



Click Me



IS 15885 (Part 2/Sec13)

R-41027766

(Please refer safety description)



(for DA-Type only)



IP65 IP67



## Features

- 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 harbor lighting
- LED bay lighting
- LED greenhouse lighting
- LED flood lighting
- Type "HL" for use in Class I, Division 2 hazardous (Classified) location.

## GTIN CODE

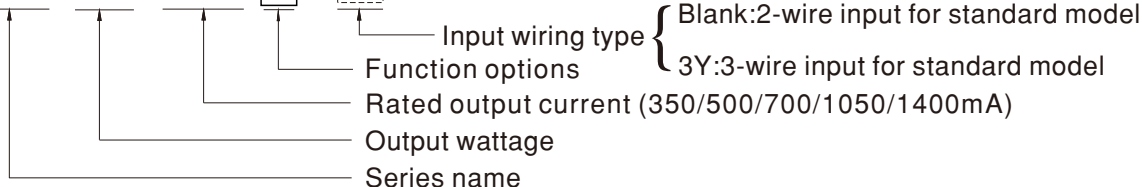
MW Search: <https://www.meanwell.com/serviceGTIN.aspx>

## Description

ELG-75-C series is a 75W LED AC/DC driver featuring the constant current mode and high voltage output. ELG-75-C operates from 100~305VAC and offers models with different rated current ranging between 350mA and 1400mA. Thanks to the high efficiency up to 91%, with the fanless design, the entire series is able to operate for -40°C~+85°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-75-C 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 - 75 - C500 A -

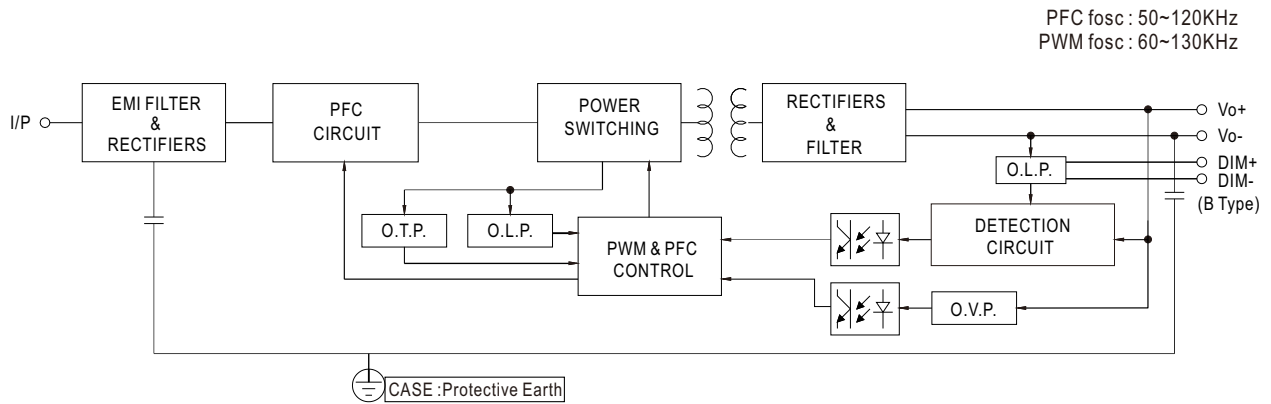


| Type  | IP Level | Function                                                                                                        | Note     |
|-------|----------|-----------------------------------------------------------------------------------------------------------------|----------|
| Blank | IP67     | Io fixed.                                                                                                       | In Stock |
| A     | IP65     | Io 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 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 |

**SPECIFICATION**

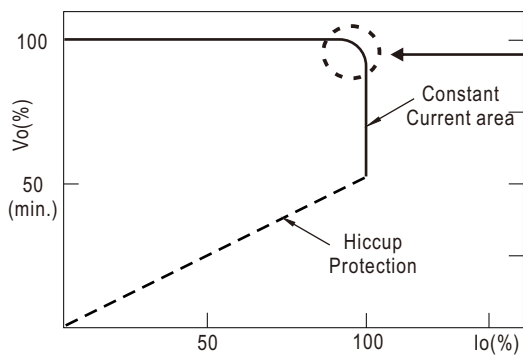
| MODEL                               |                                                                                                             | ELG-75-C350                                                                                                                                                                                                                                                 | ELG-75-C500 | ELG-75-C700 | ELG-75-C1050 | ELG-75-C1400 |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|-------------|--------------|--------------|
| OUTPUT                              | RATED CURRENT                                                                                               | 350mA                                                                                                                                                                                                                                                       | 500mA       | 700mA       | 1050mA       | 1400mA       |
|                                     | RATED POWER <div>Note.5</div>                                                                               | 200VAC ~ 305VAC                                                                                                                                                                                                                                             |             |             |              |              |
|                                     |                                                                                                             | 74.9W                                                                                                                                                                                                                                                       | 75W         | 74.9W       | 74.55W       | 75.6W        |
|                                     |                                                                                                             | 100VAC ~ 180VAC                                                                                                                                                                                                                                             |             |             |              |              |
|                                     | 59.85W                                                                                                      | 60W                                                                                                                                                                                                                                                         | 59.5W       | 59.85W      | 60.2W        |              |
|                                     | CONSTANT CURRENT REGION <div>Note.2</div>                                                                   | 107 ~ 214V                                                                                                                                                                                                                                                  | 75 ~ 150V   | 53 ~ 107V   | 35 ~ 71V     | 27 ~ 54V     |
|                                     | OPEN CIRCUIT VOLTAGE(max.)                                                                                  | 224V                                                                                                                                                                                                                                                        | 158V        | 114V        | 78V          | 61V          |
|                                     | CURRENT ADJ. RANGE                                                                                          | Adjustable for A/AB-Type only (via built-in potentiometer)                                                                                                                                                                                                  |             |             |              |              |
|                                     |                                                                                                             | 175 ~ 350mA                                                                                                                                                                                                                                                 | 250 ~ 500mA | 350 ~ 700mA | 525 ~ 1050mA | 700 ~ 1400mA |
| CURRENT RIPPLE                      | 5.0% max. @rated current                                                                                    |                                                                                                                                                                                                                                                             |             |             |              |              |
| CURRENT TOLERANCE                   | ±5.0%                                                                                                       |                                                                                                                                                                                                                                                             |             |             |              |              |
| SET UP TIME <div>Note.4</div>       | 500ms/115VAC,230VAC                                                                                         |                                                                                                                                                                                                                                                             |             |             |              |              |
| INPUT                               | VOLTAGE RANGE <div>Note.3</div>                                                                             | 100 ~ 305VAC      142 ~ 431VDC<br>(Please refer to "STATIC CHARACTERISTIC" section)                                                                                                                                                                         |             |             |              |              |
|                                     | FREQUENCY RANGE                                                                                             | 47 ~ 63Hz                                                                                                                                                                                                                                                   |             |             |              |              |
|                                     | POWER FACTOR (Typ.)                                                                                         | PF ≥ 0.97/115VAC, PF ≥ 0.95/230VAC, PF ≥ 0.92/277VAC@full load<br>(Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)                                                                                                                              |             |             |              |              |
|                                     | TOTAL HARMONIC DISTORTION                                                                                   | THD< 20%(@load≥50%/115VC,230VAC; @load≥75%/277VAC)<br>(Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)                                                                                                                                            |             |             |              |              |
|                                     | EFFICIENCY (Typ.)                                                                                           | 91%                                                                                                                                                                                                                                                         | 91%         | 91%         | 90%          | 90%          |
|                                     | AC CURRENT (Typ.)                                                                                           | 0.7A / 115VAC    0.45A / 230VAC    0.38A/277VAC                                                                                                                                                                                                             |             |             |              |              |
|                                     | INRUSH CURRENT(Typ.)                                                                                        | COLD START 50A(twidth=350μs measured at 50% Ipeak)/230VAC; Per NEMA 410                                                                                                                                                                                     |             |             |              |              |
|                                     | MAX. No. of PSUs on 16A CIRCUIT BREAKER                                                                     | 5 units (circuit breaker of type B) / 8 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-Type<br>Standby power consumption <0.5W for B / AB / DA -Type |                                                                                                                                                                                                                                                             |             |             |              |              |
| PROTECTION                          | SHORT CIRCUIT                                                                                               | Hiccup mode, recovers automatically after fault condition is removed                                                                                                                                                                                        |             |             |              |              |
|                                     | OVER VOLTAGE                                                                                                | 225 ~ 260V                                                                                                                                                                                                                                                  | 160 ~ 190V  | 115 ~ 140V  | 80 ~ 100V    | 64 ~ 79V     |
|                                     | OVER TEMPERATURE                                                                                            | Shut down o/p voltage, re-power on to recover                                                                                                                                                                                                               |             |             |              |              |
| ENVIRONMENT                         | WORKING TEMP.                                                                                               | Tcase=-40 ~ +85℃ (Please refer to " OUTPUT LOAD vs TEMPERATURE" section)                                                                                                                                                                                    |             |             |              |              |
|                                     | MAX. CASE TEMP.                                                                                             | Tcase=+85℃                                                                                                                                                                                                                                                  |             |             |              |              |
|                                     | 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;BS EN/EN/AS/NZS 61347-1, BS EN/EN/AS/NZS 61347-2-13 independent, BS EN/EN62384;EAC TP TC 004;BIS IS15885(for 700A/700B/700DA/1050A only);IP65 or IP67; GB/T19510.1, GB/T19510.213;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                                                                                                              |             |             |              |              |
| OTHERS                              | 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 020; KC KN15 ,KN61547                                                                                            |             |             |              |              |
|                                     | MTBF                                                                                                        | 3523.7K hrs min. Telcordia SR-332 (Bellcore)      305.3Khrs min.      MIL-HDBK-217F (25℃)                                                                                                                                                                   |             |             |              |              |
|                                     | DIMENSION                                                                                                   | 180*63*35.5 mm (L*W*H)                                                                                                                                                                                                                                      |             |             |              |              |
|                                     | PACKING                                                                                                     | 0.8Kg;16pcs/13.4Kg/0.67CUFT                                                                                                                                                                                                                                 |             |             |              |              |

## BLOCK DIAGRAM



## DRIVING METHODS OF LED MODULE

※ This series works in constant current mode to directly drive the LEDs.



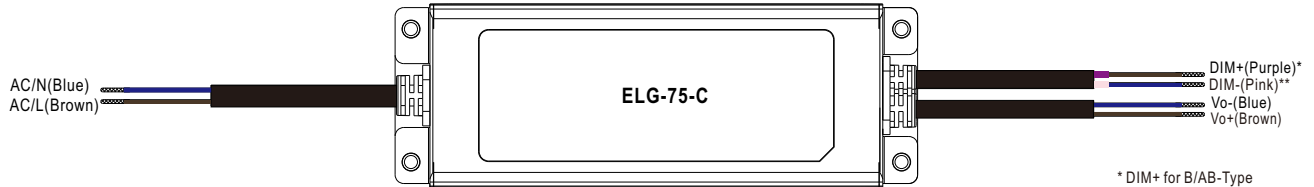
Typical output current normalized by rated current (%)

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

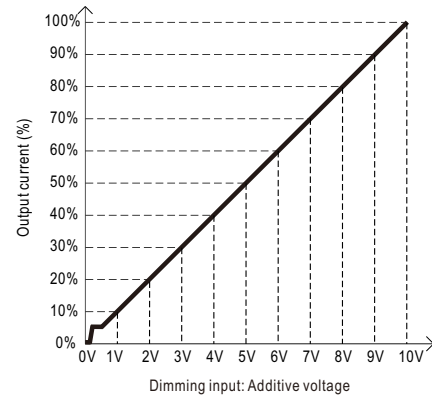
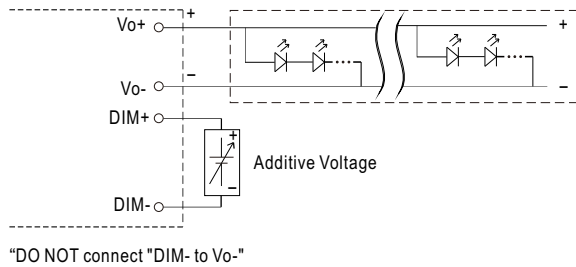
※ 3 in 1 dimming function (for B/AB-Type)



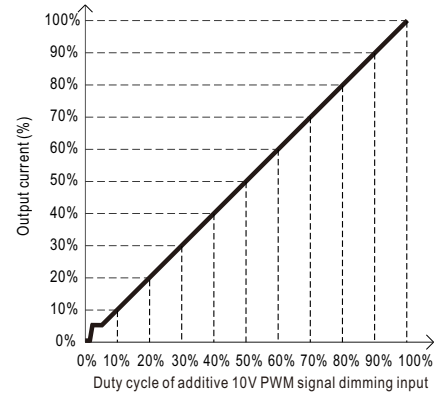
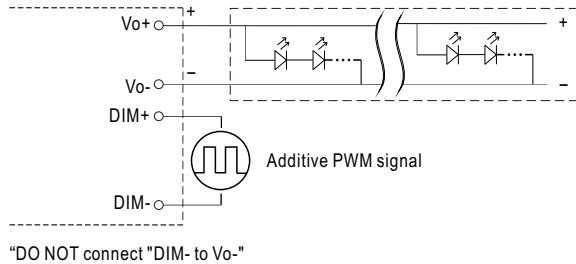
\* DIM+ for B/AB-Type  
DA+ for DA-Type  
\* DIM- for B/AB-Type  
DA- for DA-Type

- 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 $\mu$ A (typ.)

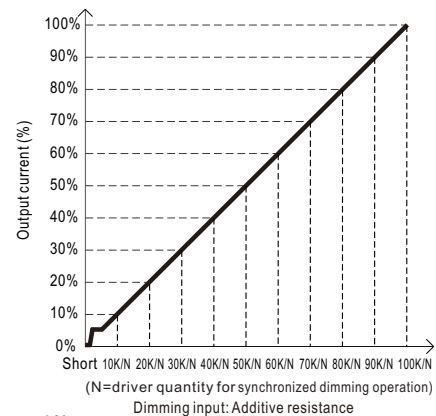
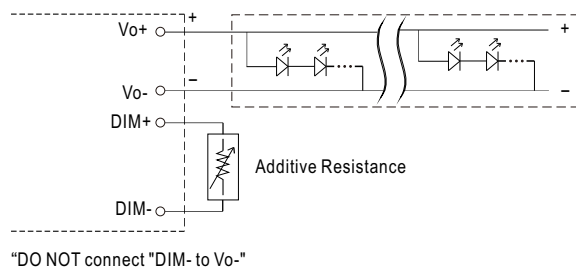
◎ Applying additive 0 ~ 10VDC



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



◎ Applying additive resistance:



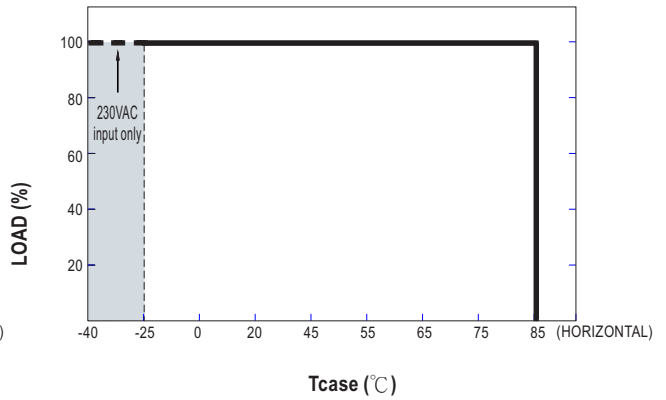
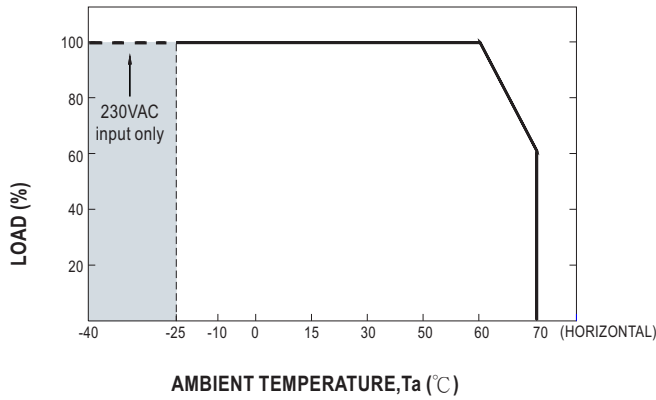
Note : 1. Min. dimming level is about 8% and the output current is not defined when  $0\% < I_{out} < 8\%$ .

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

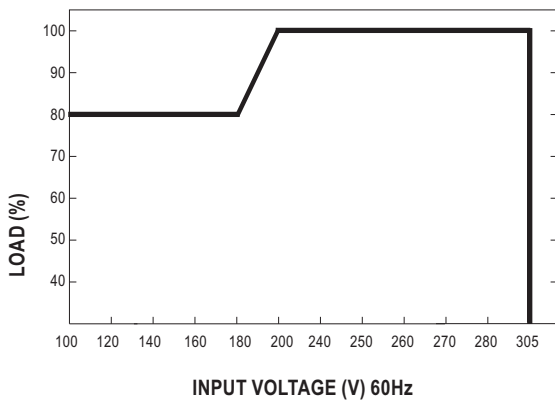
※ DALI Interface (primary side; for DA-Type)

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

### ■ OUTPUT LOAD vs TEMPERATURE(Note.7)



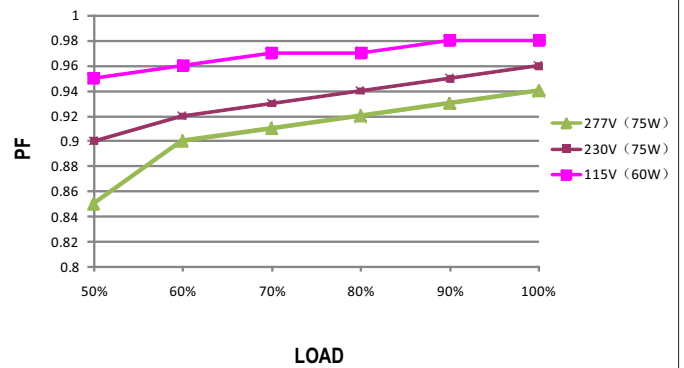
### ■ STATIC CHARACTERISTIC



※ De-rating is needed under low input voltage.

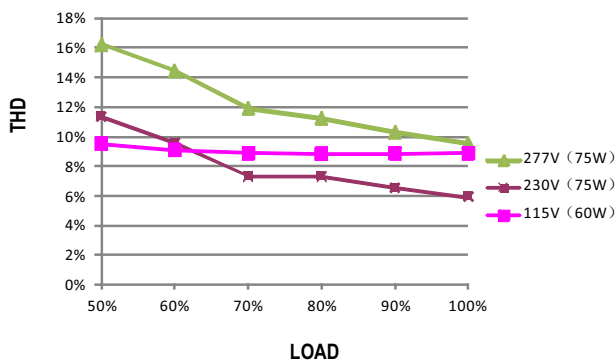
### ■ POWER FACTOR (PF) CHARACTERISTIC

※  $T_{case}$  at 75°C



### ■ TOTAL HARMONIC DISTORTION (THD)

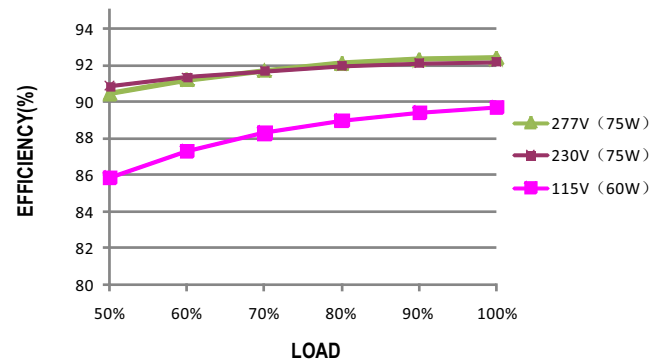
※ 350mA Model,  $T_{case}$  at 75°C



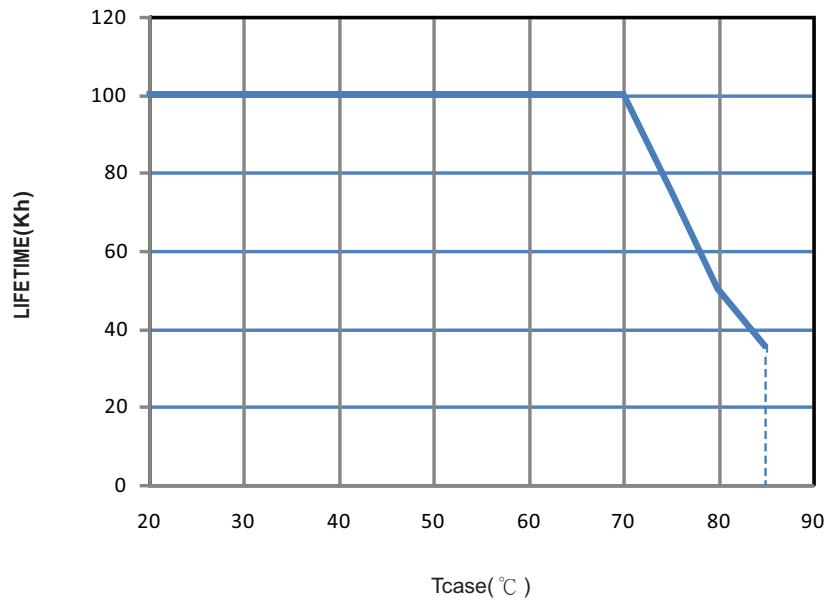
### ■ EFFICIENCY vs LOAD

ELG-75-C series possess superior working efficiency that up to 91% can be reached in field applications.

※ 350mA Model,  $T_{case}$  at 75°C



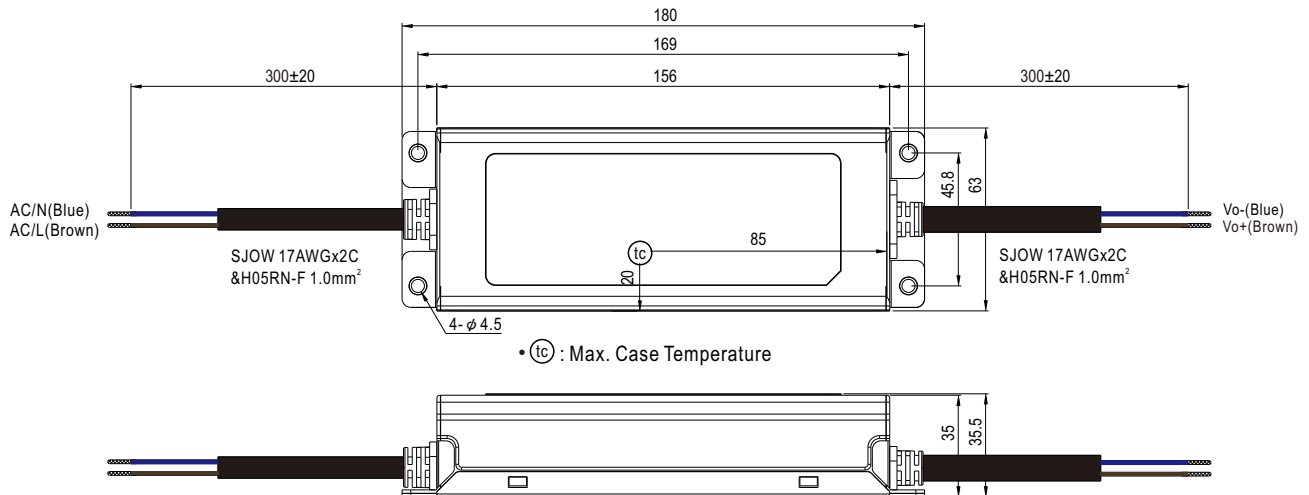
■ LIFE TIME



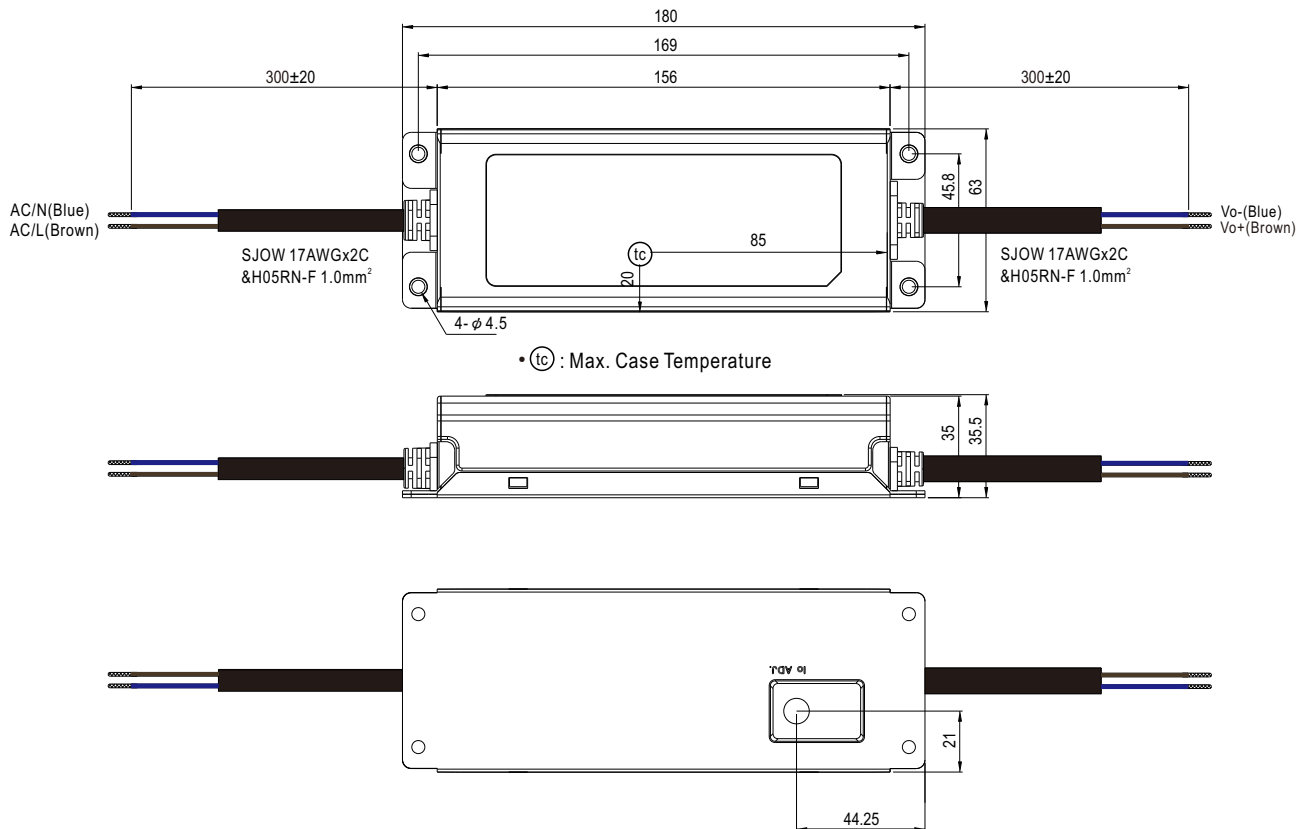
# MECHANICAL SPECIFICATION

※ Blank-Type

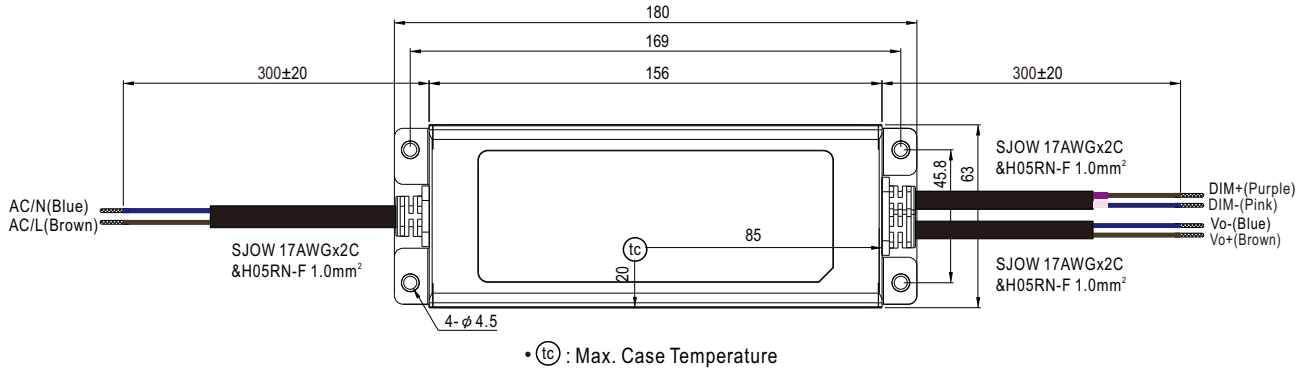
CASE NO.: 243A Unit:mm Tolerance:±1



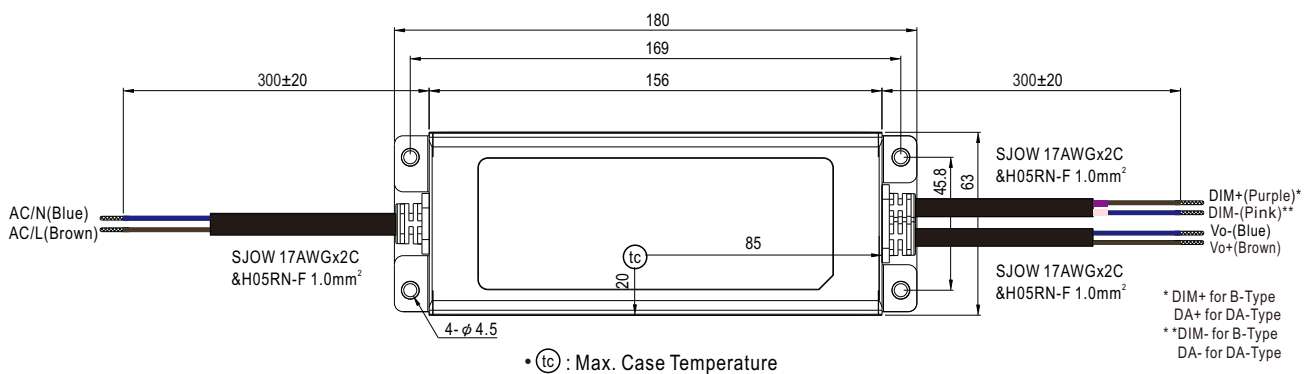
※ A-Type



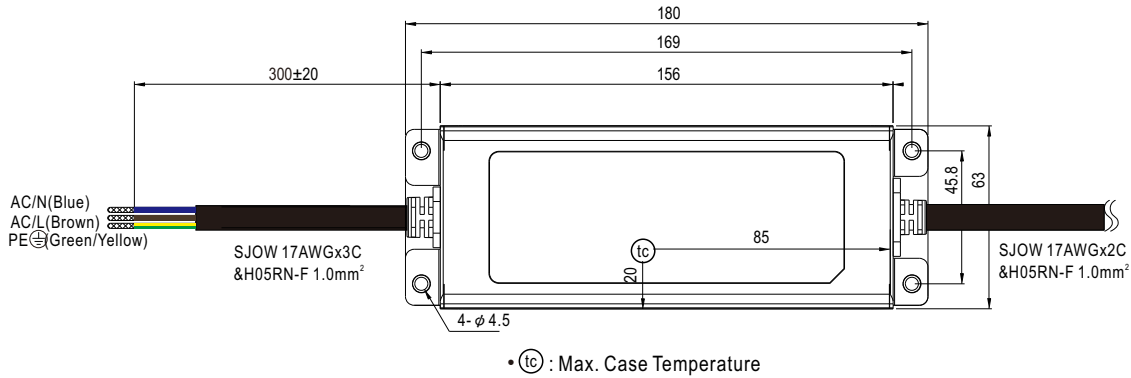
※ AB-Type



※ B/DA-Type

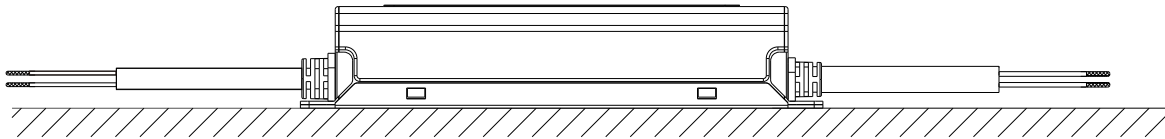


※ 3Y Model (3-wire input)



- ◎ 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



 [www.simpex.ch](http://www.simpex.ch)

Besuchen Sie unseren Simpex E-Shop  
mit über 12'000 Produkten.

Er bietet Ihnen eine breite Funktionsvielfalt, sowie intelligente  
Suchfunktionen. Ob Sie den Shop als Einkaufsplattform oder als  
Produktfinder nutzen – im Simpex E-Shop haben Sie alle Infor-  
mationen schnell und tagesaktuell zur Hand.

24h und das 365 Tage im Jahr.



## Hauptsitz

### **Simpex Electronic AG**

Binzackerstrasse 33

CH-8620 Wetzikon

Telefon +41 44 931 10 10

E-Mail [contact@simpex.ch](mailto:contact@simpex.ch)

Internet [www.simpex.ch](http://www.simpex.ch)