AC – DC

## Features

- Universal input 100-240VAC
- Interchangeable Power Supply
- Approved to UKCA, CE, cULus, TUV, FCC, (C-Tick), RoHS, REACH
- EN/IEC/ES 60601-1 Safety Approved
- Meets Efficiency Level VI
- EMC Class B Certified
- Single Output 12-48V DC
- OVP, OCP, OTP, SCP



Ideal Power's 15DYS851-xxxyyyG-K 50W AC/DC External Adapter Interchangeable Power Supply (PSU) Series are certified to UKCA, CE, cULus, TUV, FCC, (C-Tick), RoHS, REACH & EN 60601-1/IEC 60601-1/ES 60601-1 Standards and comply with (EU) 2019/1782, Level VI Efficiency Regulations. These are primarily used in Medical, ITE, Audio & Video Industries and customised solutions are available upon request.

### Models

| Model Number | Output Voltage (V DC) | Output Current (A) | Output Power (W) |
|---|---|---|---|
| 15DYS851-120416G-K | 12 | 4.16 | 49.5 |
| 15DYS851-190265G-K | 19 | 2.65 | 50.4 |
| 15DYS851-240210G-K | 24 | 2.10 | 50.4 |
| 15DYS851-480105G-K | 48 | 1.05 | 50.4 |

### Input Data

| | Min | Typical | Max | Units | Notes |
|---|---|---|---|---|---|
| Input Voltage | 90 | -- | 264 | V AC | 100-240VAC +/- 10% |
| Input Frequency | 47 | -- | 63 | Hz | 50-60Hz +/- 5% |
| Input Current | -- | -- | 1.3 | A | |
| Inrush Current | -- | -- | 60 | A | At cold start, 100 / 240V AC |
| Leakage Current | -- | -- | 0.25 | mA | |

### Output Data

| | Min | Typical | Max | Units | Notes |
|---|---|---|---|---|---|
| Output Voltage | -- | 5 | -- | % | |
| Ripple & Noise | 150 | -- | 240 | mVp-p | Model dependant |
| Over Current Protection | | | | | Over Current Point Limited >2.16A |
| Short Circuit Protection | | | | | Continuous short circuit proof.<br>Will recover if fault condition is removed |
| Over Voltage Protection | | | | | Will recover if fault condition is removed |

## Environmental Data

| | Min | Typical | Max | Units | Notes |
|---|---|---|---|---|---|
| Operating Temperature | 0 | | +40 | ºC | |
| Storage Temperature | -20 | | +80 | ºC | |
| Operating Humidity | 10 | | 90 | ºC | Operating 10% to 90% |
| Storage Humidity | 5 | | 95 | ºC | Storage 5% to 95% |

## Other Information

| | |
|---|---|
| MTBF | 50,000hrs At 25°C, Full load, and nominal |
| Isolation | Primary to Secondary: 4242VDC/5mAMax (3 seconds) |
| Dimensions | Refer to mechanical drawings |

## EMC Emissions (2014/30/EU)

| | Standard | Test Level | Criteria | Notes |
|---|---|---|---|---|
| Conducted | EN 55032 | Pass | B | EMC Directive 2014/30/EU |
| Radiated | EN 55032 | Pass | B | |
| Harmonic Standard | EN 61000-3-2 | | Class D | P.F. shall >0.95 @100Vac input and >0.9 @240Vac input |

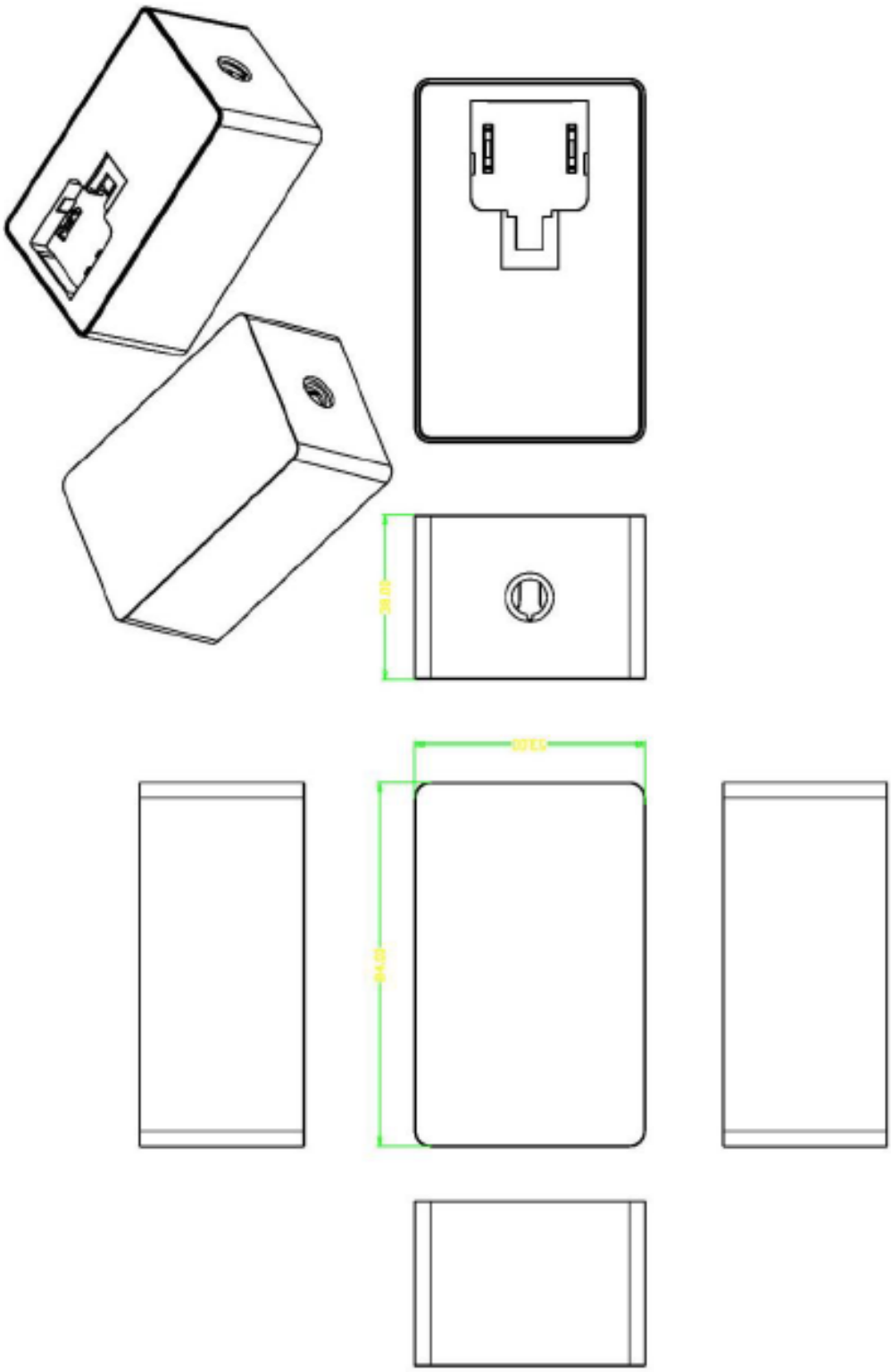
## EMI/EMS Immunity (2014/30/EU)

| | Standard | Test Level | Criteria | Notes |
|---|---|---|---|---|
| EMS | IEC/EN 60601-1-2 | | | |
| EMS | EN 55035 | | | |
| ESD | IEC 61000-4-2 | | B | Contact: +/- 4KV; Air: +/- 8KV |
| RS | IEC 61000-4-3 | | | Frequency: 80-1000MHz;<br>Field Strength: 3V/M ' 80% AM (1KHz) |
| EFT | IEC 61000-4-4 | | A/B | 0.5/1.0KV on input AC power ports |
| Surge | IEC 61000-4-5 | | A | Line to Line: +/- 1KV (peak);<br>Line to F.G: +/- 2KV (peak) |

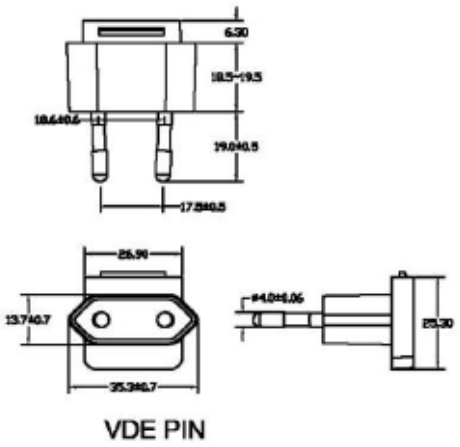
## Safety Approvals

| | Safety Standards |
|---|---|
| RoHS/REACH | RoHS Directive (EU) 2015/863 & REACH (205 SVHC) |
| CE LVD Directive 2014/35/EU | Yes (UK/European) |
| cULus | Yes |
| TUV | Yes |
| RCM & C-Tick | Yes |

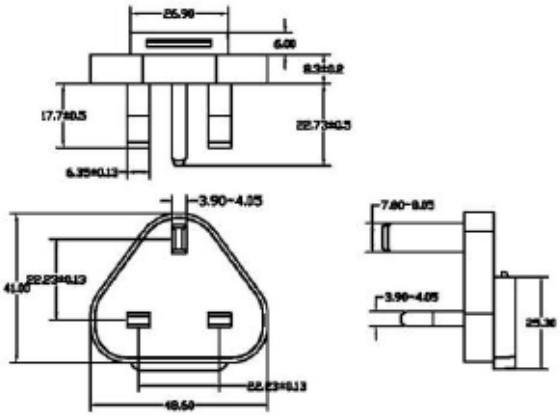
## Mechanical Drawing



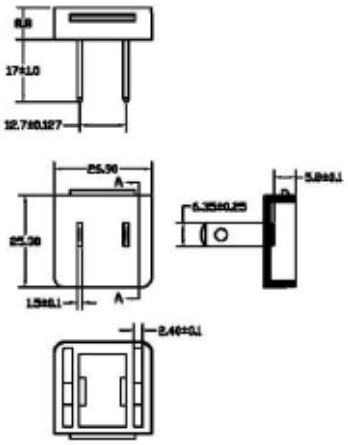
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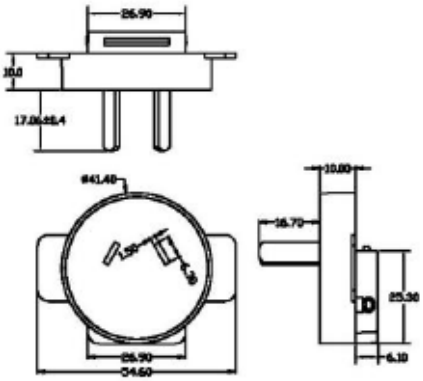
VDE PIN



BS PIN



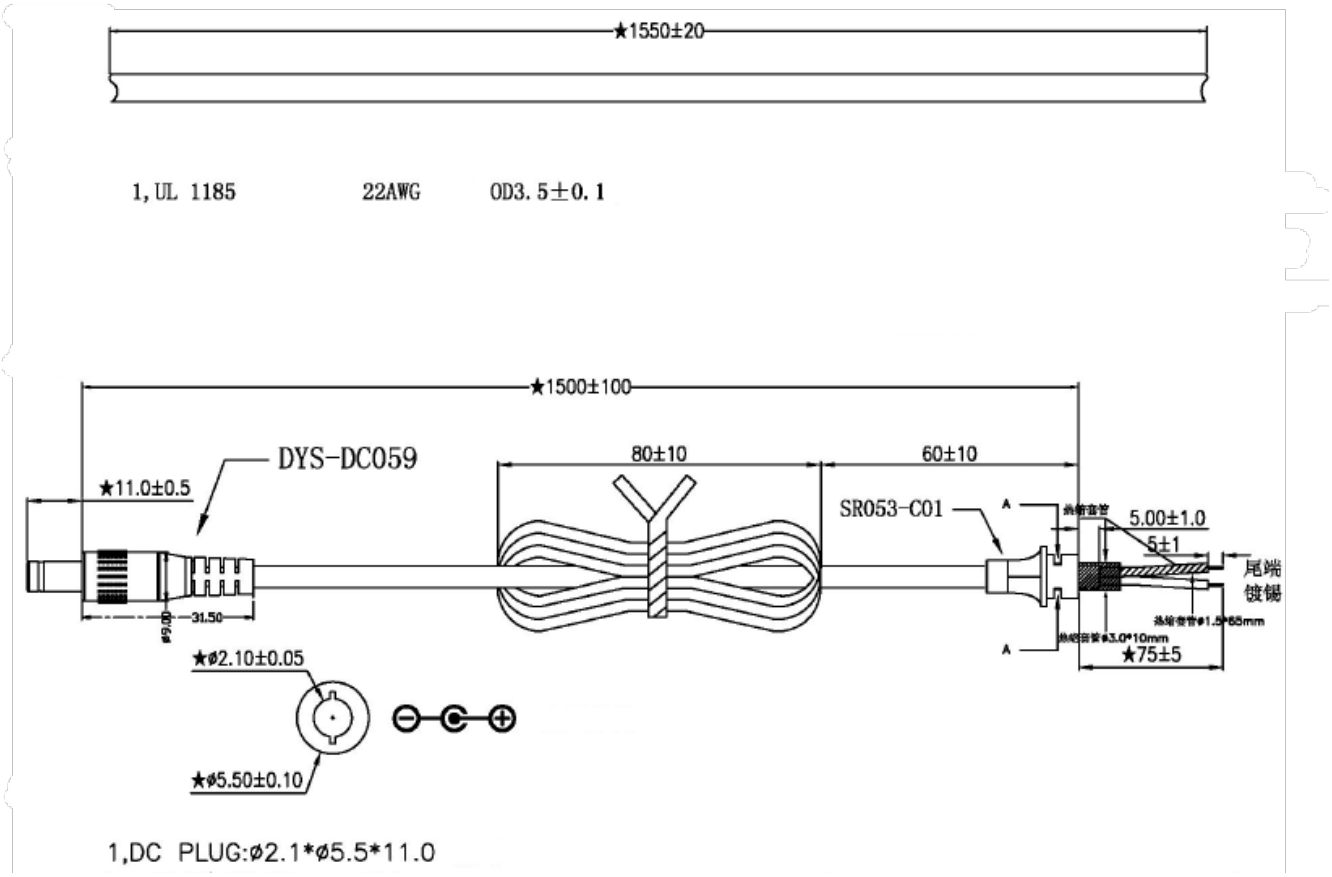
UL PIN



SAA PIN

AC – DC

## Mechanical Drawing




| Model Number | Output Cable |
|---|---|
| 15DYS851-120416G-K | 1.55m UL1185 18AWG |
| 15DYS851-190265G-K | 1.55m UL1185 22AWG |
| 15DYS851-240210G-K | 1.55m UL1185 22AWG |
| 15DYS851-480105G-K | 1.55m UL1185 22AWG |