



Antron Electronics Co.,LTD
安雄電子股份有限公司

Programmable LED Driver



| | |
|-----------------|---|
| Model Name | P3C1400S50DL |
| 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 $TC \leq 75^{\circ}C$ 3 Years $75^{\circ}C \leq TC \leq 90^{\circ}C$ |

Product Specification

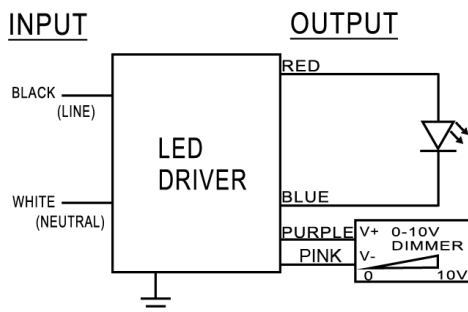


ClassP Class2



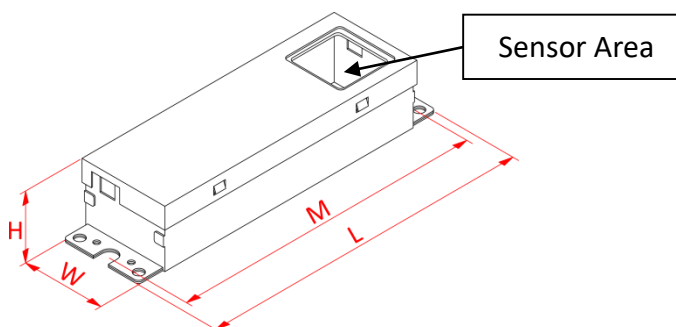
| Output Power (W) | Output Voltage (V) | Output Current (A) | Start Temp. ($^{\circ}F/^{\circ}C$) | Tcase Temp. ($^{\circ}F/^{\circ}C$) | Input Current (A) | Input Power (W) | Inrush Current (A) | THD (%) | Power Factor | Efficiency (%) |
|------------------|--------------------|--------------------|---------------------------------------|---------------------------------------|-------------------|-----------------|--------------------|---------|--------------|----------------|
| Max. 50 | 15-55 | 0.4-1.4 | Min 32/0 | Max. 194/90 | 0.17@347V | 59 | Max. 35 | Max. 20 | Min. 0.9 | Typ. 84 |

Wire Diagram



| 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 |
| Pink | 7.1 | 18 |

Enclosure



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 |

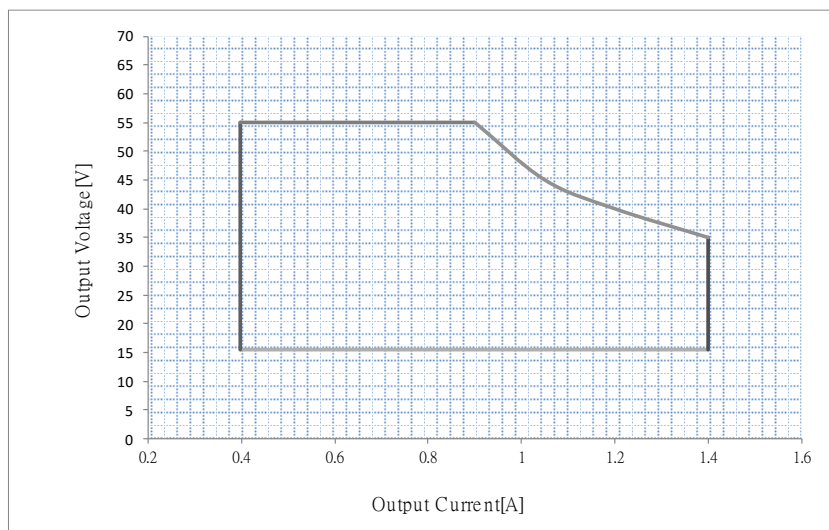


Programmable Tool

- 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 |
| 400 | 4A | 01 | 00 | 01 | 950 | 2F | 03 | 00 | 01 |
| 450 | 7C | 01 | 00 | 01 | 1000 | 57 | 03 | 00 | 01 |
| 500 | A4 | 01 | 00 | 01 | 1050 | 84 | 03 | 00 | 01 |
| 550 | D1 | 01 | 00 | 01 | 1100 | B1 | 03 | 00 | 01 |
| 600 | FE | 01 | 00 | 01 | 1150 | D9 | 03 | 00 | 01 |
| 650 | 26 | 02 | 00 | 01 | 1200 | 06 | 04 | 00 | 01 |
| 700 | 53 | 02 | 00 | 01 | 1250 | 42 | 04 | 00 | 01 |
| 750 | 85 | 02 | 00 | 01 | 1300 | 60 | 04 | 00 | 01 |
| 800 | A8 | 02 | 00 | 01 | 1350 | 88 | 04 | 00 | 01 |
| 850 | D7 | 02 | 00 | 01 | 1400 | 78 | 05 | 00 | 01 |
| 900 | 02 | 03 | 00 | 01 | | | | | |

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 (I_{out}) of the driver. The I_{out} 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 \leq 1.0 sec
- 01 => Dim-to-OFF, Speed \leq 1.0 sec
- 02 => Dim to 10%, Speed \leq 1.0 sec
- 03 => Dim to 1%, Speed \geq 2.5 sec
- 04 => Dim-to-OFF, Speed \geq 2.5 sec
- 05 => Dim to 10%, Speed \geq 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 \leq 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 \geq 2.5 sec.

Data is based upon tests performed by Antron Electronics in a controlled environment and representative performance. Actual performance can vary depending on operating conditions. Specifications are subject to change without notice. All specifications are nominal unless otherwise noted.