NEXIVO
by KGP Electronics GmbH

Constant Voltage LED Driver

Constant Voltage Driver

Model:XSV Series

IP67 SELV

Model	Item Code	Rated Input Voltage	Output current	Input current	Input power	Output power range	PF	Efficiency	Output voltage
XSV30W24-DALI-NX	159010	220-240VAC	1.25A	≤0.20A	≤36.00W	0.00-30.00W	≥0.95	86%	24V
XSV60W24-DALI-NX	159020		2.50A	≤0.40A	≤72.00W	0.00-60.00W		88%	
XSV100W24-DALI-NX	159030		4.17A	≤0.60A	≤115.00W	0.00-100.00W		90%	
XSV160W24-DALI-NX	159040		6.67A	≤0.90A	≤180.00W	0.00-160.00W		92%	
XSV240W24-DALI-NX	159050		10.00A	≤1.50A	≤265.00W	0.00-240.00W		92%	
XSV400W24-DALI-NX	159060		16.67A	≤2.30A	≤435.00W	0.00-400.00W		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	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				
	Standby Power Consumption	≤0.5W, @230VAC, Dim to OFF				
	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 50%Ipk
		30W	<30A	25A	200us	
		60W	<30A	26A	220us	
		100W	<50A	45A	250us	
		160W	<60A	56A	250us	
		240W	<80A	76A	320us	
		400W	<100A	88A	430us	

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	Connected quantity of 10A Breaker	30W	10pcs,10A type B / 16pcs 10A type C		
		60W	10pcs,10A type B / 16pcs 10A type C		
		100W	6pcs,10A type B / 10pcs 10A type C		
		160W	5pcs,10A type B / 8pcs 10A type C		
		240W	4pcs,10A type B / 6pcs 10A type C		
		400W	3pcs,10A type B / 4pcs 10A type C		
	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	9-30W		
		60W	24-60W		
		100W	30-100W		
		160W	48-160W		
		240W	72-240W		
		400W	120-400W		
	Output Voltage Ripple	<240mVPK-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			
Control Method	PUSH dimming	PUSH dimming (Max. lead wire length：20m, same port of DALI)			
	PUSH Dimming Synchronization	The power connected to the same PUSH switch can be synchronized by pressing and holding the PUSH switch for longer than 10S.			
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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/ENEC	
	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: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℃case temperature, refer to life vs. Tc curve
		240W/400W	≥100K Hrs 75℃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/3X1.0mm2, Brown/Blue/(Yellow/Green)
		Output	H05RN-F/2X1.0mm2, Red/Black (Two cables are connected in parallel for 400W)

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.
4.When connecting the DALI controller，need to reset the power supply.

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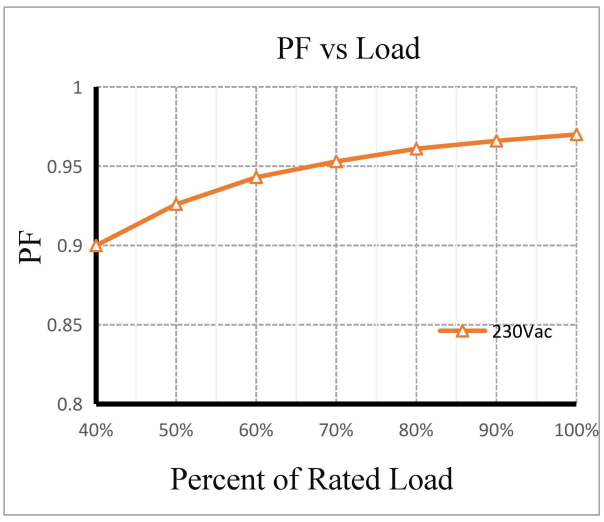
Model	Cable selection	Distance
XSV30W24-NX-DALI	0.75mm²	30M
	1.00mm²	50M
XSV60W24-NX-DALI	0.75mm²	30M
	1.00mm²	50M
XSV100W24-NX-DALI	1.00mm²	50M
XSV160W24-NX-DALI	1.50mm²	30M
XSV240W24-NX-DALI	2.50mm²	30M
XSV400W24-NX-DALI	4.00mm²	30M

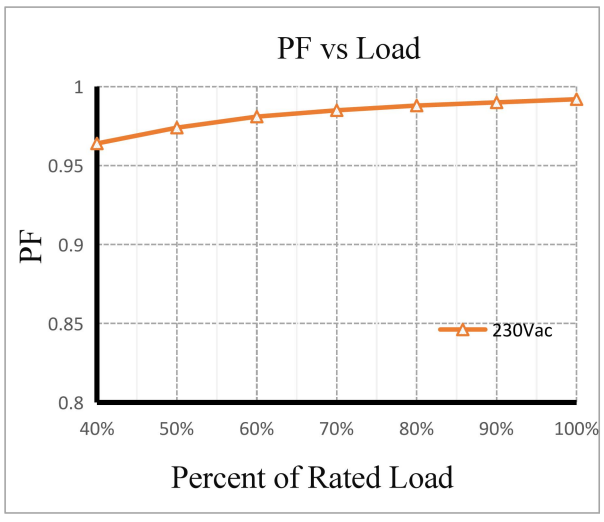
2. Graph

PF VS LOAD Curve

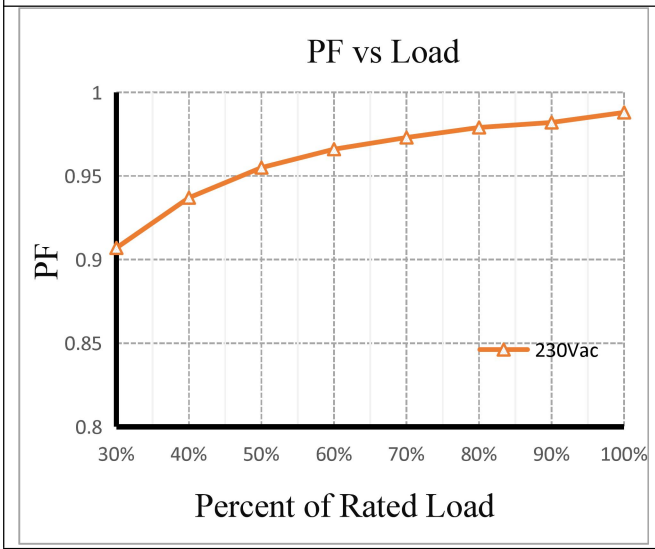
30W



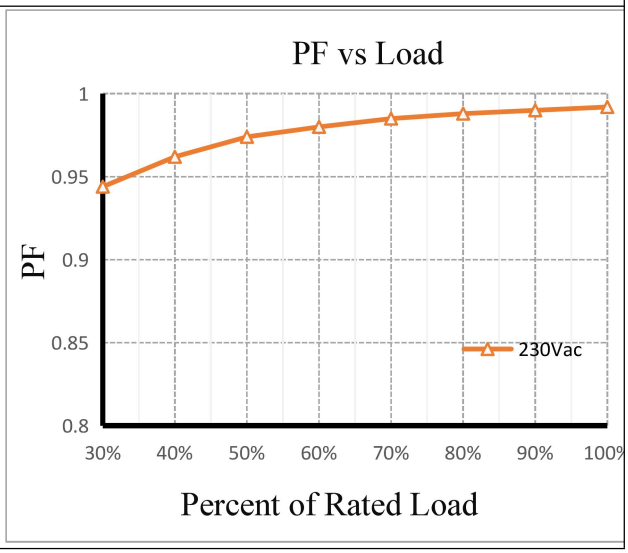
60W



100W



160W



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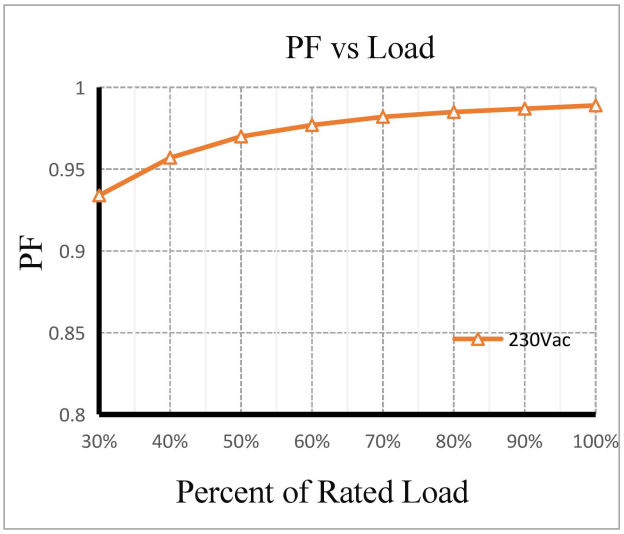
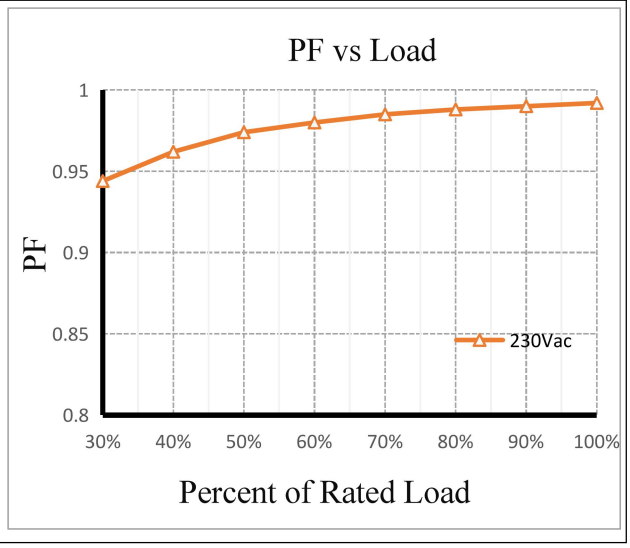
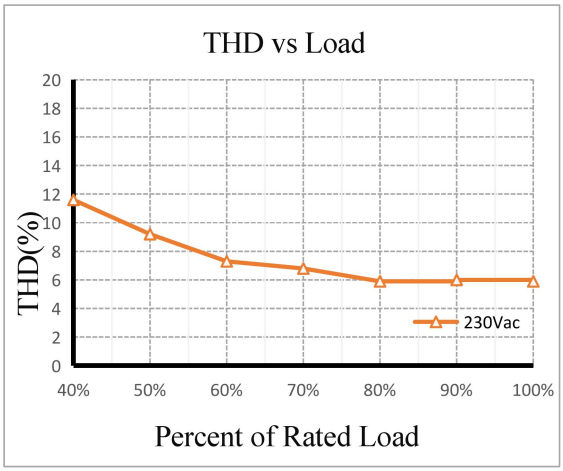
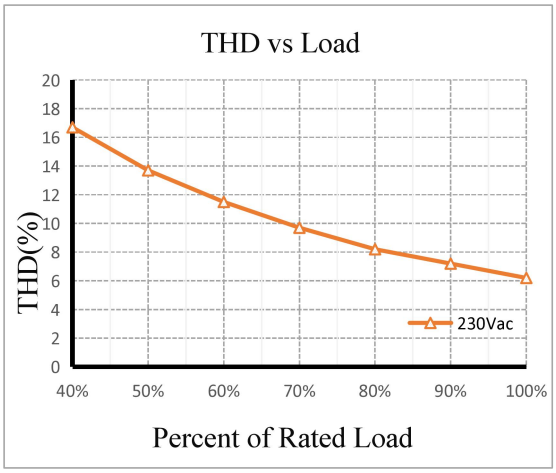
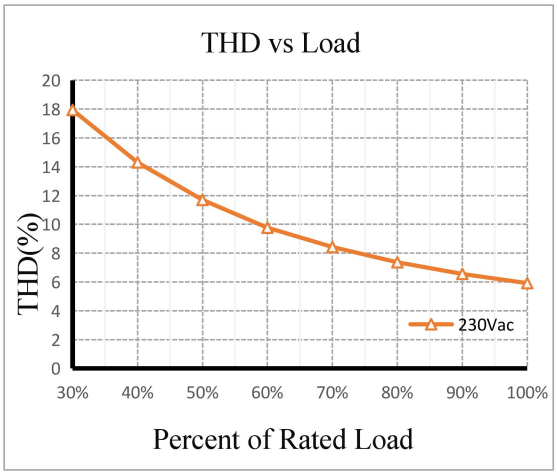
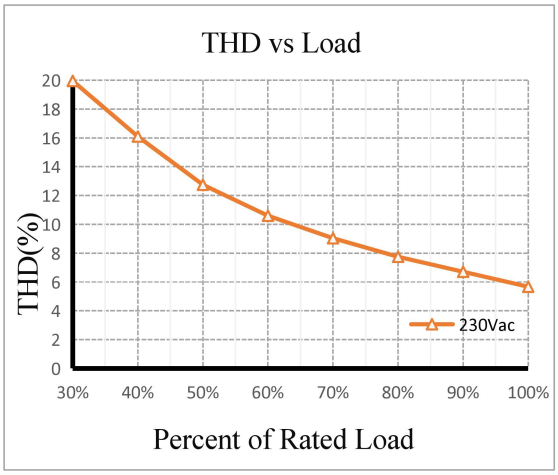
240W	400W
	

THD VS LOAD Curve

30W	60W
	
100W	**160W**
	

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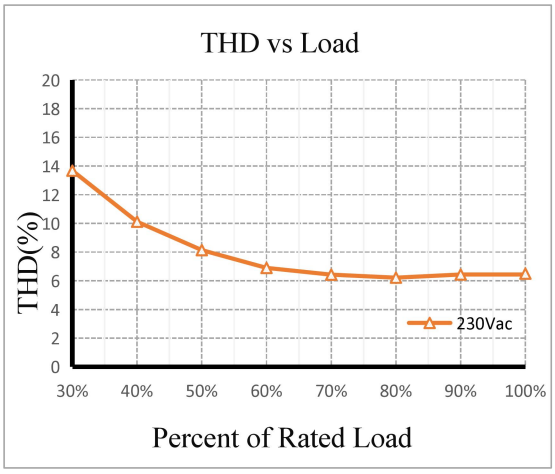
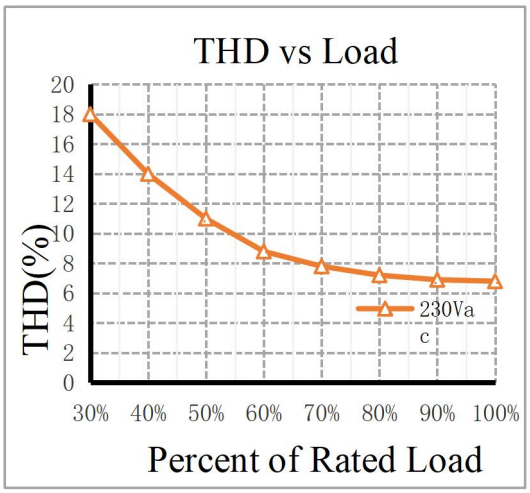
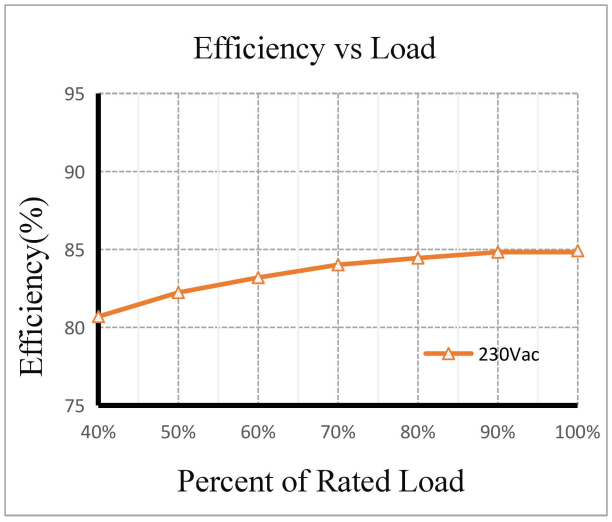
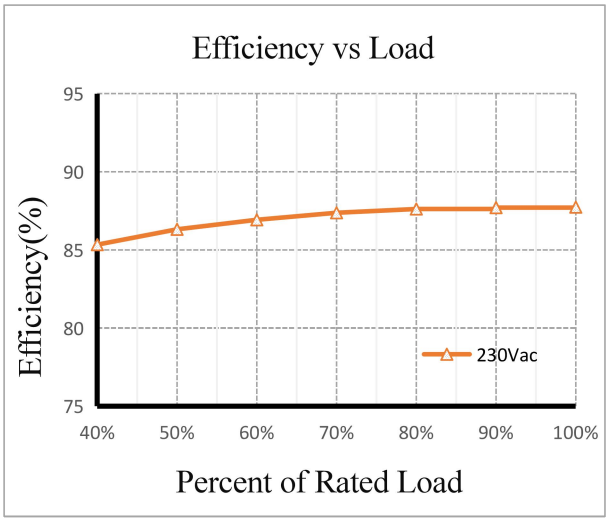
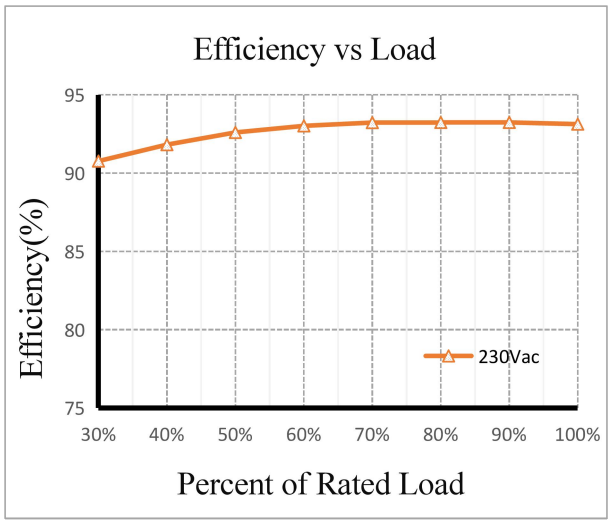
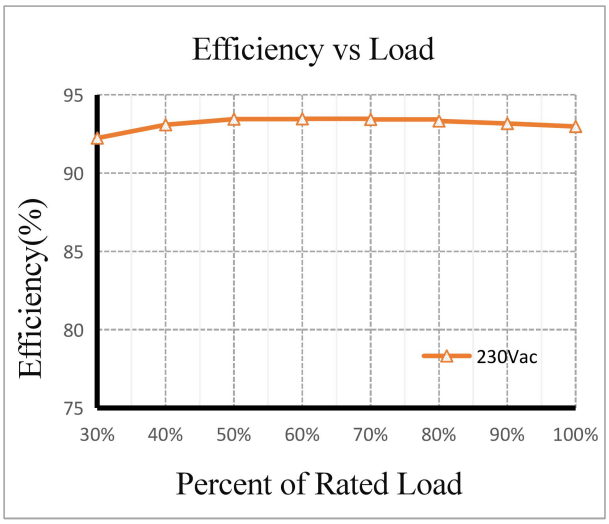
240W	400W
	

Efficiency VS LOAD Curve

30W	60W
	
100W	**160W**
	

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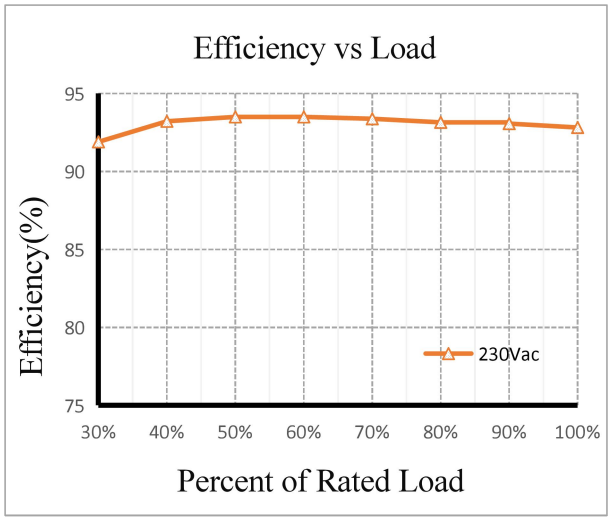
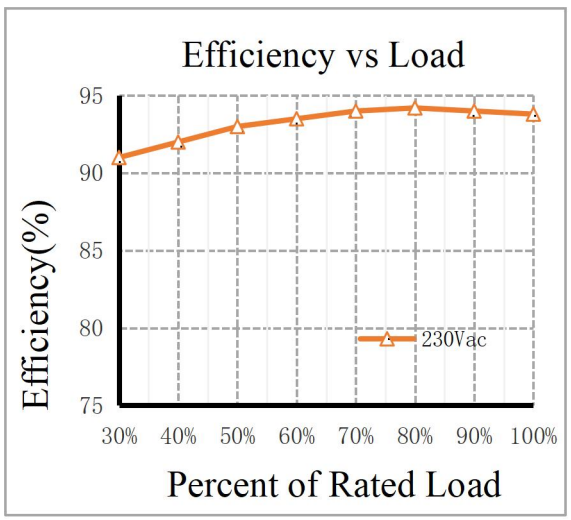
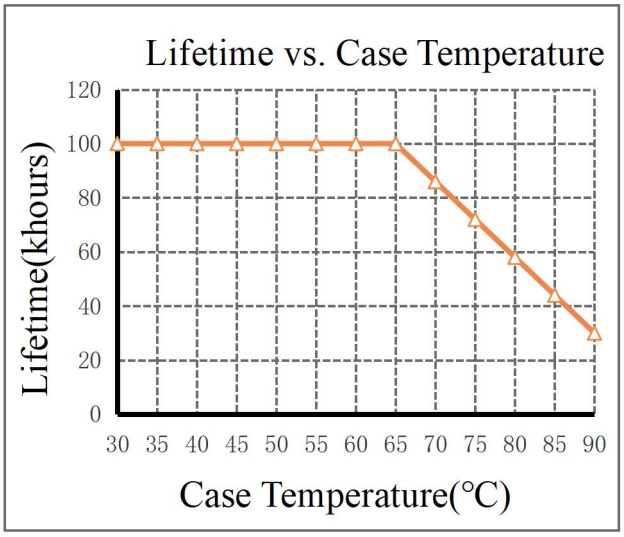
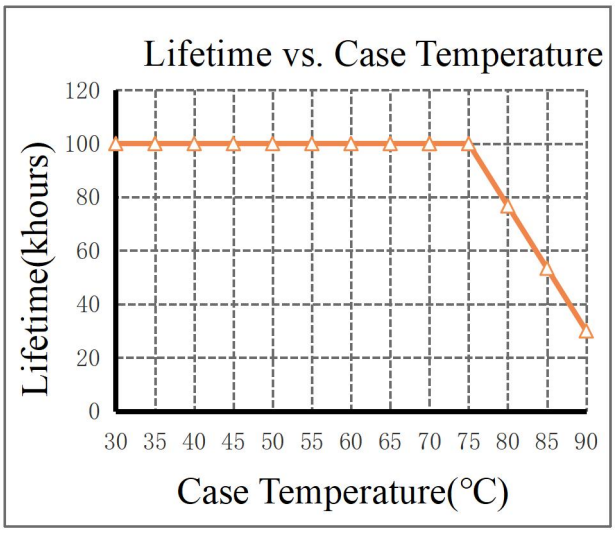
240W	400W
	

Lifetime vs. Case Temperature

30W/60W/100W/160W	240W/400W
	

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

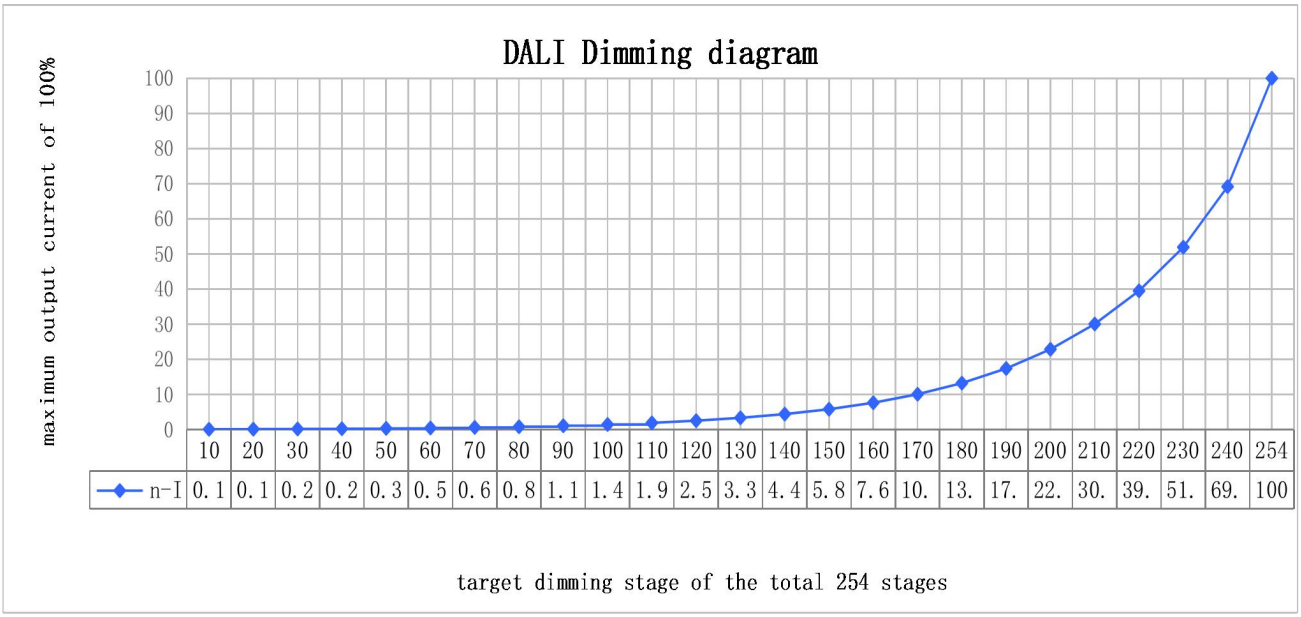
3. DALI dimming curve

3.1 formula for DALI dimming.

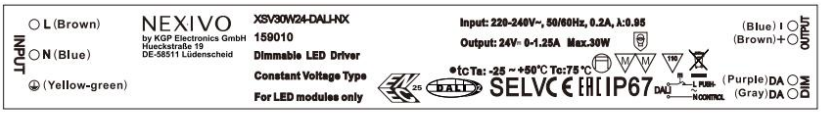
X(n)=10^{[(n-1)/(253/3)]-1},

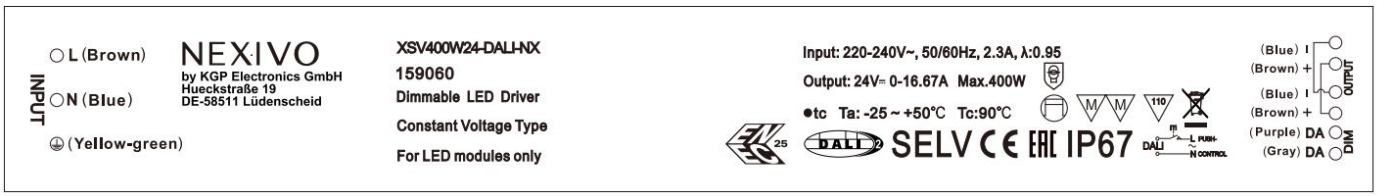
Here,n means the target dimming stage of the total 254 stages.

X(n) means the percent of the maximum output current



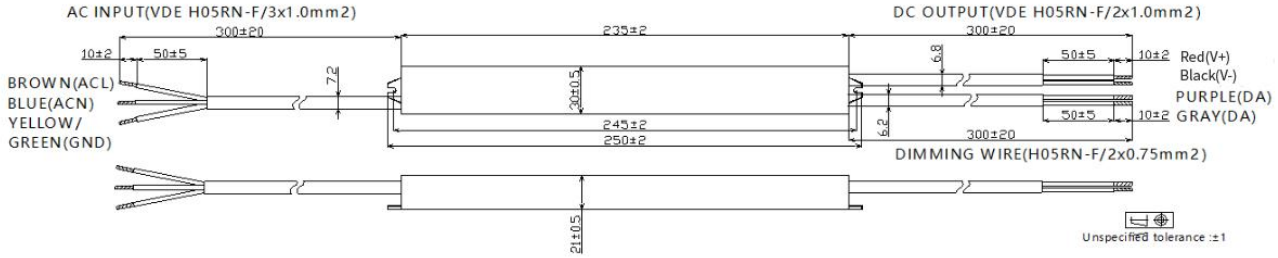
4. Label



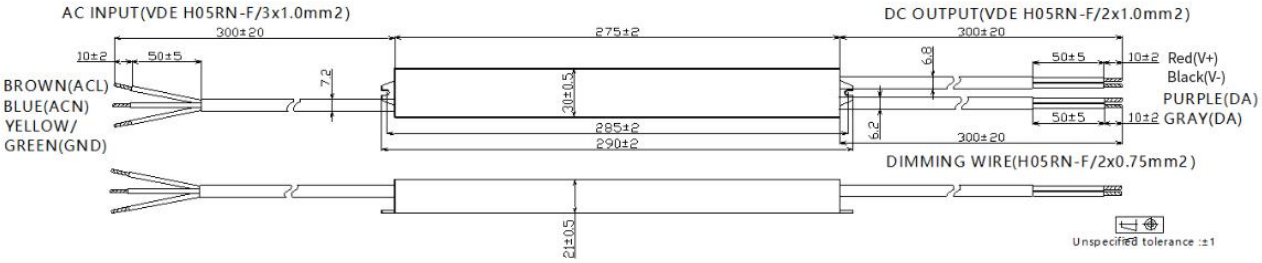


5. Dimension （Unit：mm）

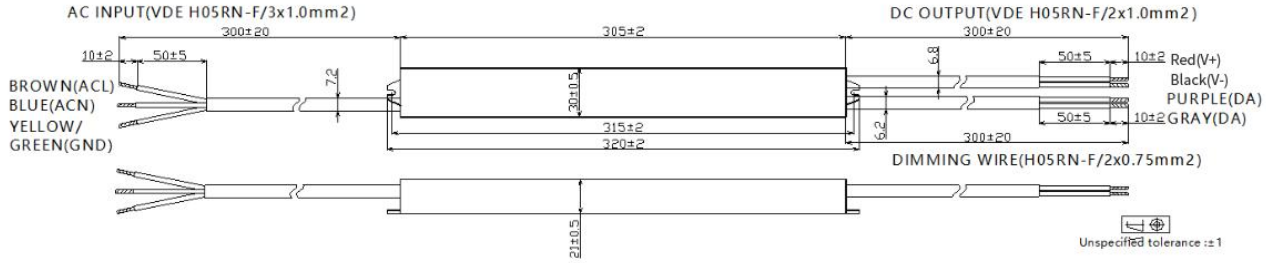
XSV30W24-DALI-NX



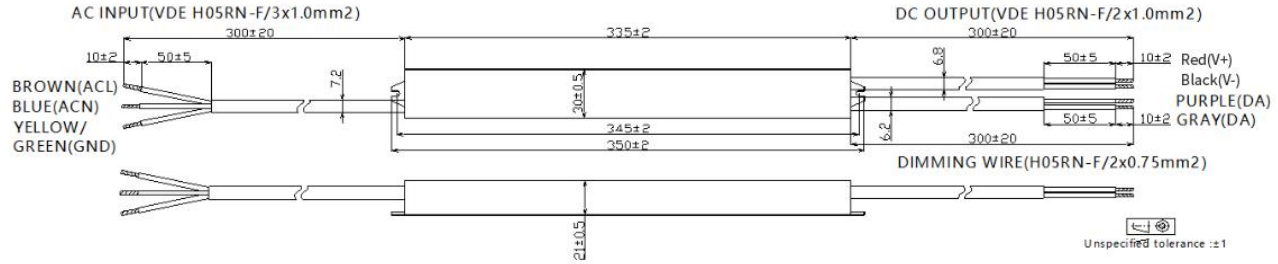
XSV60W24-DALI-NX



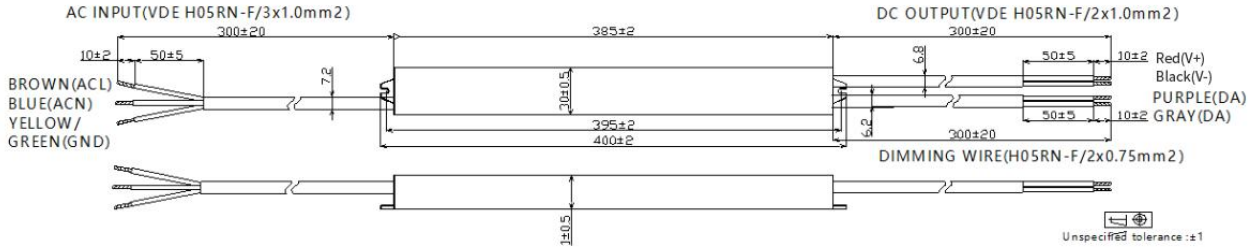
XSV100W24-DALI-NX



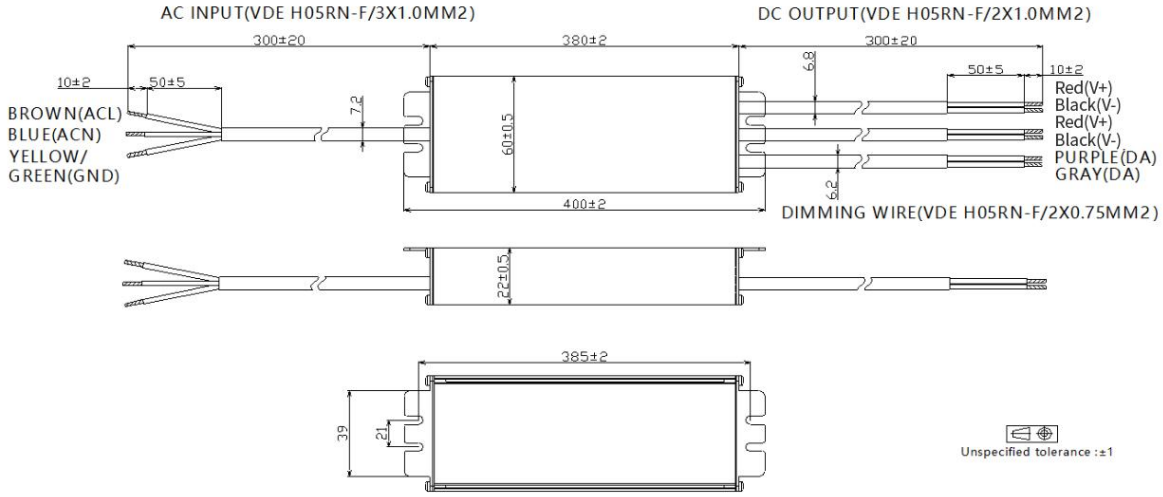
XSV160W24-DALI-NX



XSV240W24-DALI-NX

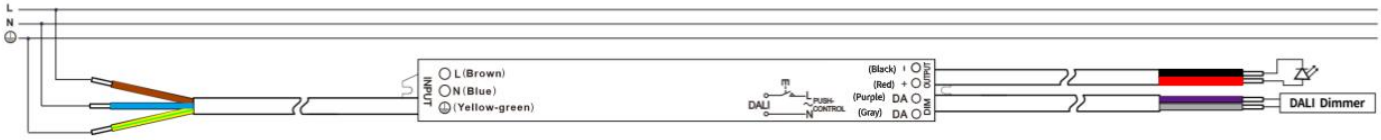


XSV400W24-DALI-NX



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

6. Wiring Diagram



The power supply is considered as a component that will be operated in combination with final equipment. Since EMC performance will be affected by the complete installation, the final equipment manufacturers must re-qualify EMC Directive on the complete installation again.

7. Packing information

Model	Carton L*W*H(cm)	Pcs/ Carton	Net weight/ Pcs(g)	Net weight/ Carton(kg)	Gross weight/ Carton(kg)
XSV30W24-DALI-NX	34*29*20	30	340	10.20	11.80
XSV60W24-DALI-NX	34*29*20	30	390	11.70	13.30
XSV100W24-DALI-NX	39*29*20	30	420	12.60	14.30
XSV160W24-DALI-NX	39*29*20	30	470	14.10	15.80
XSV240W24-DALI-NX	44*29*14	20	530	10.60	11.90
XSV400W24-DALI-NX	44*29*14	12	1050	12.60	13.60

8. Ordering data

Model No	Item code
XSV30W24-DALI-NX	159010
XSV60W24-DALI-NX	159020
XSV100W24-DALI-NX	159030
XSV160W24-DALI-NX	159040
XSV240W24-DALI-NX	159050
XSV400W24-DALI-NX	159060

9. REVISION HISTORY

Date	Revision	Remark
2026.16.03	V0.01	Product release
2026.16.06	V0.02	Add cable section and distance information
2026.15.09	V0.03	Delete TUV mark on label