# Antron Electronics Co.,LTD
## 安雄電子股份有限公司

# Programmable LED Driver

| Model Name | P3C1250S30DL |
|---|---|
| Output Model | Constant Current |
| Input Voltage | 347 Vac |
| Input Frequency | 50/60 Hz |
| Dimming | 3 in 1 ( PWM, 1-10V, Resistance) Dim to 1%, 10%, OFF |
| Surge Rating | 2KV |
| Warranty | 5 Years TC≦75˚C 3 Years 75˚C≦TC≦90˚C |

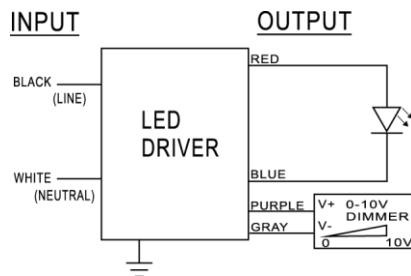FC  c(UL)us LISTED LED DRIVER E328847  IP 64  RoHS  NFC  0-10V DIMMER  ClassP Class2

## Product Specification
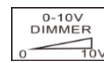
| Output Power (W) | Output Voltage (V) | Output Current (A) | Start Temp. (˚F/˚C) | Tcase Temp. (˚F/˚C) | Input Current (A) | Input Power (W) | Inrush Current (A) | THD (%) | Power Factor | Efficiency (%) |
|---|---|---|---|---|---|---|---|---|---|---|
| Max. 30 | 15-55 | 0.35-1.25 | Min 32/0 | Max. 194/90 | 0.1@347V | 38 | Max. 35 | Max. 20 | Min. 0.9 | Typ. 77 |

## Wire Diagram



INPUT — BLACK (LINE), WHITE (NEUTRAL)
OUTPUT — RED, BLUE
LED DRIVER
PURPLE V+ / GRAY V- 0-10V DIMMER 0 10V

Maximum Wiring Distance (at full load) is 18AWG/18Feet
LED case should be grounded

| Lead Length | Inch | Cm |
|---|---|---|
| Black | 5.9 | 15 |
| White | 5.9 | 15 |
| Green | NA | NA |
| Red | 5.9 | 15 |
| Blue | 5.9 | 15 |
| Purple | 7.1 | 18 |
| Gray | 7.1 | 18 |

## Enclosure



Sensor Area
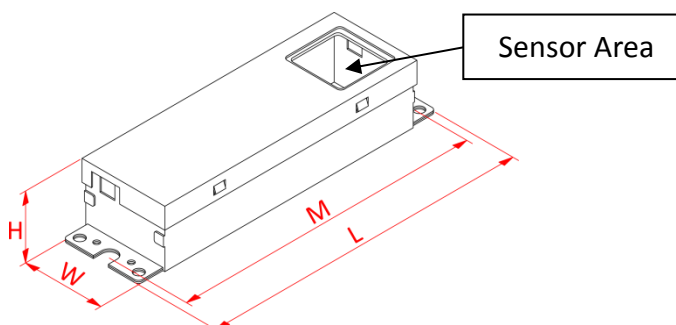
AM49

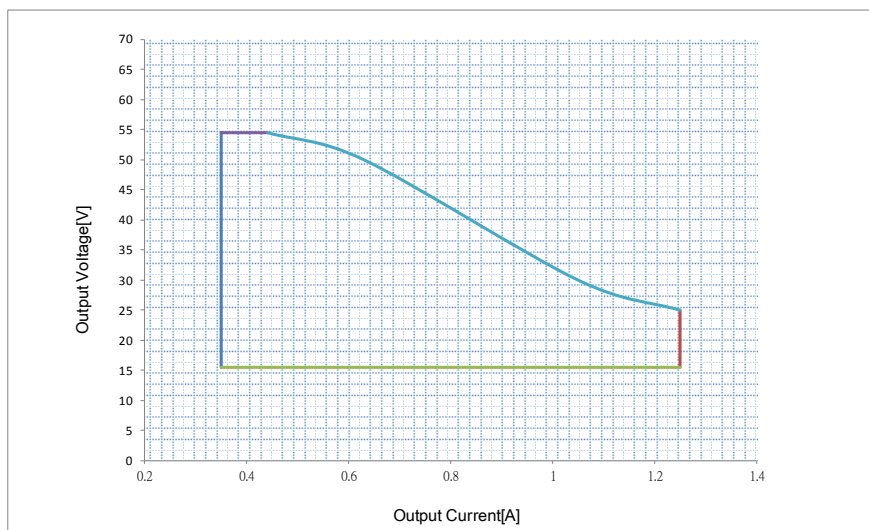| Enclosure | Inch | Cm |
|---|---|---|
| Length(L) | 6.22 | 15.8 |
| Width(W) | 1.73 | 4.4 |
| Height(H) | 1.22 | 3.1 |
| Mounting(M) | 5.86 | 14.9 |

## Programmable Tool

➢ Put the programmable wand above the NFC mark of the driver to start programming
➢ Download the software from www.antron.com.tw

## $I_{out}$ vs $V_{out}$ Curve



## Output Current Code List

### Output Current Code List

| Current Value (mA) | Correspond Iout Code | | | | Current Value (mA) | Correspond Iout Code | | | |
| | Location | | | | | Location | | | |
| | 0 | 1 | 2 | 3 | | 0 | 1 | 2 | 3 |
|---|---|---|---|---|---|---|---|---|---|
| 350 | 22 | 01 | 00 | 02 | 850 | CD | 02 | 00 | 02 |
| 400 | 4D | 01 | 00 | 02 | 900 | 00 | 03 | 00 | 02 |
| 450 | 73 | 01 | 00 | 02 | 950 | 2B | 03 | 00 | 02 |
| 500 | A2 | 01 | 00 | 02 | 1000 | 5C | 03 | 00 | 02 |
| 550 | CA | 01 | 00 | 02 | 1050 | 84 | 03 | 00 | 02 |
| 600 | F2 | 01 | 00 | 02 | 1100 | B6 | 03 | 00 | 02 |
| 650 | 1F | 02 | 00 | 02 | 1150 | E0 | 03 | 00 | 02 |
| 700 | 4B | 02 | 00 | 02 | 1200 | 1A | 04 | 00 | 02 |
| 750 | 76 | 02 | 00 | 02 | 1250 | 4C | 04 | 00 | 02 |
| 800 | A5 | 02 | 00 | 02 | | | | | |

Note: For drivers containing Revision C of their firmware (contact factory for date code of implementation), it is also possible to adjust the minimum dimming level and the dimming speed by programming the location 2.

## Programmable Driver Options (App Note)

All programmable drivers accept a 16-bit hexadecimal code to program the output current (Iout) of the driver. The Iout programming codes are documented in the computer based-programming software (ST-TOOLS.exe) or from the driver's IOUTCODE.pdf file. The Locations below 0, 1, 2, 3 contain the basic code for a specific output current value (example 84 03 00 01 = 1050 mA for PAC1400S50D).

Location | 0 | 1 | 2 | 3 |
Value | 00 | 00 | 00 | 00 |

For drivers containing Revision C of their firmware (contact factory for date code of implementation), it is also possible to adjust the minimum dimming level and the dimming speed. This adjustment is made by modifying location 2 of the programming code while keeping the other locations set for the desired output current. Specifically, the location 3 values are defined as:

- 00 => Dim to 1%, Speed ≤ 1.0 sec
- 01 => Dim-to-OFF, Speed ≤ 1.0 sec
- 02 => Dim to 10%, Speed ≤ 1.0 sec
- 03 => Dim to 1%, Speed ≥ 2.5 sec
- 04 => Dim-to-OFF, Speed ≥ 2.5 sec
- 05 => Dim to 10%, Speed ≥ 2.5 sec

As an example, if the programming code value of 84 03 00 01 is programmed, the output current will be 1050 mA, and the driver will dim to 1% and the dimming speed will be ≤ 1.0 sec. If the programming code of 84 03 04 01 is programmed, the output current will be 1050 mA, and the driver will dim to off and the dimming speed will be ≥ 2.5 sec.