



70~100W Constant Voltage + Constant Current LED Driver **ELG-100** series



■ Features

- Constant Voltage + Constant Current mode output
- Metal housing design with functional Ground
- Built-in active PFC function
- Class 2 power unit
- No load / Standby power consumption <0.5W
- IP67 / IP65 rating for indoor or outdoor installations
- Function options: output adjustable via potentiometer; 3 in 1 dimming (dim-to-off); Smart timer dimming; DALI
- Typical lifetime >50000 hours
- 5 years warranty

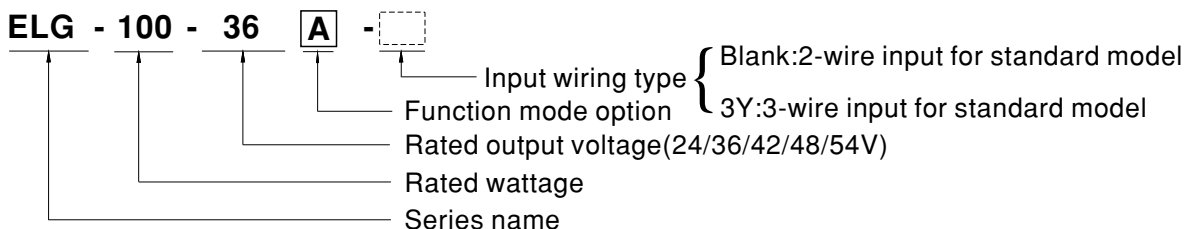
■ Applications

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

■ Description

ELG-100 series is a 100W AC/DC LED driver featuring the dual mode constant voltage and constant current output. ELG-100 operates from 100~360VAC and offers models with different rated voltage ranging between 24V and 54V. Thanks to the high efficiency up to 91%, with the fanless design, the entire series is able to operate for -40°C ~ +90°C case temperature under free air convection. The design of metal housing and IP67/IP65 ingress protection level allows this series to fit both indoor and outdoor applications. ELG-100 is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system

■ Model Encoding

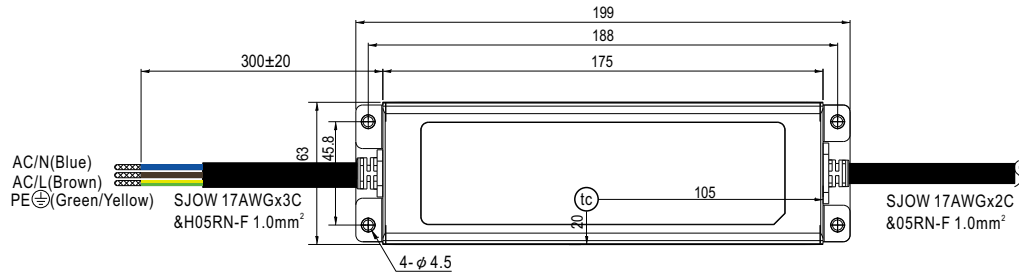


Type	IP Level	Function	Note
Blank	IP67	Io and Vo fixed.	In Stock
A	IP65	Io and Vo adjustable through built-in potentiometer.	In Stock
B	IP67	3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)	In Stock
AB	IP65	Io and Vo adjustable through built-in potentiometer & 3 in 1 dimming function (0~10Vdc, 10V PWM signal and resistance)	In Stock
DA	IP67	DALI control technology.	In Stock
Dx	IP67	Built-in Smart timer dimming function by user request.	By request
D2	IP67	Built-in Smart timer dimming and programmable function.	In Stock

SPECIFICATION

MODEL		ELG-100-24□	ELG-100-36□	ELG-100-42□	ELG-100-48□	ELG-100-54□	
OUTPUT	DC VOLTAGE	24V	36V	42V	48V	54V	
	CONSTANT CURRENT REGION <small>Note.2</small>	12 ~ 24V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V	
	RATED CURRENT	4.0A	2.66A	2.28A	2A	1.78A	
	RATED POWER	200VAC ~ 305VAC					
		96W	95.76W	95.76W	96W	96.12W	
		100VAC ~ 180VAC					
	RIPPLE & NOISE (max.) <small>Note.3</small>	200mVp-p	250mVp-p	250mVp-p	300mVp-p	350mVp-p	
		Adjustable for A/AB-Type only (via the built-in potentiometer)					
	VOLTAGE ADJ. RANGE	21.6 ~ 26.4V	32.4 ~ 39.6V	37.8 ~ 46.2V	43.2 ~ 52.8V	48.6 ~ 59.4V	
	CURRENT ADJ. RANGE	Adjustable for A/AB-Type only (via the built-in potentiometer)					
		2 ~ 4A	1.33 ~ 2.66A	1.14 ~ 2.28A	1 ~ 2A	0.89 ~ 1.78A	
	VOLTAGE TOLERANCE <small>Note.4</small>	±3.0%	±2.5%	±2.5%	±2.0%	±2.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
	LOAD REGULATION	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%	
SETUP, RISE TIME <small>Note.6</small>	1000ms, 80ms/115VAC 500ms, 100ms/230VAC						
HOLD UP TIME (Typ.)	15ms/115VAC 10ms/230VAC						
INPUT	VOLTAGE RANGE <small>Note.5</small>	100 ~ 305VAC 142 ~ 431VDC continue, 320VAC for 24Hrs; 360VAC for 1Hr (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; @load ≥ 60%/230VAC; @load ≥ 75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION (THD)" section)					
	EFFICIENCY (Typ.)	88%	89%	90%	90%	91%	
	AC CURRENT	1.1A / 115VAC 0.6A / 230VAC 0.5A/277VAC					
	INRUSH CURRENT(Typ.)	COLD START 60A(twidth=850μs measured at 50% Ipeak) at 230VAC; Per NEMA 410					
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	3 units (circuit breaker of type B) / 6 units (circuit breaker of type C) at 230VAC					
	LEAKAGE CURRENT	<0.75mA / 277VAC					
	NO LOAD / STANDBY POWER CONSUMPTION	No load power consumption <0.5W for Blank / A / Dx / D2-Type Standby power consumption <0.5W for B / AB / DA-Type					
	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		28 ~ 34V	41 ~ 48V	47 ~ 54V	54 ~ 62V	62 ~ 72V	
		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 ~ +80°C, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 60°C)					
SAFETY & EMC	SAFETY STANDARDS	UL8750(type"HL"), CSA C22.2 No. 250.13-12; IEC/EN/AS/NZS 61347-1, IEC/EN/AS/NZS 61347-2-13 independent, EN62384; EAC TP TC 004; BIS IS15885(for 24/24B/36/36A/42/42A/48/48B/54/54A only); GB19510.1, GB19510.14; IP65 or IP67; KC61347-1, KC61347-2-13 approved					
	DALI STANDARDS	Compliance to 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	Compliance to EN55015, EN61000-3-2 Class C (@load ≥ 60%); EN61000-3-3; GB17743, GB17625.1; EAC TP TC 020; KC KN15, KN61547					
	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level (surge immunity Line-Earth 6KV, Line-Line 4KV); EAC TP TC 020; KC KN15, KN61547					
	OTHERS	MTBF	978.2K hrs min. Telcordia SR-332 (Bellcore) 282.9Khrs min. MIL-HDBK-217F (25°C)				
DIMENSION		199*63*35.5mm (L*W*H)					
PACKING		0.85kg; 16pcs/14.2kg/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". For DA-Type, Constant Current region is 60%~100% of maximum voltage under rated power delivery. 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. 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 80°C or less. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com The ambient temperature derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft). For any application note and IP water proof function installation caution, please refer our user manual before using. https://www.meanwell.com/Upload/PDF/LED_EN.pdf 						

※ 3Y Model (3-wire input)



• (tc) : Max. Case Temperature

◎ Note1: Please connect the case to PE for the complete EMC deliverance and safety use.

◎ Note2: Please contact MEAN WELL for input wiring option with PE.

■ **INSTALLATION MANUAL**

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