

## 12W IP66 Power Supplies

**RoHS**



- ◆ Small Size
- ◆ 115VAC or 230VAC input
- ◆ Constant Current or Constant Voltage Versions
- ◆ Splash proof
- ◆ Conservative component ratings for long life

### Key Market Segments & Applications

LED Lighting  
Damp Environments

### Specifications

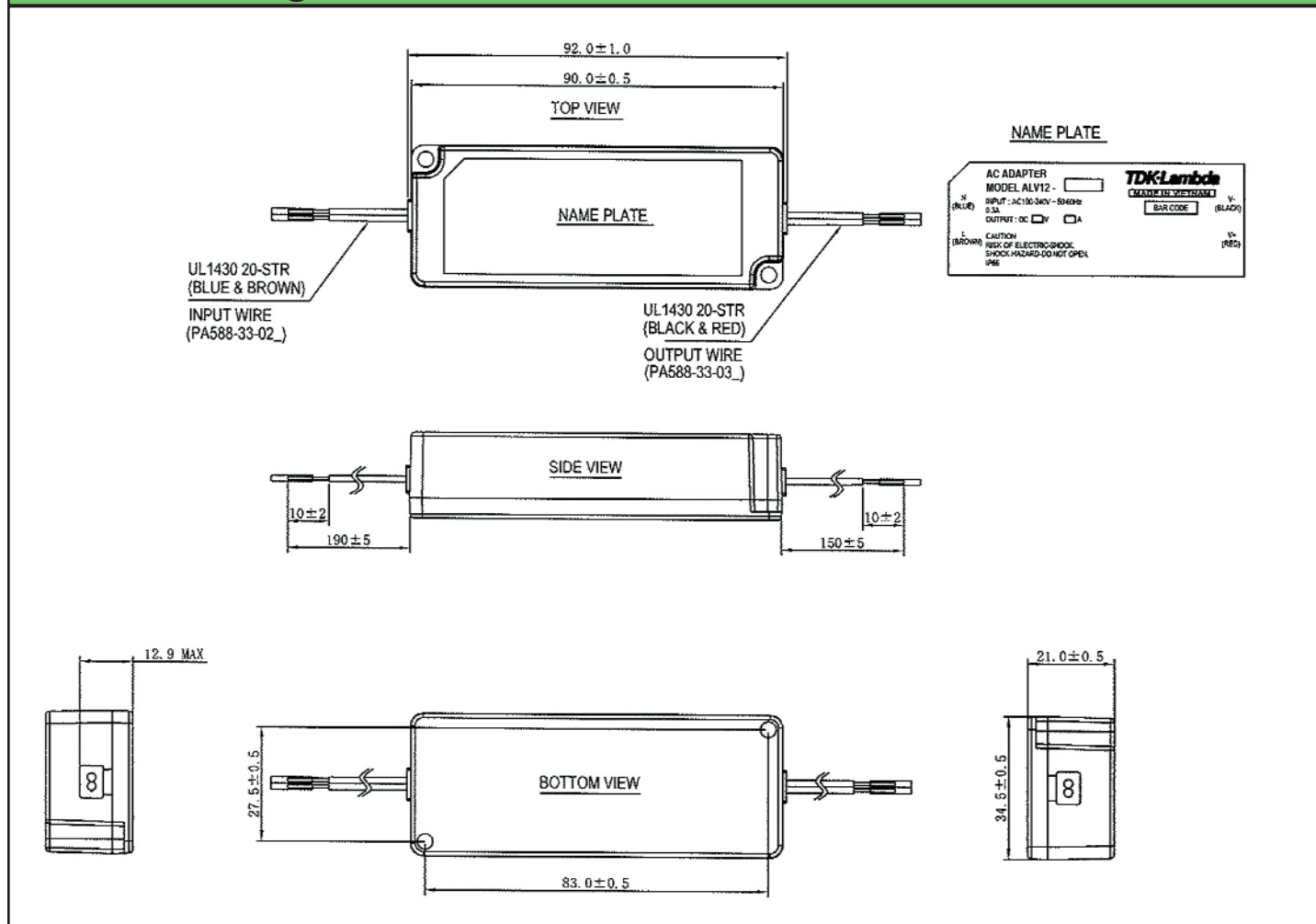
| MODEL                         |        | ALC12                                                                               | ALV12                 |
|-------------------------------|--------|-------------------------------------------------------------------------------------|-----------------------|
| ITEMS                         |        |                                                                                     |                       |
| AC Input                      | VAC/Hz | 90 - 264VAC, 47 - 63Hz                                                              |                       |
| Inrush Current (100/200VAC)   | A      | 25 / 50A, 25°C ambient, cold start                                                  |                       |
| Input Current (110/200VAC)    | A      | 0.28 / 0.18A                                                                        |                       |
| Temperature Coefficient       | -      | <0.02%/°C (0 - 50°C)                                                                |                       |
| Overcurrent Protection        | -      | Automatic Recovery                                                                  | > 105% of rated power |
| Overvoltage Protection        | %      | > 110%                                                                              |                       |
| Turn on time                  | ms     | < 200ms                                                                             |                       |
| Hold Up Time (115/230V input) | ms     | 5ms typical                                                                         |                       |
| Leakage Current (265VAC 60Hz) | mA     | 0.25mA                                                                              |                       |
| Efficiency                    | %      | 82% typical at full load                                                            |                       |
| Operating Temperature         | -      | -10 to +60°C (Guaranteed start up at -20°C)                                         |                       |
| Storage Temperature           | -      | -30 to +85°C                                                                        |                       |
| Operating Humidity (1)        | -      | 15 - 90% RH                                                                         |                       |
| Storage Humidity (1)          | -      | 15 - 90% RH                                                                         |                       |
| Cooling                       | -      | Convection                                                                          |                       |
| Withstand Voltage             | -      | Input to Output 3kVAC                                                               |                       |
| Isolation Resistance          | -      | >100M at 25°C & 70%RH, Input to Output at 500VDC                                    |                       |
| Vibration (non operating)     | -      | 10 - 55Hz: 19.6m/s <sup>2</sup> constant sweep 1 min X, Y, Z for 30 mins            |                       |
| Shock                         | -      | < 196.1 m/s <sup>2</sup> (20G)                                                      |                       |
| Immunity                      | -      | IEC61000-4-2, -3, -4, -5, -6, -8, -11                                               |                       |
| Safety Agency Approvals       | -      | UL1310 (Class 2), CAN/CSA-C22.2 No 223-M91, IEC61347-1, IEC61347-2-13, CE Mark, PSE |                       |
| Conducted & Radiated EMI      | -      | EN55015, EN55022, FCC Class B                                                       |                       |
| IP Class                      | -      | IP66                                                                                |                       |
| Weight (Typ)                  | g      | 84                                                                                  |                       |
| Size (LxWxH)                  | in(mm) | 3.45 x 1.36 x 0.83" (90 x 34.5 x 21mm)                                              |                       |
| Warranty                      | yrs    | Three Years                                                                         |                       |

(1) Non condensing

## Model Selector

| Model        | CV/CC | Output Voltage (V) | Output Accuracy | Min. Output Current (A) | Output Current (A) | Maximum Average Power | Ripple & Noise |
|--------------|-------|--------------------|-----------------|-------------------------|--------------------|-----------------------|----------------|
| ALC12-36-R35 | CC    | 3 - 36V            | 0.33 - 0.37A    | -                       | 0.35A              | 12.6W                 | -              |
| ALC12-18-R70 | CC    | 3 - 18V            | 0.66 - 0.735A   | -                       | 0.7A               | 12.6W                 | -              |
| ALV12-12-1R0 | CV    | 12                 | 11.4 - 12.6V    | 0.1A                    | 1A                 | 12W                   | 100mV          |
| ALV12-15-R80 | CV    | 15                 | 14.25 - 15.75V  | 0.08A                   | 0.8A               | 12W                   | 100mV          |
| ALV12-24-R50 | CV    | 24                 | 22.8 - 25.2V    | 0.05A                   | 0.5A               | 12W                   | 150mV          |

## Outline Drawing



For Additional Information, please visit  
[us.tdk-lambda.com/products/al-series.htm](http://us.tdk-lambda.com/products/al-series.htm)