



## ■ Features


- Wide input range 100~305VAC( Class I )
- Metal case with IP67, suitable for outdoor application
- Surge protection with 6KV/4KV
- Protection functions: OVP/SCP/OCP/OTP
- Life time >50,000 hrs. and 5 years warranty

## ■ Applications

- Skyscraper lighting
- Street lighting
- Floodlight Lighting
- Stage lighting
- Fishing lighting
- Horticulture lighting
- Bay lighting
- DMX power supply
- Type HL for use in class I , Division 2

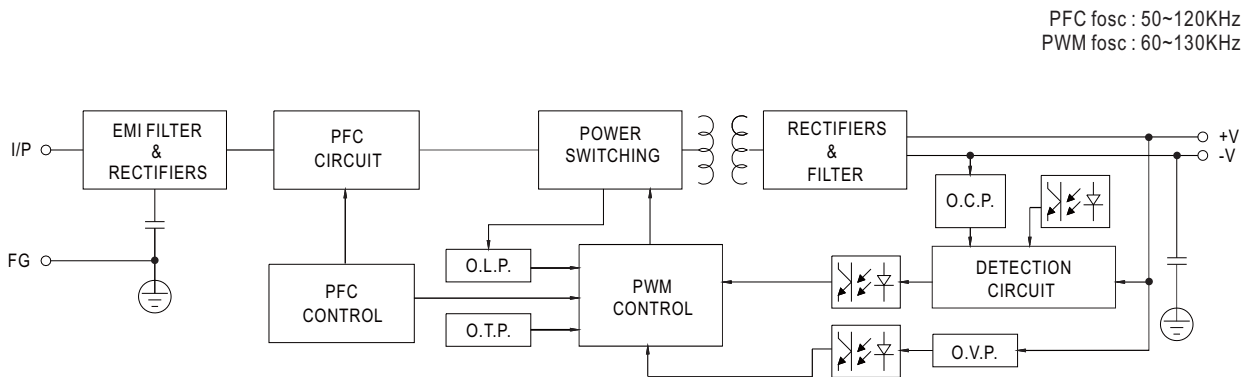
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ISSUE

**SPECIFICATION**

|                     |  |   |                            |   |
|---------------------|--|---|----------------------------|---|
| ORDER NAME          |  | XLG-100-H-ADI   |                            |   |
| MODEL               |  | XLG-100-H-A   |                            |   |
| OUTPUT              | DC VOLTAGE   | 48V   |                            |   |
|                     | CONSTANT CURRENT REGION <small>Note.2</small>  | 33.6~ 48V   |                            |   |
|                     | RATED CURRENT  | 2.08A   |                            |   |
|                     | RATED POWER  | 99.8W   |                            |   |
|                     | RIPPLE & NOISE (max.) <small>Note.3</small>  | 300mVp-p  |                            |   |
|                     | CURRENT ADJ RANGE  | 1.04~2.08A  |                            |   |
|                     | VOLTAGE TOLERANCE <small>Note.4</small>  | ±2.0%   |                            |   |
|                     | LINE REGULATION  | ±0.5%   |                            |   |
|                     | LOAD REGULATION  | ±1%   |                            |   |
|                     | SETUP, RISE TIME <small>Note.6</small>   | 600ms, 100ms/230VAC, 1200ms, 100ms/115VAC   |                            |   |
| HOLD UP TIME (Typ.) | 12ms/ 230VAC 12ms/ 115VAC  |   |                            |   |
| INPUT               | VOLTAGE RANGE <small>Note.5</small>  | 100 ~ 305VAC 142 ~ 431VDC<br>(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  |                            |   |
|                     | TOTAL HARMONIC DISTORTION  | THD< 10% (@load≥50%/115VC, 230VAC; @load≥80%/277VAC)  |                            |   |
|                     | EFFICIENCY (Typ.)  | 91%   |                            |   |
|                     | AC CURRENT   | 1.1A / 115VAC 0.5A / 230VAC 0.42A/277VAC  |                            |   |
|                     | INRUSH CURRENT(Typ.)   | COLD START 50A(twidth=300μs measured at 50% Ipeak) at 230VAC; Per NEMA 410  |                            |   |
|                     | MAX. No. of PSUs on 16A CIRCUIT BREAKER  | 8units (circuit breaker of type B) / 14 units (circuit breaker of type C) at 230VAC   |                            |   |
|                     | LEAKAGE CURRENT  | <0.75mA / 277VAC  |                            |   |
| PROTECTION          | OVER CURRENT   | 95 ~ 108%<br>Hiccup mode or Constant current limiting, recovers automatically after fault condition is removed  |                            |   |
|                     | SHORT CIRCUIT  | Hiccup mode or Constant current limiting, recovers automatically after fault condition is removed   |                            |   |
|                     | OVER VOLTAGE   | 54 ~ 62V<br>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 ~ +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  |   |                            |   |
| EMC SAFETY &        | SAFETY STANDARDS <small>Note.7</small>   | UL8750(type"HL"), UL879, CSA C22.2 No. 250.13-12; ENEC EN61347-1, EN61347-2-13 independent, EN62384; GB19510.1, GB19510.14; EAC TP TC 004;J61347-1(H29), J61347-2-13(H29),KC61347-1,KC61347-2-13; IP67 approved |                            |   |
|                     | WITHSTAND VOLTAGE  | I/P-O/P:3.75KVAC I/P-FG:2KVAC 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   | Parameter   | Standard                   | Test Level/Note   |
|                     |  | Conducted   | EN55015(CISPR15),GB/T17743 | -----   |
|                     |  | Radiated  | EN55015(CISPR15),GB/T17743 | -----   |
|                     |  | Harmonic Current  | EN61000-3-2, GB/T17625.1   | Class C @load≥50%   |
|                     |  | Voltage Flicker   | EN61000-3-3                | -----   |
|                     | EMC IMMUNITY   | EN61547   |                            |   |
|                     |  | Parameter   | Standard                   | Test Level/Note   |
|                     |  | ESD   | EN61000-4-2                | Level 3, 8KV air ; Level 2, 4KV contact                                     |
|                     |  | Radiated  | EN61000-4-3                | Level 3   |
|                     |  | EFT/Burst   | EN61000-4-4                | Level 3   |
|                     |  | Surge   | EN61000-4-5                | 4KV/Line-Line 6KV/Line-Earth  |
|                     |  | Conducted   | EN61000-4-6                | Level 3   |
|                     |  | Magnetic Field  | EN61000-4-8                | Level 4   |
|                     |  | Voltage Dips and Interruptions  | EN61000-4-11               | >95% dip 0.5 periods, 30% dip 25 periods,<br>>95% interruptions 250 periods |
| OTHERS              | MTBF   | 1006.16K hrs min. Telcordia SR-332 (Bellcore); 276.37Khrs min. MIL-HDBK-217F (25℃)  |                            |   |
|                     | DIMENSION  | 140*63*32mm (L*W*H)   |                            |   |
|                     | PACKING  | 0.58Kg/24pcs /15Kg /0.85CUFT  |                            |   |
| NOTE                | <div>1. All parameters NOT specially mentioned are measured at 230VAC input, rated current and 25℃ of ambient temperature.</div> <div>2. Please refer to "DRIVING METHODS OF LED MODULE".</div> <div>3. Ripple &amp; noise are measured at 20MHz of bandwidth by using a 12" twisted pair-wire terminated with a 0.1uf &amp; 47uf parallel capacitor.</div> <div>4. Tolerance : includes set up tolerance, line regulation and load regulation.</div> <div>5. De-rating may be needed under low input voltages. Please refer to "STATIC CHARACTERISTIC" sections for details.</div> <div>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.</div> <div>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.</div> <div>8. The ambient temperature derating of 3.5℃/1000m with fanless models and of 5℃/1000m with fan models for operating altitude higher than 2000m(6500ft).</div> <div>9. Please refer to the warranty statement on MEAN WELL's website at <a href="http://www.meanwell.com">http://www.meanwell.com</a></div> <div>10. This series meets the typical life expectancy of &gt;50,000 hours of operation when Tcase, particularly  point (or TMP, per DLC), is about 80℃ or less.</div> <div>11. Products sourced from the Americas regions may not have the PSE/CCC/BIS/KC logo. Please contact your MEAN WELL sales for more information.</div> <div>12. For any application note and IP water proof function installation caution, please refer our user manual before using.<br/><a href="https://www.meanwell.com/Upload/PDF/LED_EN.pdf">https://www.meanwell.com/Upload/PDF/LED_EN.pdf</a></div> <div>13. To fulfill requirements of the latest ErP regulation for lighting fixture, this LED driver can only be used behind a switch without permanently connected to the mains.</div> <div>MEAN WELL<br/>2020/6<br/>ISSU</div> |   |                            |   |

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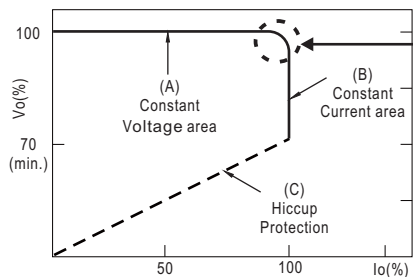
## ■ BLOCK DIAGRAM



## ■ DRIVING METHODS OF LED MODULE

### ※ I-V Operating Area

※ This series is able to work in either Constant Current mode (a direct drive way) or Constant Voltage mode (usually through additional DC/DC driver) to drive the LEDs.

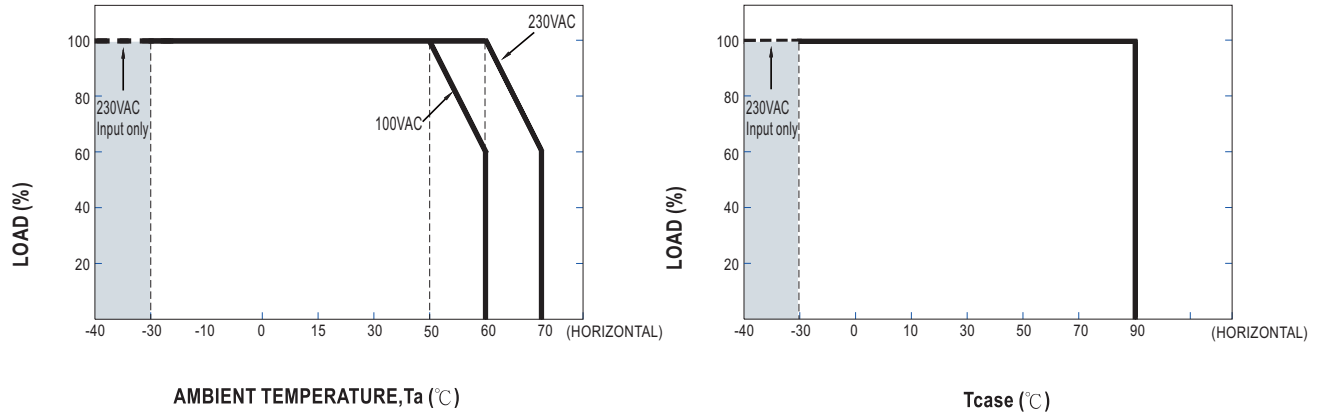


Typical output current normalized by rated current (%)

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.

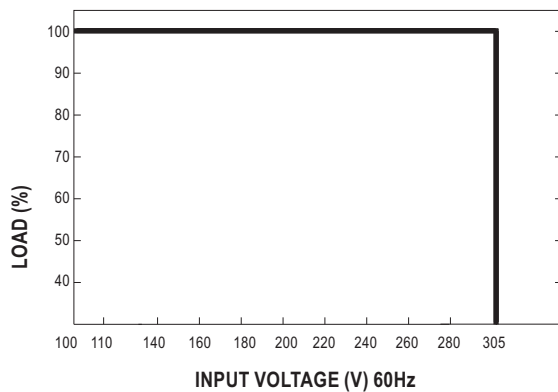
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## ■ OUTPUT LOAD vs TEMPERATURE



The maximum workable Ta is 60°C (Typ. 230VAC) or 50°C (Typ. 100VAC)  
Below 110VAC@ -30°C may retry to 2nd setup

## ■ STATIC CHARACTERISTIC

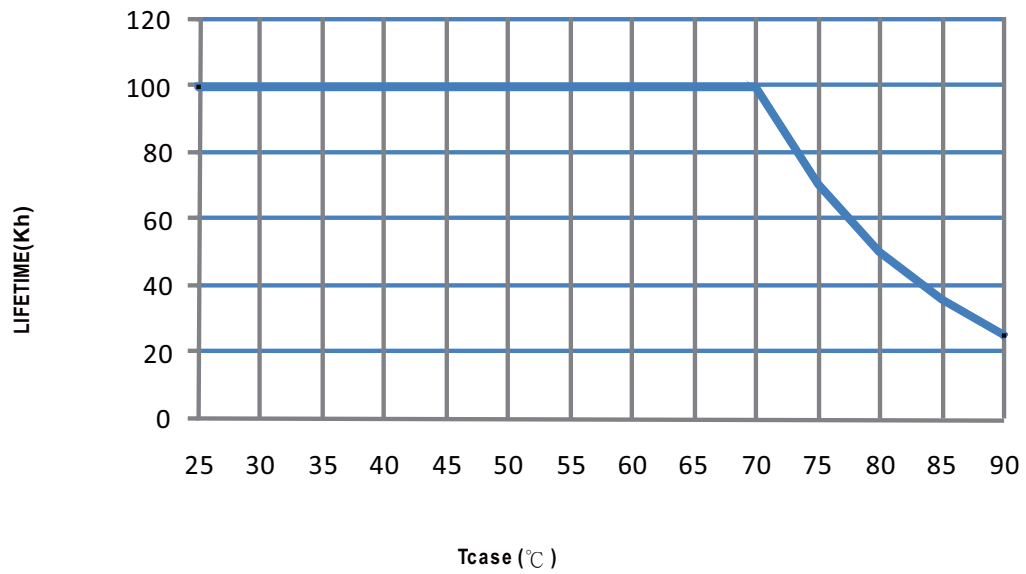


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# 100W Constant Voltage+ Constant Current Mode LED Driver **XLG-100-H-ADI**

## ■ LIFE TIME



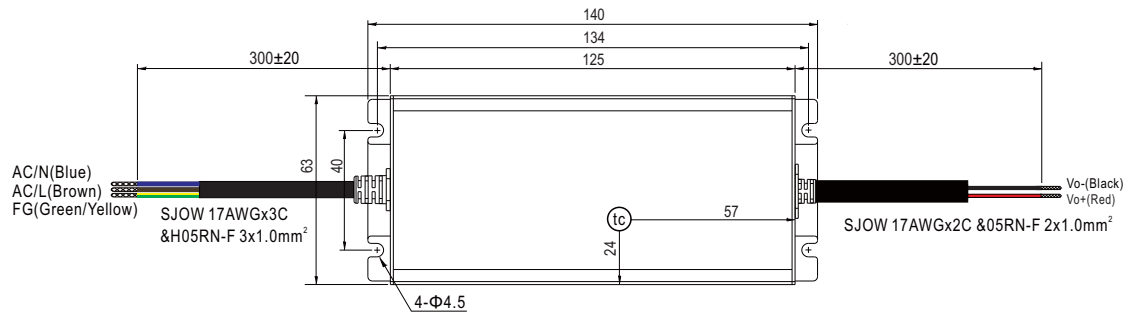
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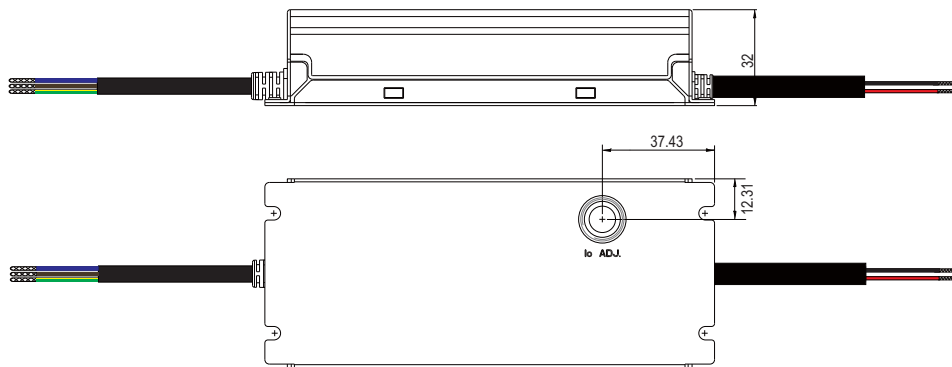
# 100W Constant Voltage+ Constant Current Mode LED Driver **XLG-100-H-ADI**

## MECHANICAL SPECIFICATION

Case No.:275B Unit:mm



• (tc) : Max. Case Temperature



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