

## Class II 150W LED Controlgear : PA-1151-18 Series

### Product Features

- Universal AC Input
- High Power Factor
- Low Total Harmonic Distortion
- High Efficiency
- Short Circuit / Open Circuit / Over Voltage / Over Temperature Protections
- Suitable for Dry & Damp Location
- Adjustable Output Current by Dimming Input
- RoHS Compliant

### AC Input / DC Output

|  |                            |
|--|----------------------------|
| • AC Input Voltage                               | 90 ~ 305Vac (100 ~ 277Vac) |
| • AC Input Frequency                             | 47 ~ 63Hz (50~60Hz)        |
| • Max. Input Current @ 90Vac                     | 2.3A                       |
| • Min. PF @ 120Vac (50Hz) / Full Output Load     | 0.96                       |
| • Min. PF @ 230Vac (50Hz) / Full Output Load     | 0.95                       |
| • Max. THD @ 120~277Vac / Half Output Load       | 20%                        |
| • Min. Eff. @ 120 & 277Vac / 280V & 0.53A Output | 91.0%                      |
| • Turn On Delay Time                             | <3 seconds                 |
| • DC Output Current                              | 530mA                      |
| • Line Regulation                                | ±3%                        |
| • Load Regulation                                | ±7%                        |
| • DC Output Voltage Range                        | 56 ~ 280V                  |
| • DC Output Isolation                            | yes                        |

### EMC

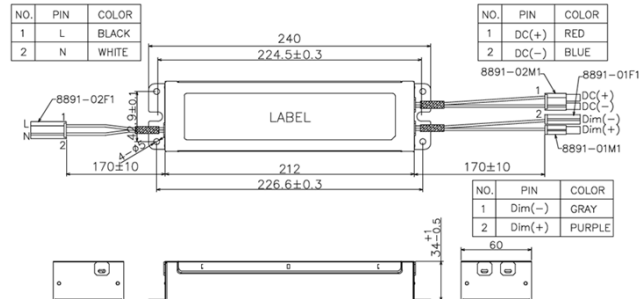
|                                      |  |
|--------------------------------------|--|
| • EMI                                | FCC Class A  |
| • Harmonic Current Emissions         | EN61000-3-2  |
| • Voltage Fluctuations & Flicker     | EN61000-3-3  |
| • Electrostatic Discharge (ESD)      | EN61000-4-2<br>±4KV (Contact), ±8KV (Air)  |
| • RS Immunity Test                   | EN61000-4-3<br>80MHz ~ 1GHz, 3V/m, 80% AM (1KHz)                                       |
| • Electrical Fast Transient          | EN61000-4-4<br>±1KV for AC power line, ±0.5KV for DC / signal line                     |
| • Lighting Surge                     | EN61000-4-5<br>±4KV (Com.), ±4KV (Dif.)  |
| • CS Immunity Test                   | EN61000-4-6<br>0.15MHz ~ 80MHz, 3V, 80% AM (1KHz)                                      |
| • Voltage Dips & Short Interruptions | EN61000-4-11<br>30%, 25 cycles voltage reduction<br>100%, 0.5 cycles voltage reduction |

### Operating Environments / Reliability

|                                       |   |
|---------------------------------------|---|
| • Operating Temperature / Humidity    | -40 ~ 55°C / 10 ~ 95% RH                                  |
| • Storage Temperature / Humidity      | -40 ~ 80°C / 10 ~ 95% RH                                  |
| • Vibration (with shipping container) | 1.146Grms / 5~200Hz / six sides<br>30 minutes / side      |
| • Vibration (operation)               | 6Grms / 10~1000Hz / X/Y/Z axis<br>15 minutes / axis       |
| • MTBF Life (Note 3)                  | 50,000 Hrs while Tc ≤ 75°C<br>100,000 Hrs while Tc ≤ 65°C |
| • Tc                                  | 80°C  |
| • Cooling                             | free air convection                                       |
| • Sound Level                         | meet Class A sound rating                                 |

### Mechanical

|                          |  |
|--------------------------|--|
| • AC Input Terminal      | 170mm / black(L) & white(N) color / UL1316         |
| • DC Output Terminal     | 170mm / red(DC +) & blue(DC -) color / UL1316      |
| • Dimming Input Terminal | 170mm / purple(dim +) & gray(dim -) color / UL1316 |
| • Weight (typ.)          | 1000g  |
| • Outline Dimension      | 240mm(L) * 60mm(W) * 34mm(H)                       |



### Protections

|                       |                             |
|-----------------------|-----------------------------|
| • OVP or Open Circuit | constant voltage, 350V max. |
| • SCP                 | auto recovery               |
| • OTP                 | output power decrease       |

### Safety / Certifications

|   |                         |
|---|-------------------------|
| • Hi Pot (AC I/P to O/P)                        | 3750Vac / 10mA / 60Sec. |
| • Hi Pot (AC I/P to Case)                       | 3750Vac / 10mA / 60Sec. |
| • Insulation (AC I/P to O/P)                    | >20MΩ, 500Vdc           |
| • Complied with UL8750, 1st Edition             |                         |
| • Complied with UL1012, 8th Edition             |                         |
| • Complied with CSA C22.2 No.107.1, 3rd Edition |                         |
| • Complied with UL935, 10th Edition             |                         |



### Dimming Input

- Support 2 in 1 Dimming Function
- Resistor Dimming Range (10~100K)
- Voltage Dimming Range (1~10V)
- Resistor Dimming Reference Table

|                                   |            |
|-----------------------------------|------------|
| Resistor Dimming                  | 63.4KΩ ±1% |
| Output Current                    | 350mA      |
| Tolerance                         | ±10%       |
| • Voltage Dimming Reference Table |            |
| Voltage Dimming                   | 6.3V       |
| Output Current                    | 350mA      |
| Tolerance                         | ±10%       |

### Notes :

- (1) above definition is based on 25°C ambient if not specified
- (2) this LED driver is designed and intended for operating with LED load only
- (3) MTBF evaluation is based on SR-332 method, 115Vac/60Hz, max load
- (4) to measure efficiency after burn-in 30 minutes with full output load
- (5) recommend to install the controlgear inside the enclosure