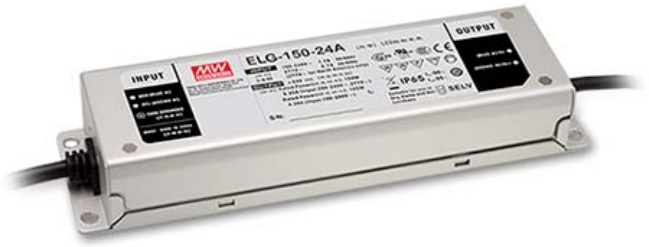
84~150W Constant Voltage + Constant Current LED Driver ELG-150 series



(for DA-Type only) SELV IP65 IP67 Type HL

Features

- Constant Voltage + Constant Current mode output
- Metal housing design
- Built-in active PFC function
- 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; Auxiliary DC output
- 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-150 series is a 150W AC/DC LED driver featuring the dual mode constant voltage and constant current output. ELG-150 operates from 100～305VAC and offers models with different rated voltage ranging between 12V and 54V. Thanks to the high efficiency up to 91%, with the fanless design, the entire series is able to operate for -40℃ ~ +90℃ 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-150 is equipped with various function options, such as dimming methodologies, so as to provide the optimal design flexibility for LED lighting system

Model Encoding

ELG - 150 - 24 A - □

- Input wiring type { Blank:2-wire input for standard model / 3Y:Optional 3-wire input by request
- Function mode option
- Rated output voltage(12/24/36/42/48/54V)
- Rated wattage
- Series name

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
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
BE	IP67	3 in 1 dimming function and Auxiliary DC output	Announce Q4'16

84~150W Constant Voltage + Constant Current LED Driver ELG-150 series

SPECIFICATION

MODEL		ELG-150-12□	ELG-150-24□	ELG-150-36□	ELG-150-42□	ELG-150-48□	ELG-150-54□
OUTPUT	DC VOLTAGE	12V	24V	36V	42V	48V	54V
	CONSTANT CURRENT REGION Note.2	6 ~ 12V	12 ~ 24V	18 ~ 36V	21 ~ 42V	24 ~ 48V	27 ~ 54V
	RATED CURRENT	10A	6.25A	4.17A	3.57A	3.13A	2.8A
	RATED POWER	200VAC ~ 305VAC					
		120W	150W	150.1W	150W	150.2W	151.2W
		100VAC ~ 180VAC					
		84W	105W	105W	105W	105W	105W
	RIPPLE & NOISE (max.) Note.3	150mVp-p	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p
	VOLTAGE ADJ. RANGE	Adjustable for A-Type only (via the built-in potentiometer)					
		10.8 ~ 13.2V	21.6 ~ 26.4V	32.4 ~ 39.6V	37.8 ~ 46.2V	43.2 ~ 52.8V	49 ~ 58V
	CURRENT ADJ. RANGE	Adjustable for A-Type only (via the built-in potentiometer)					
		5 ~ 10A	3.2 ~ 6.25A	2.1 ~ 4.17A	1.8 ~ 3.57A	1.56 ~ 3.13A	1.4 ~ 2.8A
	VOLTAGE TOLERANCE Note.4	±3.0%	±3.0%	±2.5%	±2.5%	±2.0%	±2.0%
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%
	LOAD REGULATION	±2.0%	±1.0%	±1.0%	±0.5%	±0.5%	±0.5%
	AUXILIARY DC OUTPUT	Nominal 15V(deviation 11.5~15.5V)@0.4A for BE-Type only					
	SETUP, RISE TIME Note.6	1600ms, 80ms/115VAC 500ms, 100ms/230VAC					
	HOLD UP TIME (Typ.)	10ms/115VAC, 230VAC					
INPUT	VOLTAGE RANGE Note.5	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%/115VC; @load≧60%/230VAC; @load≧75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)					
	EFFICIENCY (Typ.)	88%	89%	90%	90%	90%	91%
	AC CURRENT	1.7A / 115VAC 0.9A / 230VAC 0.7A/277VAC					
	INRUSH CURRENT(Typ.)	COLD START 65A(twidth=550μs 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 / 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	14 ~ 18V	28 ~ 34V	41 ~ 48V	47 ~ 54V	54 ~ 62V	59 ~ 68V
		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℃ (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)					
	MAX. CASE TEMP.	Tcase=+90℃					
	WORKING HUMIDITY	20 ~ 95% RH non-condensing					
	STORAGE TEMP., HUMIDITY	-40 ~ +80℃, 10 ~ 95% RH					
	TEMP. COEFFICIENT	±0.03%/℃ (0 ~ 60℃)					
	VIBRATION	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes					
SAFETY & EMC	SAFETY STANDARDS	UL8750(type"HL"), CSA C22.2 No. 250.13-12; ENEC EN61347-1, EN61347-2-13 independent, EN62384; GB19510.1, GB19510.14; IP65 or IP67 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℃/ 70% RH					
	EMC EMISSION	Compliance to EN55015,EN61000-3-2 Class C (@load≧60%) ; EN61000-3-3; GB17743 , GB17625.1					
	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)					
OTHERS	MTBF	899.8K hrs min. Telcordia SR-332 (Bellcore) 313.66Khrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	219*63*35.5mm (L*W*H)					
	PACKING	0.95Kg ; 16pcs/16.0kg/0.77CUFT					

NOTE

1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25℃ of ambient temperature.
2. Please refer to "DRIVING METHODS OF LED MODULE". For DA-Type, Constant Current region is 60%~100% of maximum voltage under rated power delivery.
3. Ripple & noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf & 47uf parallel capacitor.
4. Tolerance : includes set up tolerance, line regulation and load regulation.
5. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTICS" sections for details.
6. 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.
7. 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.
8. 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℃ or less.
9. Please refer to the warranty statement on MEAN WELL's website at http://www.meanwell.com