



144~200W Constant Voltage + Constant Current LED Driver **ELG-200-XXDA-3W**



■ Features

- Constant Voltage + Constant Current mode output
- Metal housing design
- Built-in active PFC function
- Standby power consumption <0.5W
- IP67 rating for indoor or outdoor installations
- DALI
- Typical lifetime>50000 hours
- 5 years warranty

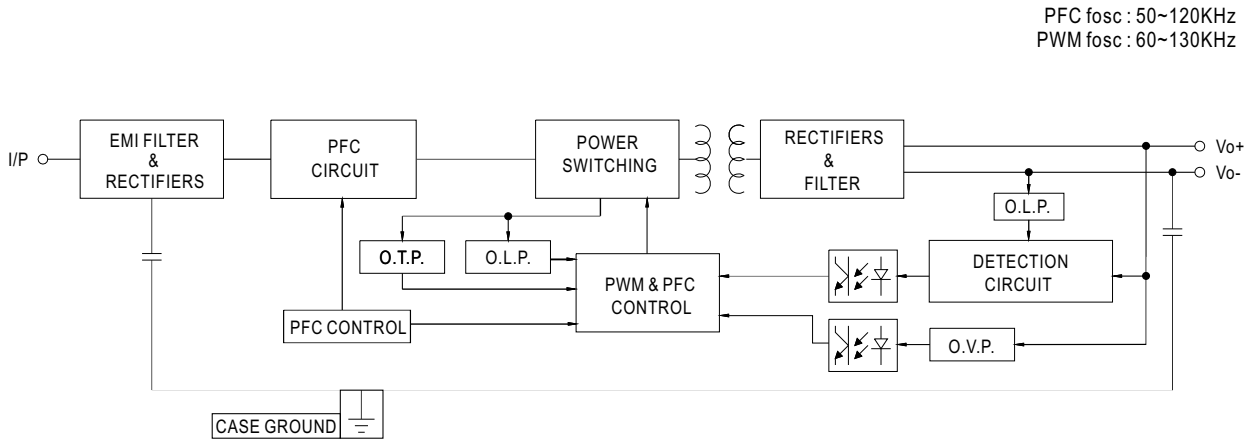
■ Applications

- LED street lighting
- LED architectural lighting
- LED bay lighting
- LED floodlighting
- Type “HL” for use in Class I, Division 2 hazardous (Classified) location.

SPECIFICATION

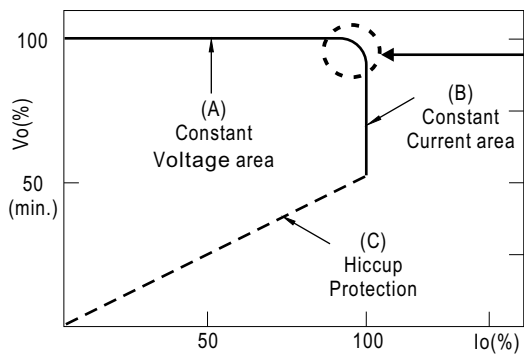
MODEL		ELG-200-12DA-3W	ELG-200-24DA-3W	ELG-200-36DA-3W	ELG-200-42DA-3W	ELG-200-48DA-3W	ELG-200-54DA-3W	
OUTPUT	DC VOLTAGE	12V	24V	36V	42V	48V	54V	
	CONSTANT CURRENT REGION <small>Note.2</small>	6 ~ 12V	12 ~ 24V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V	
	RATED CURRENT	16A	8.4A	5.55A	4.76A	4.16A	3.72A	
	RATED POWER	200VAC ~ 305VAC						
		192W	201.6W	199.8W	199.9W	199.68W	200.88W	
		100VAC ~ 180VAC						
		144W	150W	149.76W	149.94W	149.76W	150.12W	
	RIPPLE & NOISE (max.) <small>Note.3</small>	150mVp-p	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p	
	VOLTAGE TOLERANCE <small>Note.4</small>	±3.0%	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
LOAD REGULATION	±2.0%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
SETUP, RISE TIME <small>Note.6</small>	500ms, 100ms/230VAC, 1000ms, 100ms/115VAC							
HOLD UP TIME (Typ.)	10ms/ 230VAC 10ms/ 115VAC							
INPUT	VOLTAGE RANGE <small>Note.5</small>	100 ~ 305VAC 142 ~ 431VDC (Please refer to "STATIC CHARACTERISTIC" section)						
	FREQUENCY RANGE	47 ~ 63Hz						
	POWER FACTOR	PF ≥ 0.97/115VAC, PF ≥ 0.95/230VAC, PF ≥ 0.92/277VAC@full load (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)						
	TOTAL HARMONIC DISTORTION	THD < 20% (@load ≥ 50%/115VAC, 230VAC; @load ≥ 75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)						
	EFFICIENCY (Typ.)	90%	92%	92%	92.5%	93%	93%	
	AC CURRENT	1.8A / 115VAC 1.2A / 230VAC 1.0A/277VAC						
	INRUSH CURRENT(Typ.)	COLD START 60A(twidth=510μs measured at 50% Ipeak) at 230VAC; Per NEMA 410						
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	4 units (circuit breaker of type B) / 6 units (circuit breaker of type C) at 230VAC						
	LEAKAGE CURRENT	<0.75mA / 277VAC						
	STANDBY POWER CONSUMPTION <small>Note.7</small>	Standby power consumption <0.5W						
PROTECTION	OVER CURRENT	95 ~ 108% Constant current limiting, recovers automatically after fault condition is removed						
	SHORT CIRCUIT	Hiccup mode, recovers automatically after fault condition is removed						
	OVER VOLTAGE	13.5 ~ 18V	27 ~ 34V	42 ~ 49V	47 ~ 54V	54 ~ 63V	60 ~ 67V	
		Shut down output voltage, re-power on to recover						
	OVER TEMPERATURE	Shut down output voltage, re-power on to recover						
ENVIRONMENT	WORKING TEMP.	Tcase=-40 ~ +90°C (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)						
	MAX. CASE TEMP.	Tcase=+90°C						
	WORKING HUMIDITY	20 ~ 95% RH non-condensing						
	STORAGE TEMP., HUMIDITY	-40 ~ +90°C, 10 ~ 95% RH						
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)						
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes						
SAFETY & EMC	DALI STANDARDS	Comply with IEC62386-101,102,207 for DA-Type only						
	WITHSTAND VOLTAGE	I/P-O/P:3.75KVAC I/P-FG:2.0KVAC O/P-FG:1.5KVAC						
	ISOLATION RESISTANCE	I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C / 70% RH						
	EMC EMISSION	Refer to EN55015,EN61000-3-2 Class C (@load ≥ 50%) ; EN61000-3-3;GB17625.1,GB17743						
	EMC IMMUNITY	Refer to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level (surge immunity Line-Earth 6KV, Line-Line 4KV)						
OTHERS	MTBF	826.7K hrs min. Telcordia SR-332 (Bellcore) ; 200.8Khrs min. MIL-HDBK-217F (25°C)						
	DIMENSION	244*71*37.5mm (L*W*H)						
	PACKING	1.05Kg; 12pcs / 13.6Kg / 0.72CUFT						
NOTE	<ol style="list-style-type: none"> All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25°C of ambient temperature. Please refer to "DRIVING METHODS OF LED MODULE". Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor. Tolerance : includes set up tolerance, line regulation and load regulation. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details. Length of set up time is measured at first cold start. Turning ON/OFF the driver may lead to increase of the set up time. No load/standby power consumption is specified for 230VAC input. The driver 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. This series meets the typical life expectancy of >50,000 hours of operation when Tcase, particularly (Tc) point (or TMP, per DLC), is about 70°C or less. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com 							

■ Block Diagram



■ DRIVING METHODS OF LED MODULE

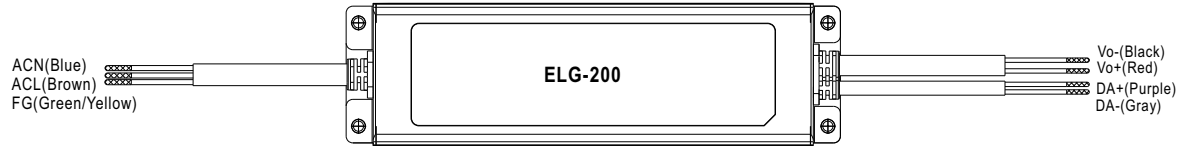
- ※ This series is able to work in either Constant Current mode (a direct drive way) or Constant Voltage mode (usually through additional DC/DC driver) to drive the LEDs.



Typical output current normalized by rated current (%)

In the constant current region, the highest voltage at the output of the driver depends on the configuration of the end systems.
Should there be any compatibility issues, please contact MEAN WELL.

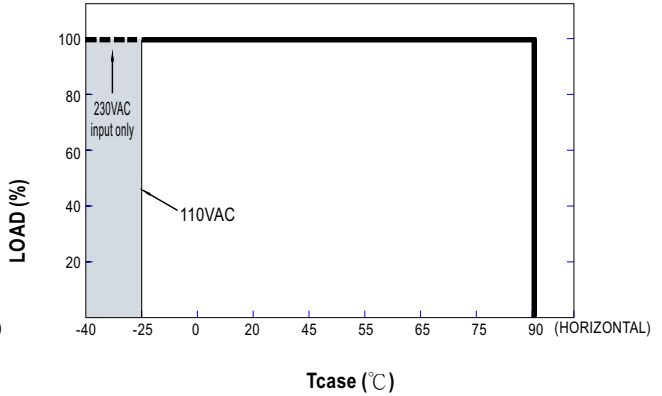
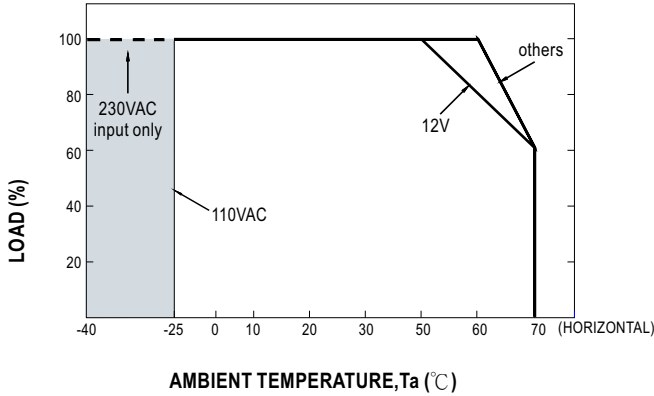
■ DIMMING OPERATION



※ DALI Interface (primary side)

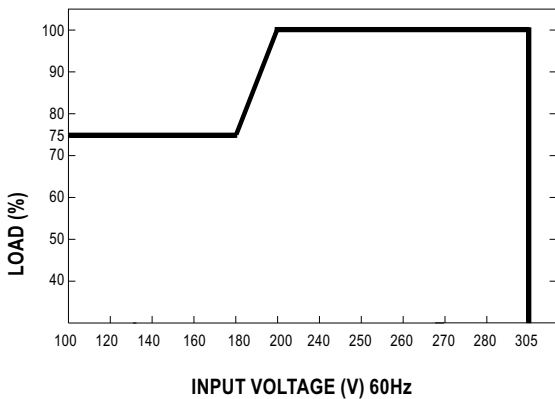
- Apply DALI signal between DA+ and DA-.
- DALI protocol comprises 16 groups and 64 addresses.
- First step is fixed at 8% of output.

OUTPUT LOAD vs TEMPERATURE



◎ If ELG-200 operates in Constant Current mode with the rated current, the maximum workable Ta is 50°C for 12V-model whereas 60°C for other models.

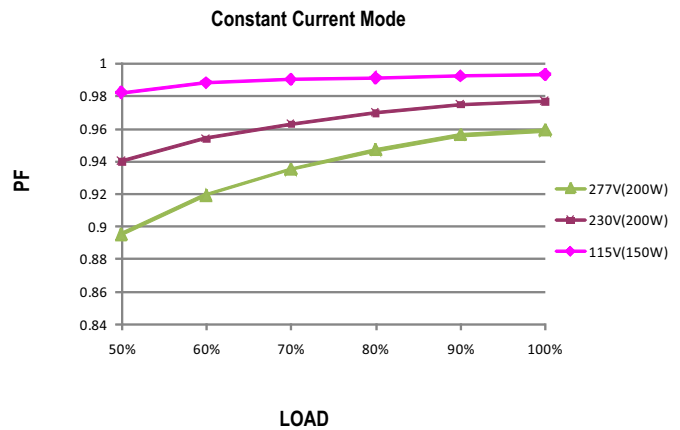
STATIC CHARACTERISTIC



※ De-rating is needed under low input voltage.

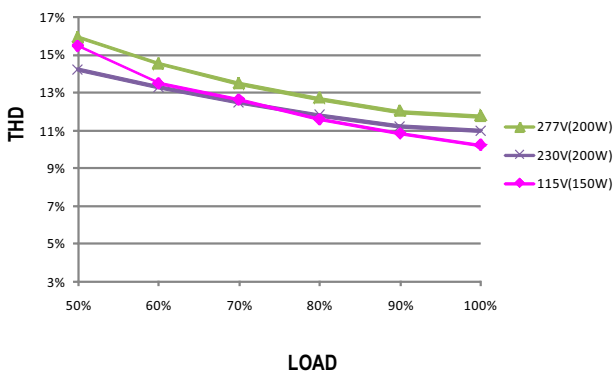
POWER FACTOR (PF) CHARACTERISTIC

※ Tcase at 80°C



TOTAL HARMONIC DISTORTION (THD)

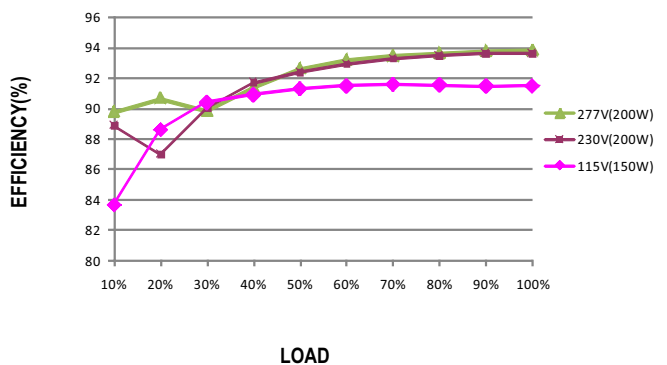
※ 48V Model, Tcase at 80°C



EFFICIENCY vs LOAD

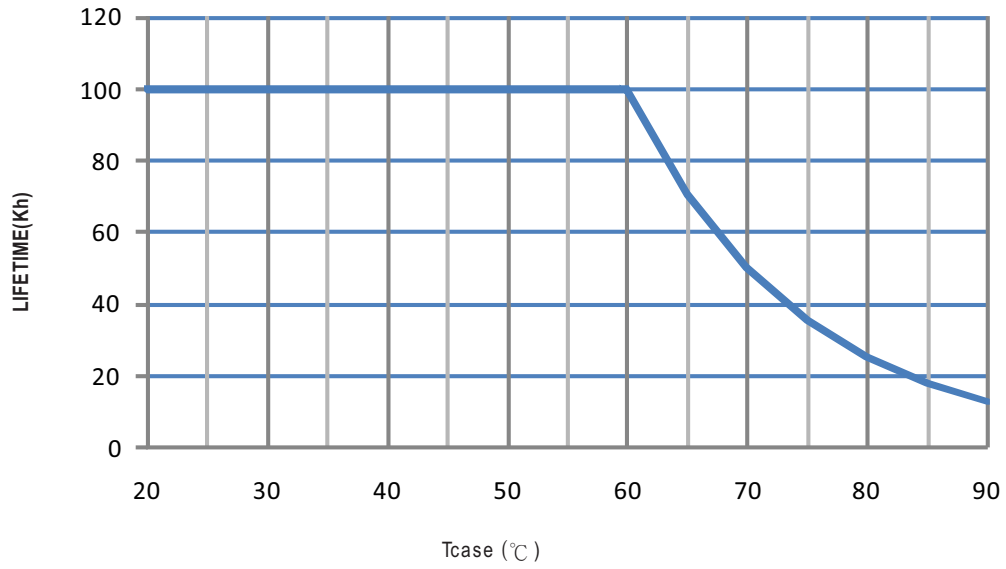
ELG-200 series possess superior working efficiency that up to 93% can be reached in field applications.

※ 48V Model, Tcase at 80°C



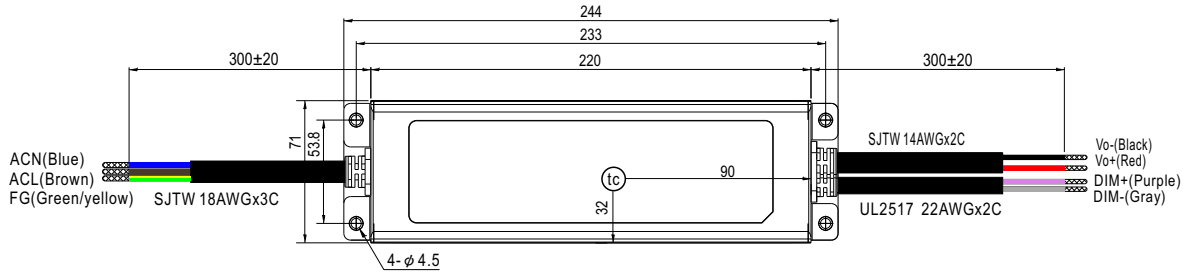


■ LIFE TIME



MECHANICAL SPECIFICATION

CASE NO.: 245A Unit:mm



• (tc) : Max. Case Temperature



INSTALLATION MANUAL

Please refer to : <http://www.meanwell.com/manual.html>