



Наличие и актуальные цены на

ELG-240-24B

<https://www.mean-well.ru/store/ELG-240-24B/>



User's Manual



IS 15885(Part 2/Sec13)



R-41027766

(Please refer safety description)



(for DA-Type only)



Features

- Constant Voltage + Constant Current mode output
- Metal housing design with functional Ground
- 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
- 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.

GTIN CODE

MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

Description

ELG-240 series is a 240W AC/DC LED driver featuring the dual mode constant voltage and constant current output. ELG-240 operates from 100~305VAC and offers models with different rated voltage ranging between 24V and 54V. Thanks to the high efficiency up to 93%, 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-240 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 - 240 - 24 [A] - []

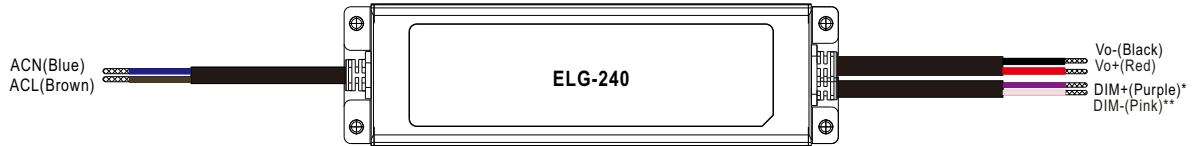
- Input wiring type { Blank:2-wire input for standard model
3Y:3-wire input for standard model
- Function mode option
- Rated output voltage(24/36/42/48/54V)
- Rated wattage
- Series name

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
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-240-24 □	ELG-240-36 □	ELG-240-42 □	ELG-240-48 □	ELG-240-54 □	
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	10A	6.66A	5.71A	5.0A	4.45A	
	RATED POWER	200VAC ~ 305VAC					
		240W	239.76W	239.82W	240W	240.3W	
		100VAC ~ 180VAC					
		180W	180W	179.76W	180W	180.36W	
	RIPPLE & NOISE (max.) <small>Note.3</small>	200mVp-p	250mVp-p	250mVp-p	250mVp-p	350mVp-p	
	VOLTAGE ADJ. RANGE	Adjustable for A/AB-Type only (via built-in potentiometer)					
		22.4 ~ 25.6V	33.5 ~ 38.5V	39 ~ 45V	44.8 ~ 51.2V	50 ~ 57V	
	CURRENT ADJ. RANGE	Adjustable for A/AB-Type only (via built-in potentiometer)					
		5 ~ 10A	3.33 ~ 6.66A	2.86 ~ 5.71A	2.5 ~ 5A	2.23 ~ 4.45A	
	VOLTAGE TOLERANCE <small>Note.4</small>	±2.0%	±2.0%	±2.0%	±2.0%	±2.0%	
	LINE REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%	
LOAD REGULATION	±0.5%	±0.5%	±0.5%	±0.5%	±0.5%		
INPUT	SETUP, RISE TIME <small>Note.6</small>	500ms, 100ms/230VAC, 1000ms, 100ms/115VAC					
	HOLD UP TIME (Typ.)	10ms/ 230VAC 10ms/ 115VAC					
	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%/115VC, 230VAC; @load≥75%/277VAC) (Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)					
	EFFICIENCY (Typ.)	92%	92%	92.5%	93%	93%	
	AC CURRENT	2.2A/ 115VAC 1.5A/ 230VAC 1.2A/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						
NO LOAD / STANDBY POWER CONSUMPTION <small>Note.7</small>	No load power consumption <0.5W for Blank / A / Dx / D-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	27 ~ 34V	42 ~ 49V	47 ~ 54V	54 ~ 63V	60 ~ 67V	
	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 ~ +90℃, 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;IEC/BS EN/EN/AS/NZS 61347-1, IEC/BS EN/EN/AS/NZS 61347-2-13 independent, BS EN/EN62384; EAC TP TC 004;BIS IS15885(for 24/24A/24B/24DA/36/36A/36B/42/42A/42B/48/48A/48B/54/54A/54ADA/54B only); GB19510.14,GB19510.1; IP65 or IP67;KC61347-1.KC61347-2-13 approved					
	DALI STANDARDS	Compliance to IEC62386-101,102,(207 by request) 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 BS EN/EN55015,BS EN/EN61000-3-2 Class C (@load ≥ 50%) ; BS EN/EN61000-3-3; GB/T 17743, GB17625.1;EAC TP TC 020; KC KN15,KN61547					
	EMC IMMUNITY	Compliance to BS EN/EN61000-4-2,3,4,5,6,8,11; BS EN/EN61547, light industry level (surge immunity Line-Earth 6KV, Line-Line 4KV);EAC TP TC 02; KC KN15,KN61547					
OTHERS	MTBF	2391.4K hrs min. Telcordia SR-332 (Bellcore) ; 190.7K hrs min. MIL-HDBK-217F (25℃)					
	DIMENSION	244*71*37.5mm (L*W*H)					
	PACKING	1.22Kg; 12pcs / 15.2Kg / 0.72CUFT					

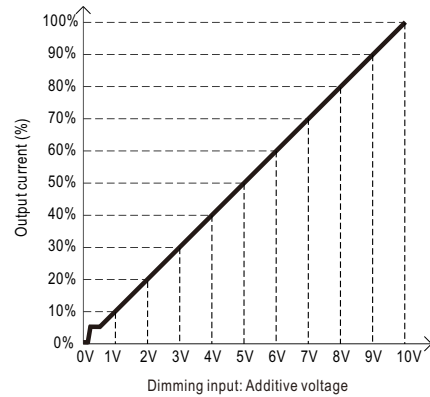
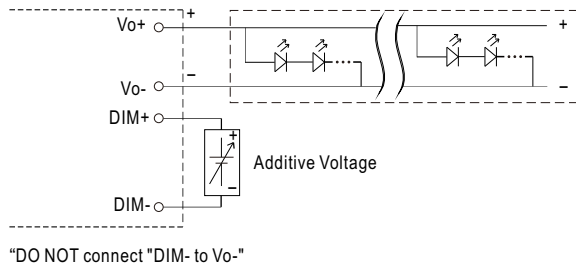
■ DIMMING OPERATION



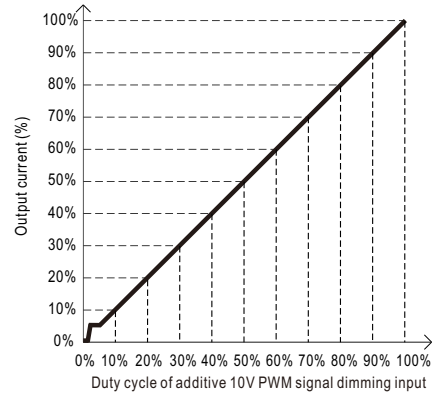
※ 3 in 1 dimming function (for B/AB-Type)

- Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-:
0 ~ 10VDC, or 10V PWM signal or resistance.
- Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers.
- Dimming source current from power supply: 100 μ A (typ.)

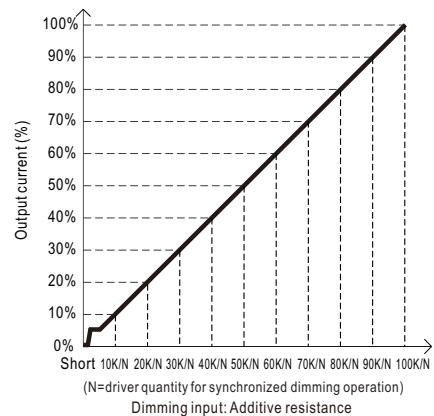
◎ Applying additive 0 ~ 10VDC



◎ Applying additive 10V PWM signal (frequency range 100Hz ~ 3KHz):



◎ Applying additive resistance:



Note : 1. Min. dimming level is about 8% and the output current is not defined when 0% < I_{out} < 8%.

2. The output current could drop down to 0% when dimming input is about 0k Ω or 0Vdc, or 10V PWM signal with 0% duty cycle.

※ DALI Interface (primary side; for DA-Type)

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

※ Smart timer dimming function (for Dxx-Type by User definition)

MEAN WELL Smart timer dimming primarily provides the adaptive proportion dimming profile for the output constant current level to perform up to 14 consecutive hours. 3 dimming profiles hereunder are defined accounting for the most frequently seen applications. If other options may be needed, please contact MEAN WELL for details.

Ex : ☉ D01-Type: the profile recommended for residential lighting



Set up for D01-Type in Smart timer dimming software program:

	T1	T2	T3	T4
TIME**	06:00	07:00	11:00	---
LEVEL**	100%	70%	50%	70%

** : TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

Example: If a residential lighting application adopts D01-Type, when turning on the power supply at 6:00pm, for instance:

- [1] The power supply will switch to the constant current level at 100% starting from 6:00pm.
- [2] The power supply will switch to the constant current level at 70% in turn, starting from 0:00am, which is 06:00 after the power supply turns on.
- [3] The power supply will switch to the constant current level at 50% in turn, starting from 1:00am, which is 07:00 after the power supply turns on.
- [4] The power supply will switch to the constant current level at 70% in turn, starting from 5:00am, which is 11:00 after the power supply turns on.

The constant current level remains till 8:00am, which is 14:00 after the power supply turns on.

Ex : ☉ D02-Type: the profile recommended for street lighting



Set up for D02-Type in Smart timer dimming software program:

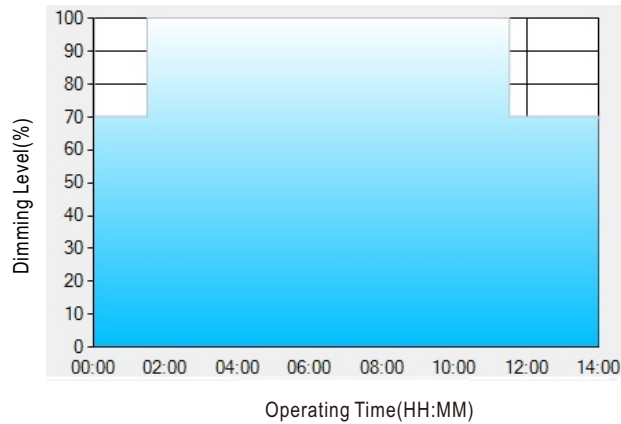
	T1	T2	T3	T4	T5
TIME**	01:00	03:00	8:00	11:00	---
LEVEL**	50%	80%	100%	60%	80%

** : TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

Example: If a street lighting application adopts D02-Type, when turning on the power supply at 5:00pm, for instance:

- [1] The power supply will switch to the constant current level at 50% starting from 5:00pm.
- [2] The power supply will switch to the constant current level at 80% in turn, starting from 6:00pm, which is 01:00 after the power supply turns on.
- [3] The power supply will switch to the constant current level at 100% in turn, starting from 8:00pm, which is 03:00 after the power supply turns on.
- [4] The power supply will switch to the constant current level at 60% in turn, starting from 1:00am, which is 08:00 after the power supply turns on.
- [5] The power supply will switch to the constant current level at 80% in turn, starting from 4:00am, which is 11:00 after the power supply turns on. The constant current level remains till 6:30am, which is 14:00 after the power supply turns on.

Ex: ☉ D03-Type: the profile recommended for tunnel lighting



Set up for D03-Type in Smart timer dimming software program:

	T1	T2	T3
TIME**	01:30	11:00	---
LEVEL**	70%	100%	70%

** : TIME matches Operating Time in the diagram whereas LEVEL matches Dimming Level.

Example: If a tunnel lighting application adopts D03-Type, when turning on the power supply at 4:30pm, for instance:

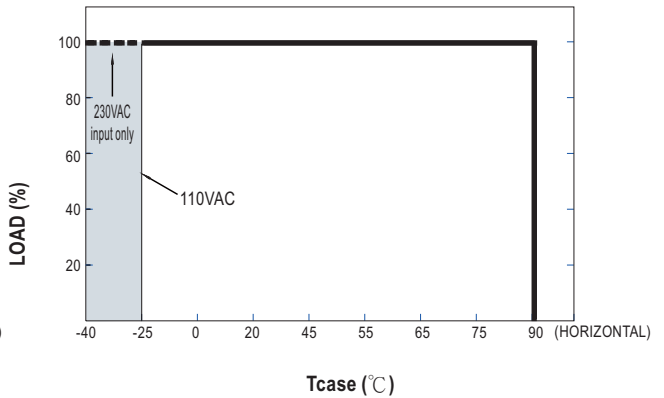
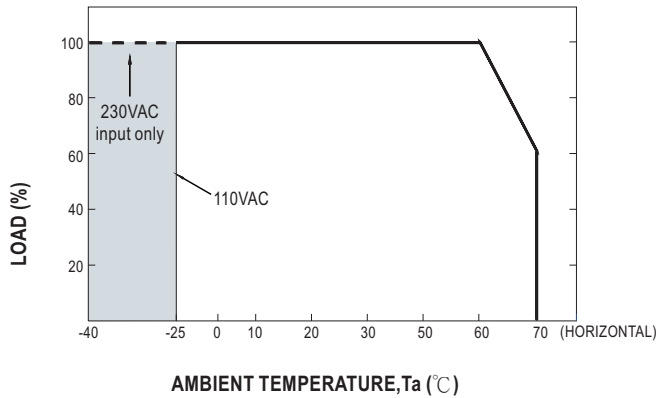
[1] The power supply will switch to the constant current level at 70% starting from 4:30pm.

[2] The power supply will switch to the constant current level at 100% in turn, starting from 6:00pm, which is 01:30 after the power supply turns on.

[3] The power supply will switch to the constant current level at 70% in turn, starting from 5:00am, which is 11:00 after the power supply turns on.

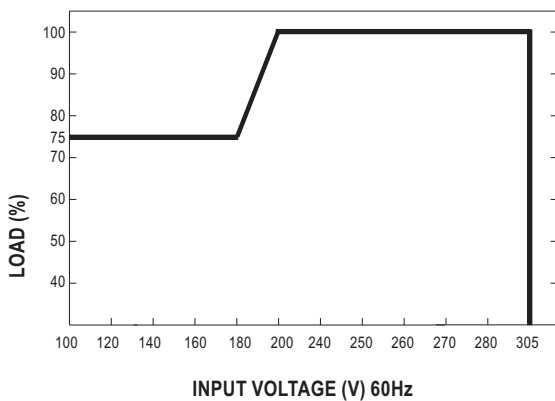
The constant current level remains till 6:30am, which is 14:00 after the power supply turns on.

■ OUTPUT LOAD vs TEMPERATURE(Note.10)



⊙ If ELG-240 operates in Constant Current mode with the rated current, the maximum workable T_a is 60°C.

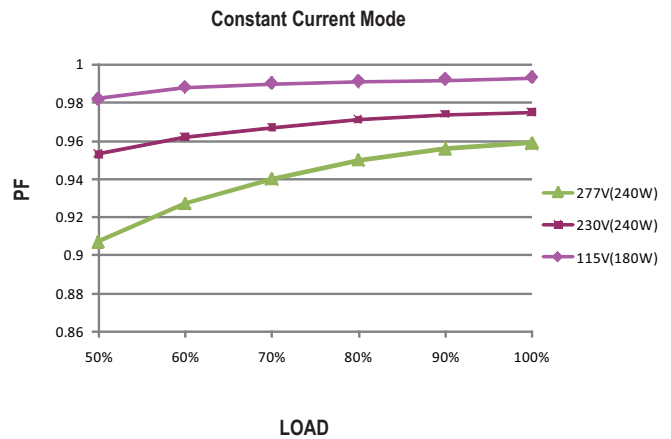
■ STATIC CHARACTERISTIC



※ De-rating is needed under low input voltage.

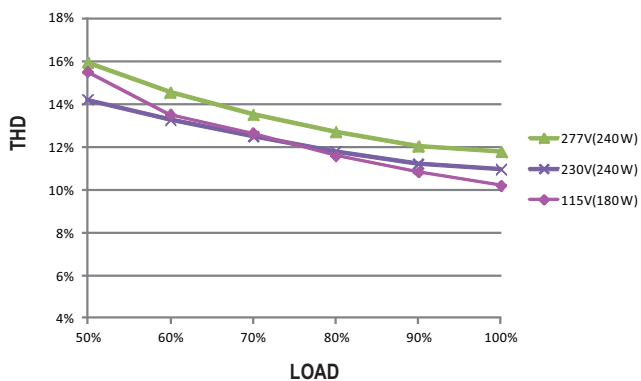
■ POWER FACTOR (PF) CHARACTERISTIC

※ T_{case} at 80°C



■ TOTAL HARMONIC DISTORTION (THD)

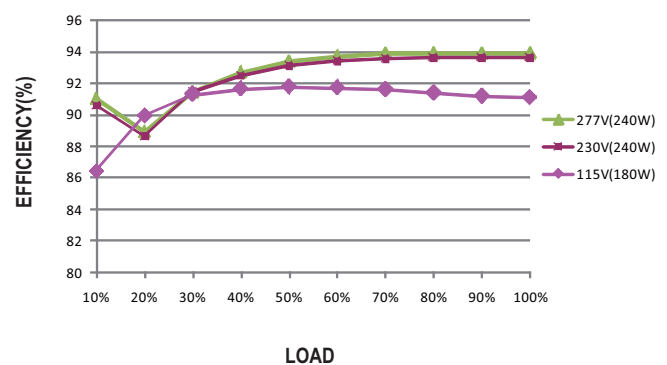
※ 48V Model, T_{case} at 80°C



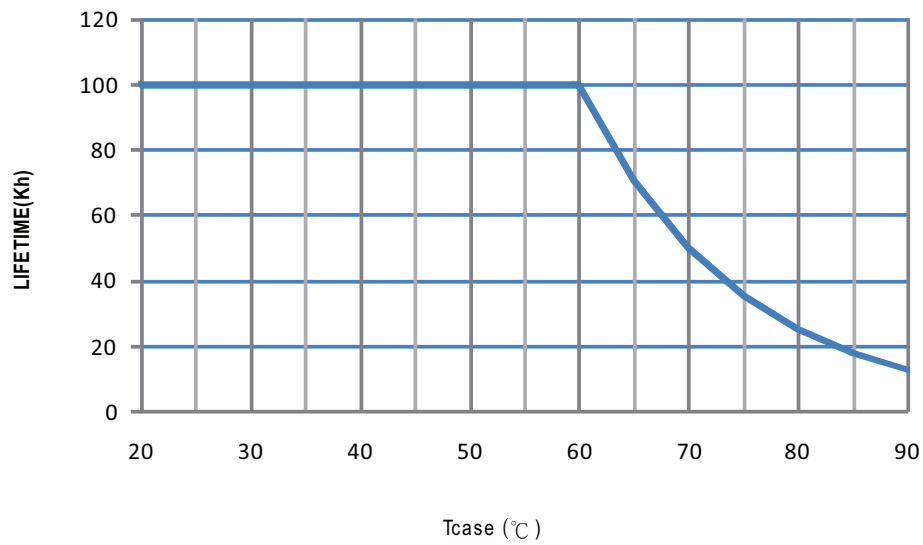
■ EFFICIENCY vs LOAD

ELG-240 series possess superior working efficiency that up to 93% can be reached in field applications.

※ 48V Model, T_{case} at 80°C



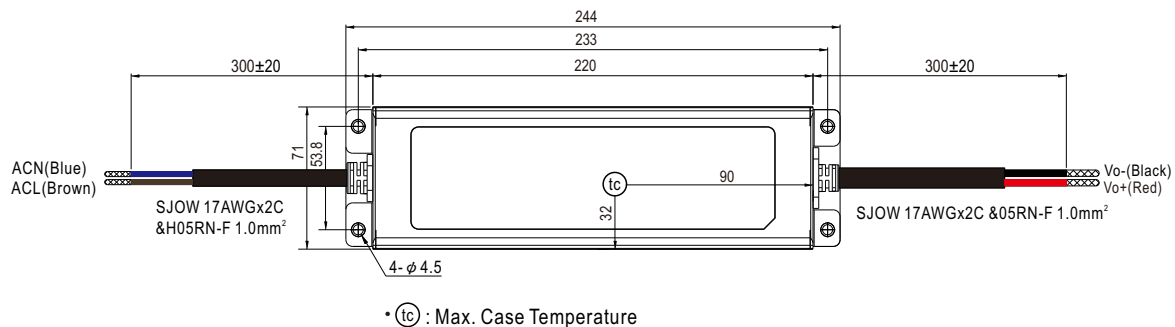
■ LIFE TIME



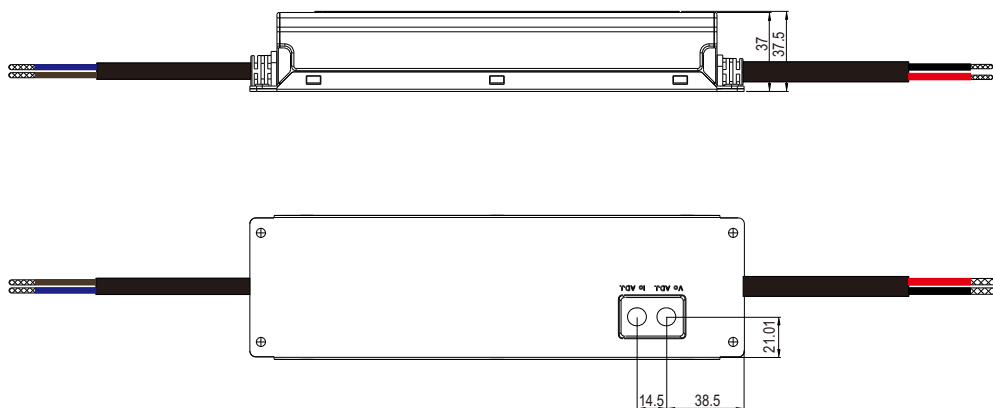
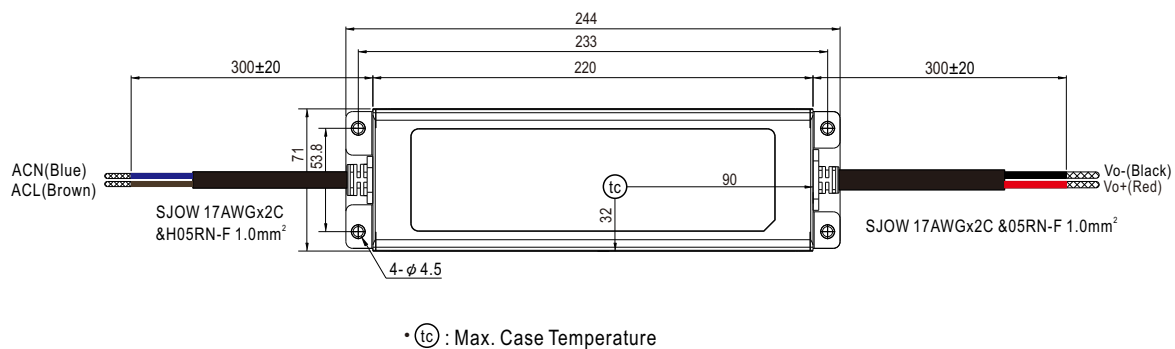
MECHANICAL SPECIFICATION

※ Blank-Type

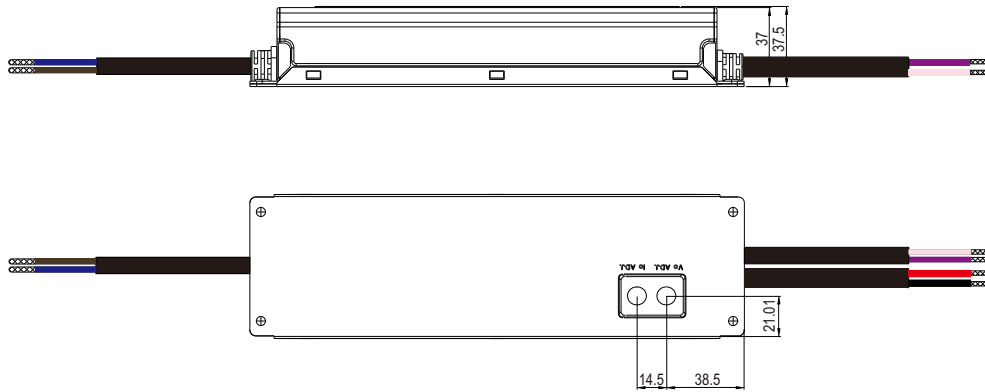
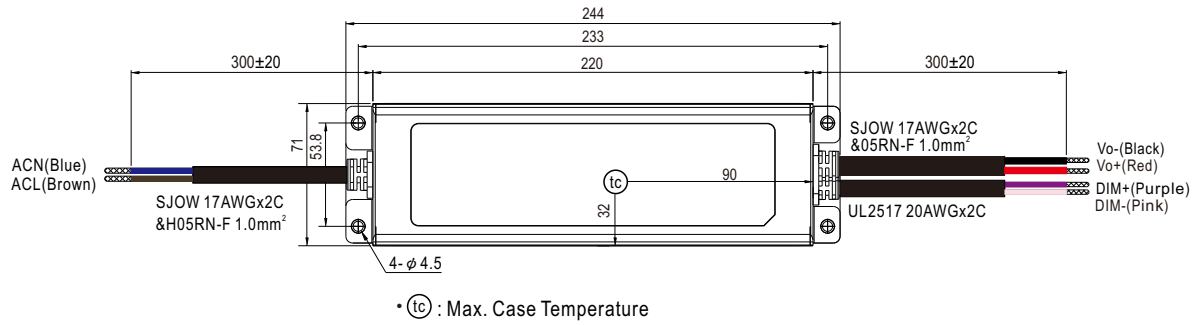
CASE NO.: 262A Unit:mm Tolerance:±1



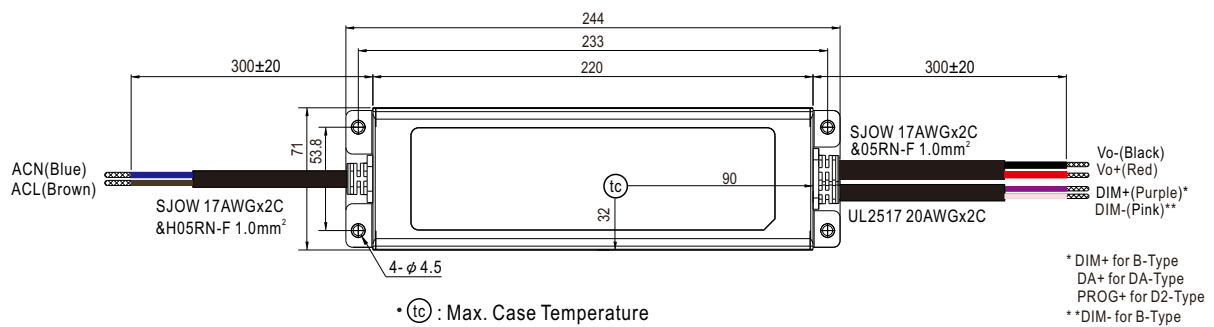
※ A-Type



※ AB-Type

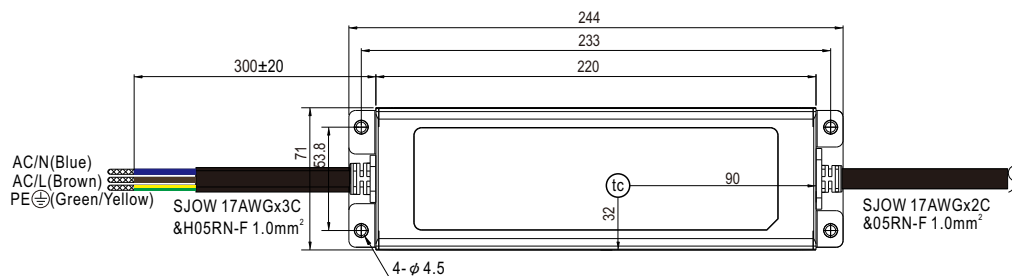


※ B/DA/D2-Type



* DIM+ for B-Type
DA+ for DA-Type
PROG+ for D2-Type
** DIM- for B-Type
DA- for DA-Type
PROG- for D2-Type

※ 3Y Model (3-wire input)

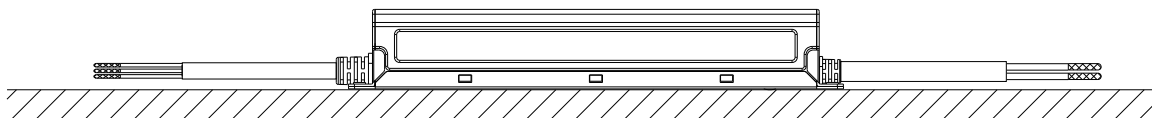


• t_c : Max. Case Temperature

○ 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.

■ Recommend Mounting Direction



■ INSTALLATION MANUAL

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