

Наличие и актуальные цены на

# ELG-240-C700DA-3Y

https://www.meanwell.ru/store/ELG-240-C700DA-3Y/



178.5~240W Constant Current Mode LED Driver **ELG-240-C** series





### Features

- Constant Current mode output
- Metal housing design with functional Ground
- Built-in active PFC function
- No load / Standby power consumption <0.5W</li>
- · 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 greenhouse lighting

LED bay lighting

LED flood lighting

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

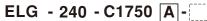
• Type "HL" for use in Class I, Division 2

hazardous (Classified) location.

### Description

ELG-240-C series is a 240W LED AC/DC driver featuring the constant current mode and high voltage output. ELG-240-C operates from 100~305VAC and offers models with different rated current ranging between 700mA and 2100mA. Thanks to the high efficiency up to 93%, with the fanless design, the entire series is able to operate for  $-40^{\circ}C + 85^{\circ}C$  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-240-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



Blank:2-wire input for standard model

- Function options
- Rated output current (700/1050/1400/1750/2100mA)
- Output wattage
- Series name

| Туре  | IP Level | Function  | Note       |
|-------|----------|---|------------|
| Blank | IP67     | lo fixed.   | In Stock   |
| A     | IP65     | lo adjustable through built-in potentiometer.   | In Stock   |
| В     | 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   |
| 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

| -         | RATED CURRENT   | 700mA   |                           |                         |                |               |  |  |
|-----------|---|---|---------------------------|-------------------------|----------------|---------------|--|--|
| -         |   | TUUIIIA   | 1050mA                    | 1400mA                  | 1750mA         | 2100mA        |  |  |
|           |   | 200VAC ~ 305VAC   |                           |                         |                |               |  |  |
|           | RATED POWER   | 240.1W  | 239.4W                    | 239.4W                  | 239.75W        | 241.5W        |  |  |
|           |   | 100VAC ~ 180VAC   |                           |                         |                |               |  |  |
| -         |   | 179.9W  | 179.55W                   | 179.2W                  | 178.5W         | 180.6W        |  |  |
|           | CONSTANT CURRENT REGION Note.2  | 172 ~ 343V  | 114 ~ 228V                | 86 ~ 171V               | 69 ~ 137V      | 57 ~ 115V     |  |  |
|           | OPEN CIRCUIT VOLTAGE(max.)  | 360V  | 239V                      | 180V                    | 144V           | 120V          |  |  |
| ουτρυτ    |   | Adjustable for A/AB-T   | ype only (via built-in po | tentiometer)            |                |               |  |  |
|           | CURRENT ADJ. RANGE  | 350 ~ 700mA   | 525 ~ 1050mA              | 700 ~ 1400mA            | 875 ~ 1750mA   | 1050 ~ 2100mA |  |  |
|           | CURRENT RIPPLE  | 5.0% max. @rated cu   | rrent                     | -                       | 1              | 8             |  |  |
|           | CURRENT TOLERANCE   | ±5.0%   |                           |                         |                |               |  |  |
|           | SET UP TIME Note.4  | 800ms/115VAC, 500ms/230VAC  |                           |                         |                |               |  |  |
|           | VOLTAGE RANGE Note.3  | 100 ~ 305VAC 142 ~ 431VDC<br>(Please refer to "STATIC CHARACTERISTIC" section)  |                           |                         |                |               |  |  |
|           | FREQUENCY RANGE   | 47 ~ 63Hz   |                           |                         |                |               |  |  |
|           |   | PF ≥ 0.97/115VAC, PF ≥ 0.95/230VAC, PF ≥ 0.92/277VAC@full load  |                           |                         |                |               |  |  |
| -         | POWER FACTOR (Typ.)   | (Please refer to "POWER FACTOR (PF) CHARACTERISTIC" section)  |                           |                         |                |               |  |  |
| INPUT     | TOTAL HARMONIC DISTORTION   | THD< 20%(@load≧50%/115VC,230VAC; @load≧75%/277VAC)<br>(Please refer to "TOTAL HARMONIC DISTORTION(THD)" section)  |                           |                         |                |               |  |  |
| -         | EFFICIENCY (Typ.)   | 93%   | 93%                       | 93%                     | 93%            | 93%           |  |  |
| -         | AC CURRENT (Typ.)   |   | A / 230VAC 1.2A/27        |                         |                |               |  |  |
|           | INRUSH CURRENT(Typ.)  | COLD START 75A(tw   | idth=450 $\mu$ s measured | at 50% Ipeak)/230VAC;   | Per NEMA 410   |               |  |  |
|           | MAX. No. of PSUs on 16A<br>CIRCUIT BREAKER  | 2 units (circuit breaker of type B) / 4 units (circuit breaker of type C) at 230VAC   |                           |                         |                |               |  |  |
| Ē         | LEAKAGE CURRENT   | <0.75mA / 277VAC  |                           |                         |                |               |  |  |
|           | NO LOAD / STANDBY<br>POWER CONSUMPTION  | No load power consumption <0.5W for Blank / A / Dx / D2-Type<br>Standby power consumption <0.5W for B / AB / DA-Type  |                           |                         |                |               |  |  |
|           | SHORT CIRCUIT   |   |                           | ult condition is remove | d              |               |  |  |
|           |   | 380 ~ 435V  | 250 ~ 290V                | 192 ~ 216V              |                | 128~156V      |  |  |
| ROTECTION | OVER VOLTAGE  |   | e, re-power on to reco    |                         |                | 001           |  |  |
|           | OVER TEMPERATURE  |   | e, re-power on to reco    |                         |                |               |  |  |
|           | WORKING TEMP.   |   |                           | JT LOAD vs TEMPERA      | TURE" section) |               |  |  |
| -         | MAX. CASE TEMP.   | Tcase=+85℃  |                           |                         |                |               |  |  |
| -         | WORKING HUMIDITY  | 20 ~ 95% RH non-condensing  |                           |                         |                |               |  |  |
|           | STORAGE TEMP., HUMIDITY   |   |                           |                         |                |               |  |  |
| F         | TEMP. COEFFICIENT   |   |                           |                         |                |               |  |  |
| -         | VIBRATION   | ±0.03%/°C (0 ~ 60°C)<br>10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes   |                           |                         |                |               |  |  |
|           | 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; GB19510.14,GB19510.1;BIS IS15885(for 700A/1050A only);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  |                           |                         |                |               |  |  |
| EMC       | ISOLATION RESISTANCE  | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / 25°C/ 70% RH   |                           |                         |                |               |  |  |
| -         | EMC EMISSION  | Compliance to BS EN/EN55015,BS EN/EN61000-3-2 Class C (@load ≥ 50%) ; BS EN/EN61000-3-3;<br>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:<br>Line-Earth:6KV,Line-Line:4KV);EAC TP TC 020; KC KN15, KN61547  |                           |                         |                |               |  |  |
| H         | MTBF  | 2730.9K hrs min. Telcordia SR-332 (Bellcore) ; 235K hrs min. MIL-HDBK-217F ( $25^{\circ}$ C)  |                           |                         |                |               |  |  |
|           | DIMENSION   | 244*71*37.5 mm (L*V   | 1                         |                         |                |               |  |  |
|           | PACKING   | 1.22Kg; 12pcs /15.2k  | •                         |                         |                |               |  |  |
| NOTE      | <ol> <li>Please refer to "DRIVING ME"</li> <li>De-rating may be needed und</li> <li>Length of set up time is measu</li> <li>The driver is considered as a d<br/>complete installation, the final<br/>(as available on https://www.m</li> <li>This series meets the typical li</li> <li>Please refer to the warranty st</li> <li>The ambient temperature dera</li> <li>For any application note and II<br/>https://www.meanwell.com/Upl</li> </ol> | under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.<br>easured at first cold start. Turning ON/OFF the power supply may lead to increase of the set up time.<br>s a component that will be operated in combination with final equipment. Since EMC performance will be affected by the<br>nal equipment manufacturers must re-qualify EMC Directive on the complete installation again.<br>w.meanwell.com//Upload/PDF/EMI_statement_en.pdf)<br>al life expectancy of >50,000 hours of operation when Tcase, particularly (c) point (or TMP, per DLC), is about 80°C or less.<br>ty statement on MEAN WELL's website at http://www.meanwell.com.<br>derating of 3.5°C/1000m with fanless models and of 5°C/1000m with fan models for operating altitude higher than 2000m(6500ft).<br>d IP water proof function installation caution, please refer our user manual before using. |                           |                         |                |               |  |  |

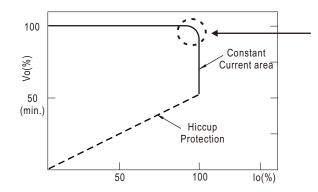


# ELG-240-C series

#### BLOCK DIAGRAM PFC fosc: 50~120KHz PWM fosc: 60~130KHz EMI FILTER RECTIFIERS POWER 3 PFC -0 Vo+ I/P C & FILTER & SWITCHING CIRCUIT 3 -O Vo-RECTIFIERS -0 DIM+ -0 DIM-O.L.P. (B Type) 0.T.P. O.L.P. DETECTION PWM & PFC CIRCUIT CONTROL PFC CONTROL O.V.P. 1 CASE : Protective Earth

### ■ DRIVING METHODS OF LED MODULE

 $\,$   $\!$   $\!$   $\!$  This series works in constant current mode to directly drive the LEDs.

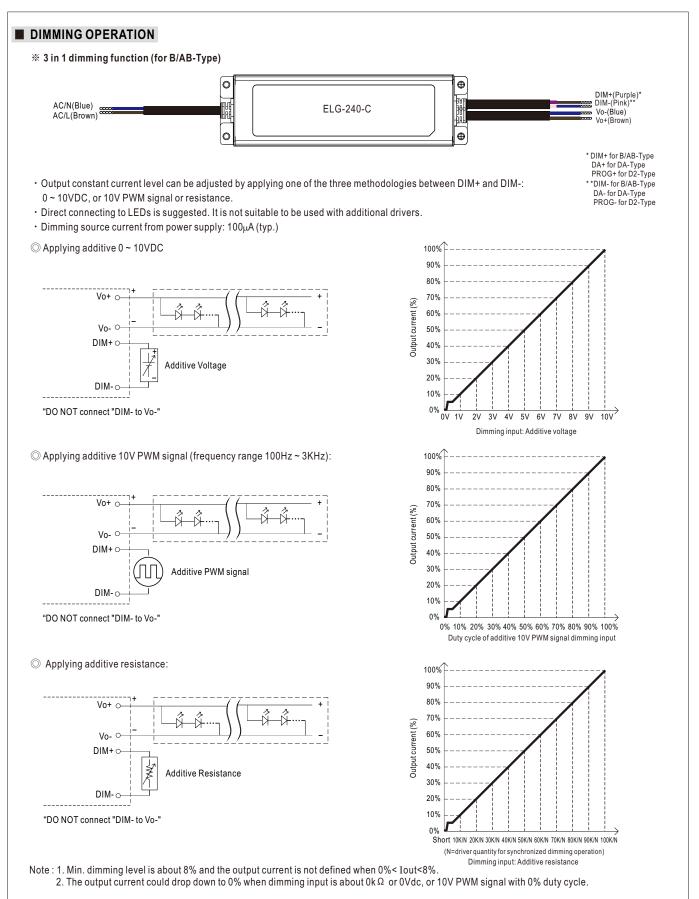


Typical output current normalized by rated current (%)

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.







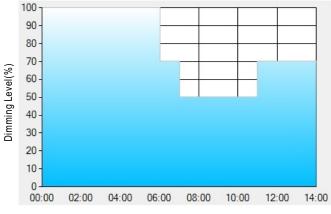
#### ※ DALI Interface (primary side; for DA-Type)

- 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 : O D01-Type: the profile recommended for residential lighting



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

|         | T1    | T2    | Т3    | Τ4  |
|---------|-------|-------|-------|-----|
| TIME**  | 06:00 | 07:00 | 11:00 |     |
| LEVEL** | 100%  | 70%   | 50%   | 70% |

#### Operating Time(HH:MM)

\*\*: 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: O D02-Type: the profile recommended for street lighting



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

|         | T1    | T2    | Т3   | 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.

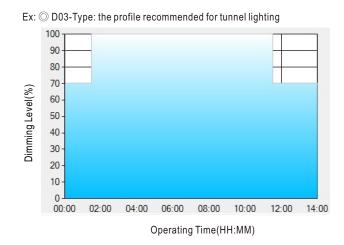
[2] The power supply will switch to the constant current level at 80% in turn, starting from 6:00pm, which is 01:00 after the power supply turns on.

[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.





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

|         | T1    | T2    | Т3  |
|---------|-------|-------|-----|
| 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:

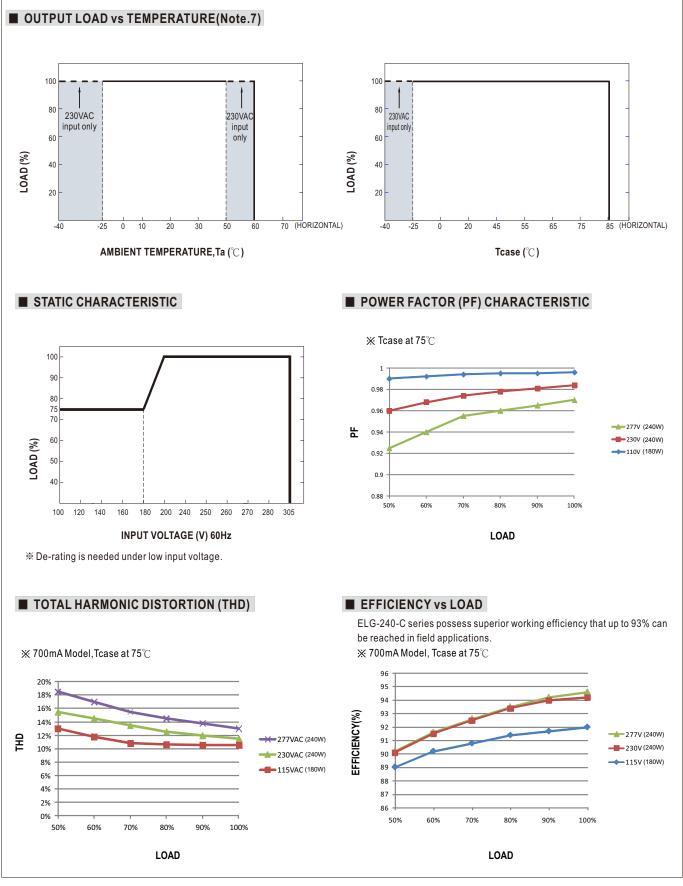
[1] The power supply will switch to the constant current level at 70% starting from 4:30pm.

[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.

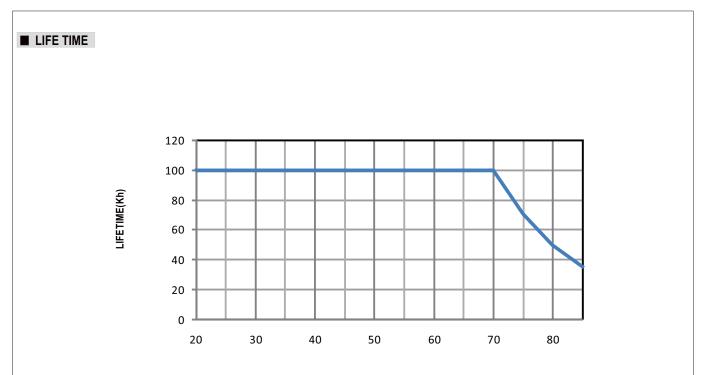


ELG-240-C series



File Name:ELG-240-C-SPEC 2024-09-19









#### MECHANICAL SPECIFICATION

