

# LD200H-72

200 Watts | AC DC Constant Voltage LED Driver

## PRODUCT FEATURE

- Universal AC input range 20~305VAC
- Constant Voltage Operation
- Built-in Active PFC Function
- Protections: OVP / OCP/ SCP/ OTP
- High Efficiency 92% ~ 94%
- Fully insulated Case with IP67 level
- Cooling by Free Air Convection (Metal Housing)
- No Load Consumption <0.5 at 230Vac
- Suitable for LED Strips and Moving Sign Applications
- Function options: 3 in 1 dimming (dim-to-off); DALI
- The output and dimming lines a re-compliant with the new regulations with isolation
- Suitable for dry / damp / wet locations;
- 5 years warranty



LD200H-VUYYYNN-72



LD200H-VUYYYNN-72D / LD200H-VUYYYNN-72DA



## WARRANTY

- See [Limited Warranty Policy](#) for more additional information.

**NOTE:** LD200H-VUYYYNN-72(X)

YYY = Rated Current, NN = DC Voltage, (X) = Black → Non DIM., (X) = D → 3-in-1 Dim., (X) = DA → DALI DIM

## SPECIFICATION

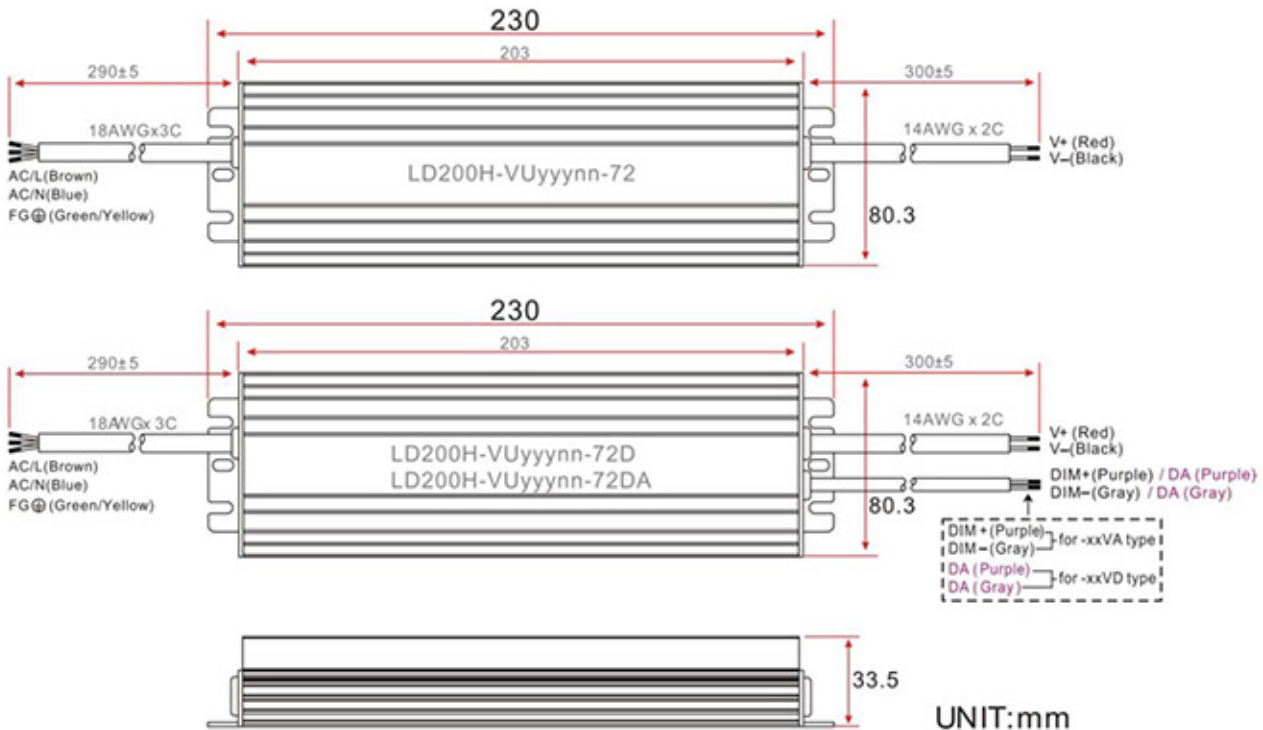
MODEL NO.		LD200H-VU1K612-72(X)	LD200H-VU83024-72(X)	LD200H-VU55036-72(X)	LD200H-VU41548-72(X)
OUTPUT	DC VOLTAGE	12V	24V	36V	48V
	RATED CURRENT	16.7A	8.3A	5.5A	4.15A
	CURRENT RANGE	0~16.7A	0~8.3A	0~5.5A	0~4.15A
	RATED POWER	200.4W	199.2W	198W	199.2W
	RIPPLE & NOISE(MAX)	300mVp-P	350mVp-P	400mVp-P	500mVp-P
	EFFICIENCY AT 230VAC (TYP.)	92%	93%	93.5%	94%
	VOLTAGE TOLERANCE	±5%	±5%	±5%	±5%
	PWM DIMMING (OPTIONAL)	> 1600 Hz (for dimmable version)			
SETUP TIME (MAX.)	0.5s / 230VAC, 1s/ 115VAC, at full load				
INPUT	RATED VOLTAGE	100 ~ 277VAC			
	VOLTAGE RANGE	90 ~ 305VAC			
	FREQUENCY RANGE	47 ~ 63Hz			
	AC CURRENT (MAX)	2.5A at 115VAC / 1.2A at 230VAC			
	POWER FACTOR	>0.98 at 115VAC / <0.94 at 230VAC at full load. PF ≥ 0.9 at 70% load			
	TOTAL HARMONIC DISTORTION	THD < 15% at 230VAC, full load			
	INRUSH CURRENT (MAX)	Cold Start 70A at 230VAC			
LEAKAGE CURRENT	<1mA / 240VAC				
DIM. CONTROL (3 IN 1)	DC DIMMING	DC 0-10V			
	PWM DIMMING	Puls: Hi=10V Low=0V, Duty: 0%~100, Fsw 0.5 ~ 3KHz			
	RESISTANCE DIMMING	0KΩ~100KΩ or Electronic Potentiometer 0-10V			
DIM. CONTROL (DALI)	DALI STANDARDS	Compatibility with IEC 62386-101, 102 and 207			
	DALI BUS CURRENT CONSUMPTION	< 2mA			
PROTECTIONS	OVER CURRENT	105% - 180% rated output power Type: Auto recover after fault condition disappeared			
	SHORT CIRCUIT	Type: Hiccup mode & recovers after fault condition disappeared			
	OVER VOLTAGE	13 ~ 19V	26 ~ 38V	38V ~ 50V	50 ~ 65V
	OVER TEMPERATURE	Type: Hiccup mode (re-power on to recover)			
		Type: 95°C ± 10%			
		Type: Shutdown mode (re-power on to recover)			

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ENVIRONMENT	WORKING TEMP.	-30°C ~ 50°C (Refer to Derating Curve)			
	WORKING HUMIDITY	20% ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ + 80°C, 10% ~ 90% RH			
	VIBRATION	10 ~ 500Hz, 2G 10min./ 1 cycle, period for 60min. Each long X, Y, Z axes			
SAFETY & EMC	SAFETY STANDARD	EN61347-1, EN61347-2-13, independent, IP67 approved			
	WITHSTAND VOLTAGE	I/P-O/P: 3.75KVAC I/P-FG: 1.88KVAC O/P-FG: 0.5KVAC			
	ISOLATION RESISTANCE	I/P - O/P, I/P-FG: 100M ohms/ 500VDC at 25°C			
	EMC EMISSION	Compliance to EN55015, FCC part 15			
	HARMONIC CURRENT	Compliance to EN61000-3-2 Class C ( $\geq 75\%$ load), EN61000-3-3			
	EMS IMMUNITY	Compliance to EN61000-4-2, 3, 4, 5, 6, 8, 11; EN61547, criteria B			
OTHERS	MTBF	120K hours min. MIL-HDBK-217F(25°C)			
	DIMENSION (L*W*H)	230 x 80.3 x 33.5 mm; 840g/pcs			
NOTE	<p>1. All parameters NOT specially mentioned are measured at 230V AC input, rated, load and 25°C ambient temperature.                  2. Ripple &amp; Noise are measured at 20 MHZ of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.                  3. Tolerance: includes set up tolerance, line regulation and load regulation.                  4. Derating maybe needed under low input voltage. Please check the static characteristic for more details.                  5. 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 manufacture must re-qualify EMC Directive on the complete installation again.                  6. Length of setup time is measured at first cold start. Turning ON/OFF the power supply may lead to increase of the setup time.                  7. The unit might not be suitable for lighting application in EU countries. Please check with your local authorities for the possible use of the unit.                  8. Suitable for indoor use or outdoor use without direct sunlight exposure.                  9. THD &lt; 25% at 264VAC, full load.</p>				

## MECHANICAL DRAWING 230 X 80.3 X 33.5mm

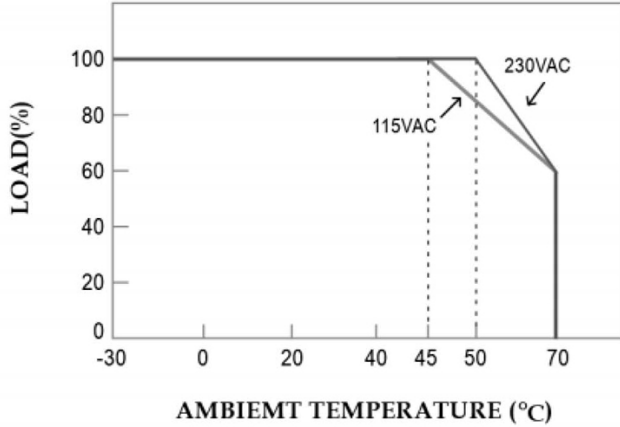


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Type:	

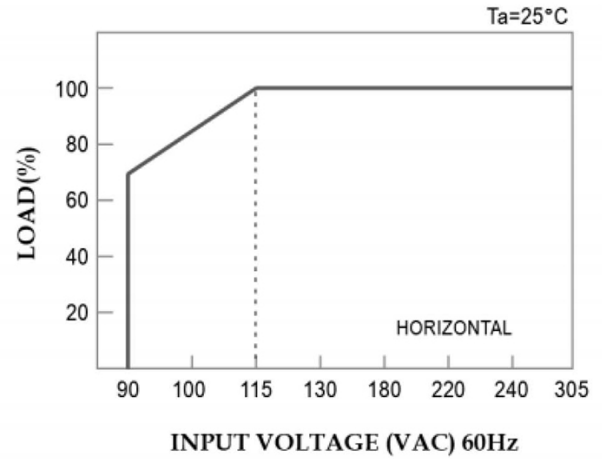
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## DERATING CURVE



## STATISTIC CHARACTERISTIC



3-in-1 Dimming Control (DC/ PWM/ Resistance)  
3-in01 Dimmable Function Description

### (1) 0-100KΩ RESISTANCE DIMMABLE (TYPICAL):

RESISTOR	SINGLE-DRIVER	SHORT	9K	20K	30K	40K	50K	60K	70K	80K	95K	100K
	MULTI-DRIVER	SHORT/N	9K/N	20K/N	30K/N	40K/N	50K/N	60K/N	70K/N	80K/N	95K/N	100K/N
<b>VOUT DUTY CYCLE(%)</b>		0%	2%	14.5%	25.9%	37.3%	48.7%	60.1%	71.5%	82.9%	100%	100%

- The length of extended wire for DIM+/- shall not exceed 20meters. (Wire ≤ 20m)
- N= The number of dimmer drivers should not exceed 15. (N ≤ 15)
- DIM+/- < 7K or 7K Vout Duty cycle 0%

### (2) DC: 0-10V DIMMABLE (TYPICAL):

DIM(VOLTAGE)	0V	0.9V	2V	3V	4V	5V	6V	7V	8V	9.5V	10V
<b>VOUT DUTY CYCLE(%)</b>	0%	2%	14.5%	25.9%	37.3%	48.7%	60.1%	71.5%	82.9%	100%	100%

- DIM+/- < 7K or 7K Vout Duty cycle 0%

### (3) 10V/PWM DIMMABLE (TYPICAL):

DIM(10V/PWM DUTY)	0%	9%	20%	30%	40%	50%	60%	70%	80%	95%	100%
<b>VOUT DUTY CYCLE(%)</b>	0%	2%	14.5%	25.9%	37.3%	48.7%	60.1%	71.5%	82.9%	100%	100%

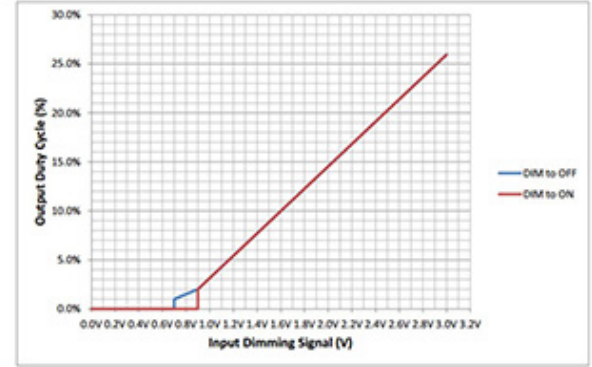
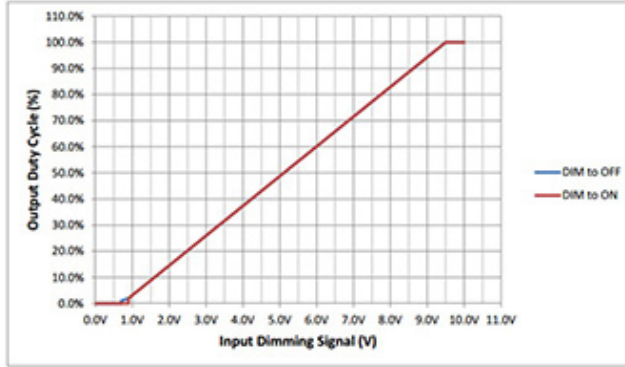
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Project Name:	
Type:	

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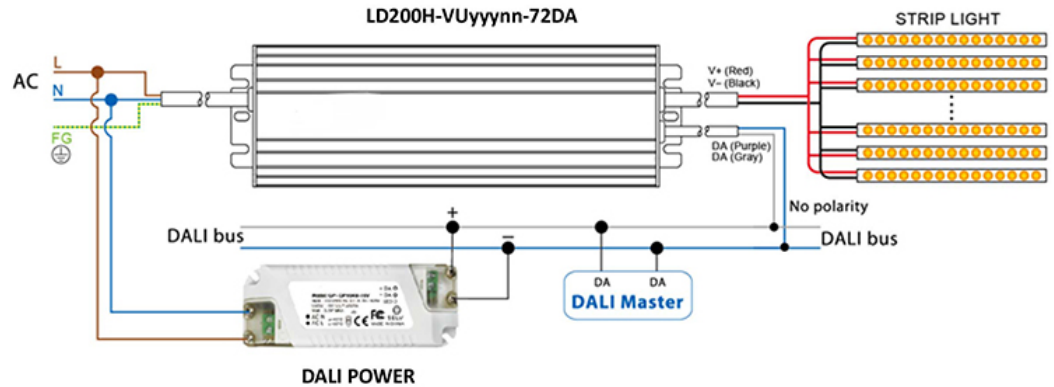
## DIMMING CURVE



## DALI INTERFACE

### DALI FUNCTION DESCRIPTION

- (1) APPLY DALI SIGNAL BETWEEN DA WIRES
- (2) FIRST STEP IS FIXED AT 1% OF OUTPUT
- (3) WIRING DIAGRAM



## APPLICATION DIAGRAM

