*30*21MM (body), 400*30*21MM (endcaps included)
		400W	385*60*22MM (body), 400*60*22MM (endcaps included)
	Wiring	Input	H05RN-F/3X1.0mm ² , Brown/Blue/(Yellow/Green)
		Output	H05RN-F/2X1.0mm ² , Red/Black
	Output Cable Length	Max. 3M	

Remark:

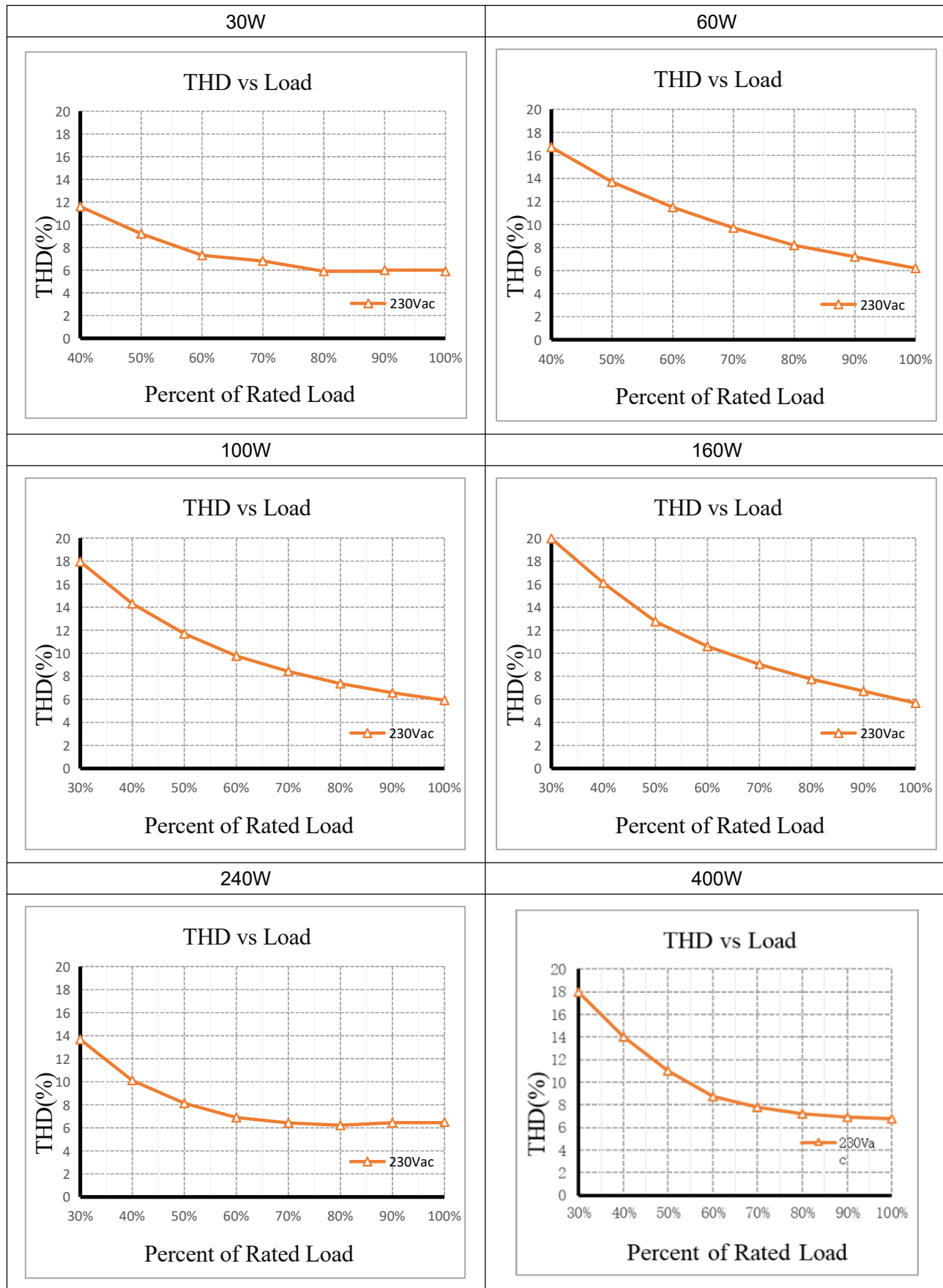
1. All Parameters, if not specified, are measured at 230VAC/50Hz and 25℃ ambient temperature.
2. LED Driver is a component of the luminaires, Luminaires and wire layout will affect the EMC, please check the EMC with end products again.
3. Output ripple should be measured at the output end which has with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

2.Graph

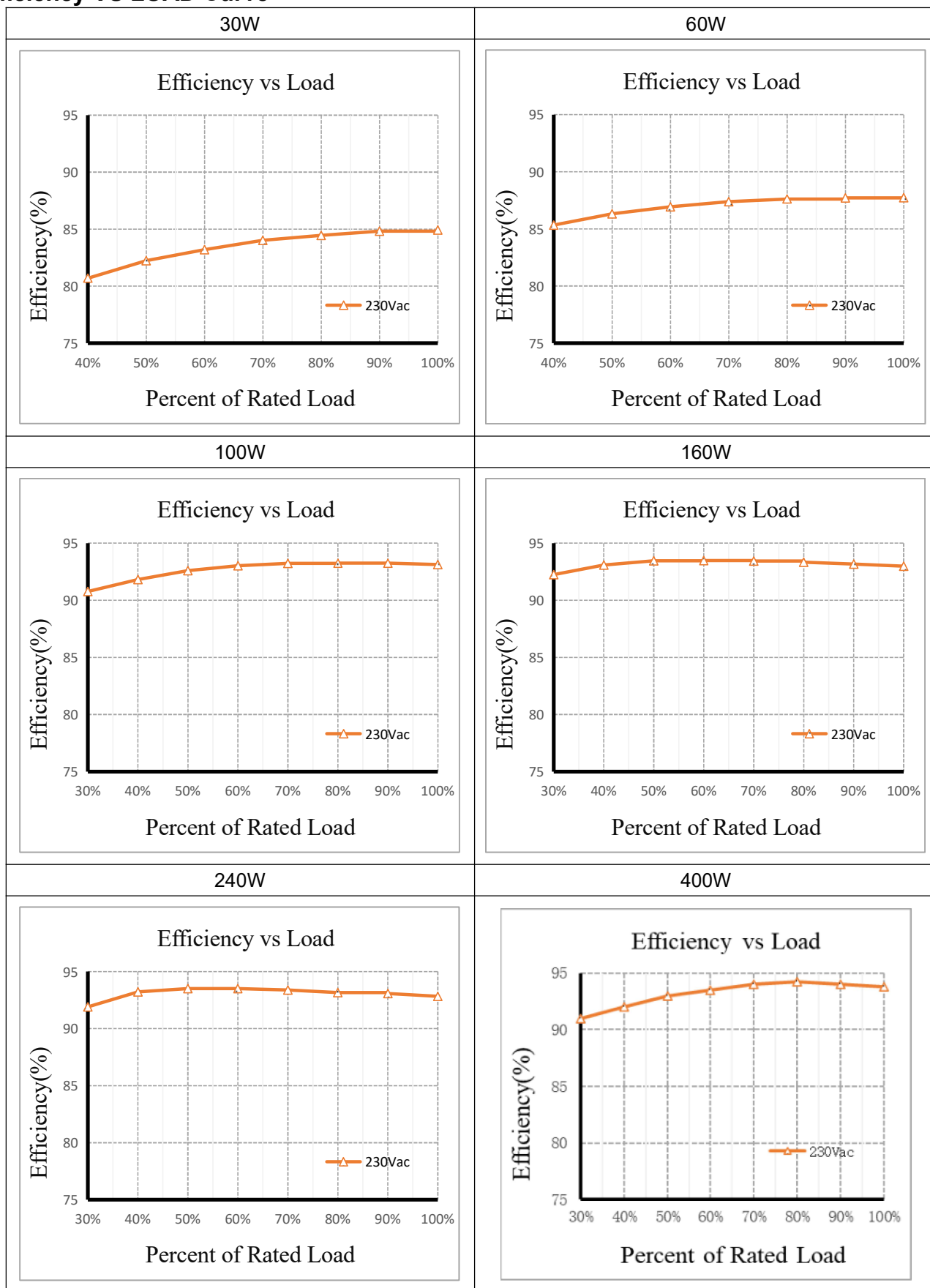
PF VS LOAD Curve



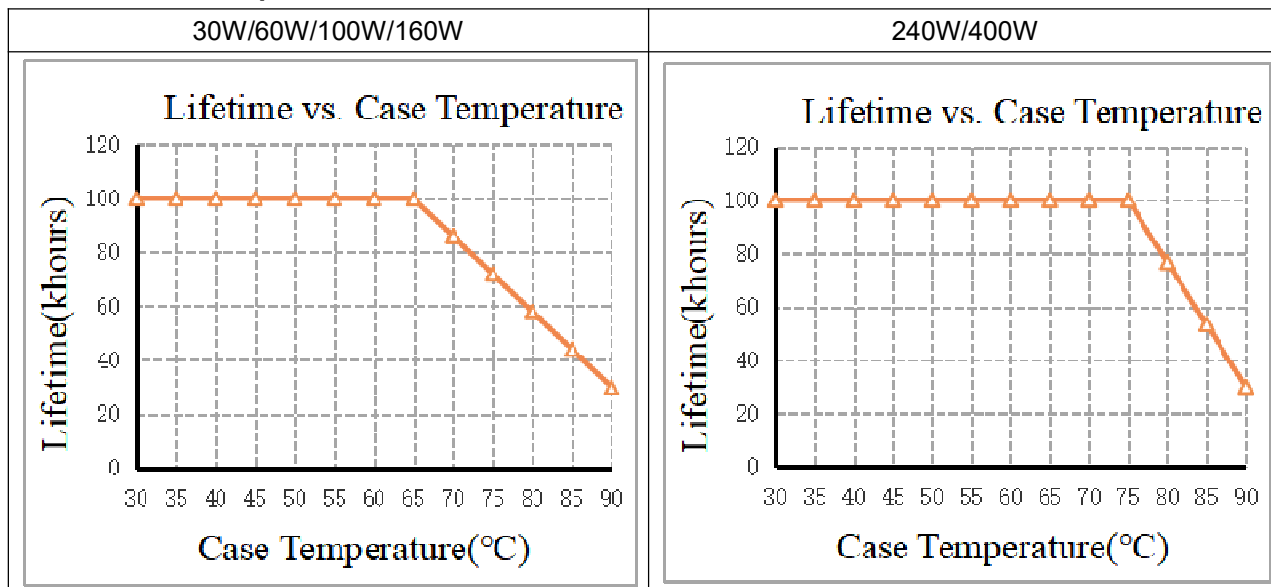
THD VS LOAD Curve



Efficiency VS LOAD Curve



Lifetime vs. Case Temperature



(End of Life: Maximum Failure Rate=10%)

3.Label

INPUT ○ L (Brown) ○ N (Blue) ○ (Yellow-green)	KGP KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid	XSV30W24	LED Driver	Input: 220-240V~, 50/60Hz, 0.2A, λ:0.95	(Black) ○ OUTPUT (Red) + ○ OUTPUT
		Constant Voltage Type	Output: 24V- 0-1.25A Max.30W	•Ic Ta: -25 ~ +50°C Tc:75°C	
		For LED modules only	SELV CE ENEC IP67		
		TUV 100			

INPUT ○ L (Brown) ○ N (Blue) ○ (Yellow-green)	KGP KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid	XSV60W24	LED Driver	Input: 220-240V~, 50/60Hz, 0.4A, λ:0.95	(Black) ○ OUTPUT (Red) + ○ OUTPUT
		Constant Voltage Type	Output: 24V- 0-2.5A Max.60W	•Ic Ta: -25 ~ +50°C Tc:75°C	
		For LED modules only	SELV CE ENEC IP67		
		TUV 100			

INPUT ○ L (Brown) ○ N (Blue) ○ (Yellow-green)	KGP KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid	XSV100W24	LED Driver	Input: 220-240V~, 50/60Hz, 0.8A, λ:0.95	(Black) ○ OUTPUT (Red) + ○ OUTPUT
		Constant Voltage Type	Output: 24V- 0-4.17A Max.100W	•Ic Ta: -25 ~ +50°C Tc:75°C	
		For LED modules only	SELV CE ENEC IP67		
		TUV 100			

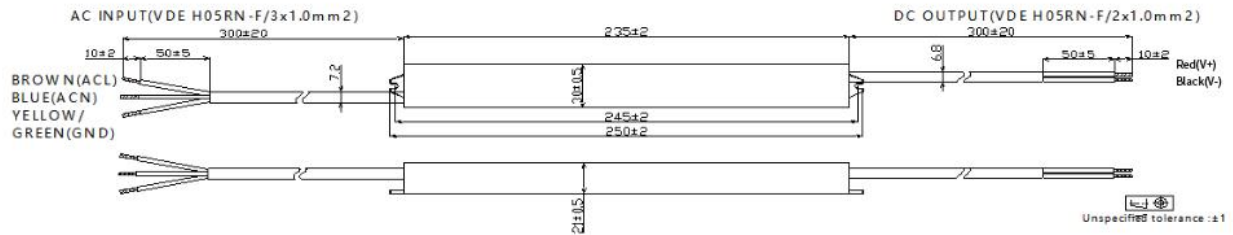
INPUT ○ L (Brown) ○ N (Blue) ○ (Yellow-green)	KGP KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid	XSV180W24	LED Driver	Input: 220-240V~, 50/60Hz, 0.8A, λ:0.95	(Black) ○ OUTPUT (Red) + ○ OUTPUT
		Constant Voltage Type	Output: 24V- 0-6.67A Max.180W	•Ic Ta: -25 ~ +50°C Tc:85°C	
		For LED modules only	SELV CE ENEC IP67		
		TUV 100			

INPUT ○ L (Brown) ○ N (Blue) ○ (Yellow-green)	KGP KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid	XSV240W24	LED Driver	Input: 220-240V~, 50/60Hz, 1.5A, λ:0.95	(Black) ○ OUTPUT (Red) + ○ OUTPUT
		Constant Voltage Type	Output: 24V- 0-10A Max.240W	•Ic Ta: -25 ~ +50°C Tc:90°C	
		For LED modules only	SELV CE ENEC IP67		
		TUV 100			

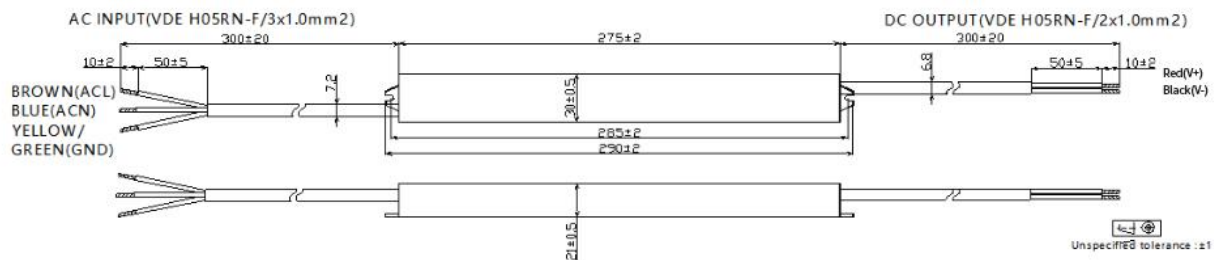
INPUT ○ L (Brown) ○ N (Blue) ○ (Yellow-green)	KGP KGP Electronics GmbH Hueckstraße 19 DE-58511 Lüdenscheid	XSV400W24	LED Driver	Input: 220-240V~, 50/60Hz, 2.3A, λ:0.95	(Black) ○ OUTPUT (Red) + ○ OUTPUT (Black) ○ OUTPUT (Red) + ○ OUTPUT
		Constant Voltage Type	Output: 24V- 0-16.67A Max.400W	•Ic Ta: -25 ~ +50°C Tc:90°C	
		For LED modules only	SELV CE ENEC IP67		
		TUV 100			

4.Dimension (Unit: mm)

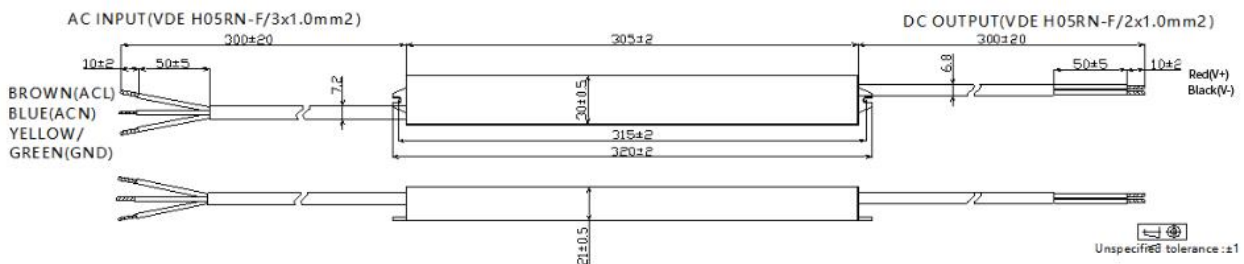
XSV30W24



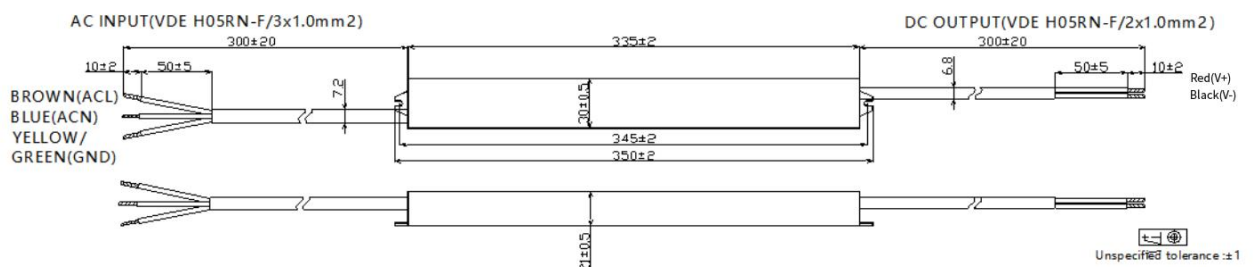
XSV60W24



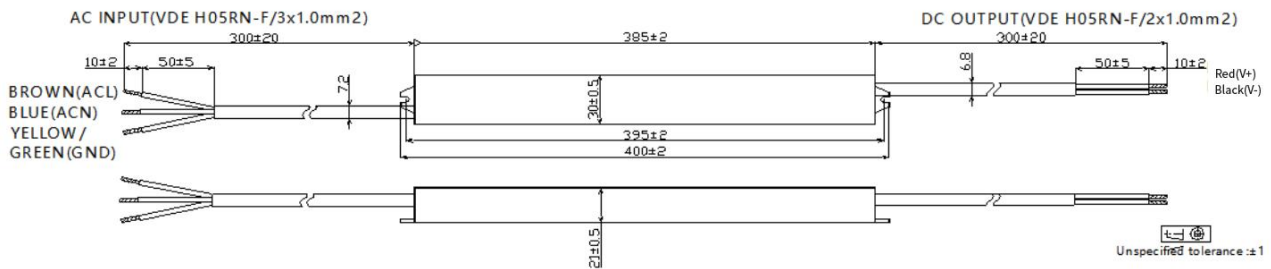
XSV100W24



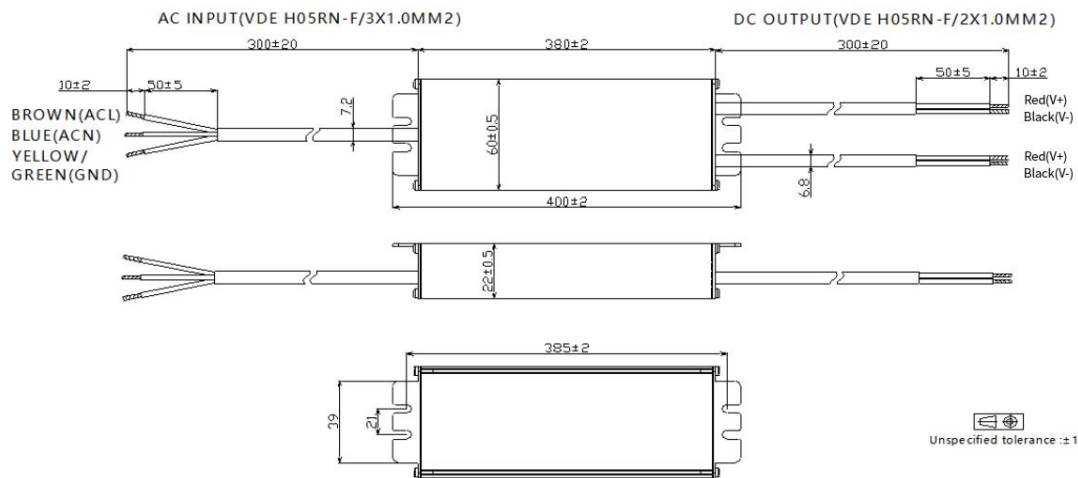
XSV160W24



XSV240W24

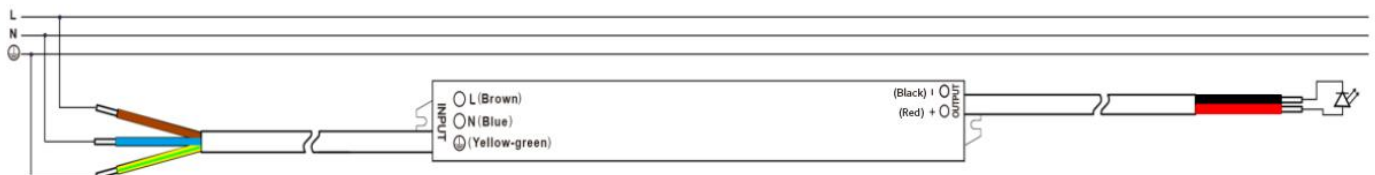


XSV400W24



Remark: Two output cables are in parallel inside the drive, and the current of each cable does not exceed 10A.

5. Wiring Diagram



6.Packing information

Model	Carton L*W*H(cm)	Pcs/ Carton	Net weight/ Pcs(g)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
XSV30W24	34*29*20	30	340	10.2	11.8
XSV60W24	34*29*20	30	390	11.7	13.3
XSV100W24	39*29*20	30	420	12.6	14.3
XSV160W24	39*29*20	30	470	14.1	15.8
XSV240W24	44*29*14	20	530	10.6	11.9
XSV400W24	44*29*14	12	1050	12.6	13.6

7.REVISION HISTORY

Date	Revision	Remark
2021-12-06	A	Preliminary Edition
2022-3-06	B	Standard Edition
2024-05-17	C	Add ENEC certification mark
2024-08-12	D	Add life vs. Tc curve
2024-09-28	E	Update carton qty
2024-10-26	F	Output wire color change to red/black