

# LXD35 series

## LED Power Supply

### Dimmable LED Power Supplies

LED Power  
35W**LED POWER**  
next generation power  
source

#### FEATURES

- High Efficiency (up to 88%)
- Dimming Control
- Active PFC (Typical 0.92)
- IP67 Waterproof
- OVP, SCP
- -35 to 55°C deg operation
- Universal Input 90-305VAC
- UL8750 recognised
- EN61347-1, -2-13 compliant

The LXD35 series of dimmable LED power supplies from Excelsys Technologies can deliver up to 35W of output power in an extremely compact package size.

The LXD35 series of constant current power supplies provides up to 2900mA of output current and 100V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXD35 series provides high reliability and high performance in a compact package.

The LXD35 series carries the CE mark for safety and is also RoHS compliant.

For more details contact [sales@excelsys.com](mailto:sales@excelsys.com)

| Model Number    | Output Voltage | Output Current | Input Voltage | OVP Latching max | Efficiency | Ripple V |
|-----------------|----------------|----------------|---------------|------------------|------------|----------|
| LXD35-0350SW    | 33-100V        | 350mA          | 90-305VAC     | 112V             | 87.0%      | 10V      |
| LXD35-0450SW    | 26-78V         | 450mA          | 90-305VAC     | 87V              | 87.0%      | 8V       |
| LXD35-0700SW(H) | 17-50V         | 700mA          | 90-305VAC     | 59V              | 86.0%      | 5V       |
| LXD35-1050SW(H) | 11-33V         | 1050mA         | 90-305VAC     | 42V              | 86.0%      | 4V       |
| LXD35-1400SW(H) | 8-24V          | 1400mA         | 90-305VAC     | 32V              | 85.0%      | 4V       |
| LXD35-1750SW(H) | 7-20V          | 1750mA         | 90-305VAC     | 27V              | 84.0%      | 4V       |
| LXD35-2100SW(H) | 6-18V          | 2100mA         | 90-305VAC     | 25V              | 84.0%      | 4V       |
| LXD35-2450SW(H) | 5-15V          | 2450mA         | 90-305VAC     | 21V              | 83.0%      | 4V       |
| LXD35-2900SW(H) | 4-12V          | 2900mA         | 90-305VAC     | 18V              | 82.0%      | 4V       |

| Input Specifications      |   |      |         |      |         |  |
|---------------------------|---|------|---------|------|---------|--|
| Parameter                 | Conditions/Description                      | Min  | Nom     | Max  | Units   |  |
| Input Voltage Range       | Universal Input                             | 90   |         | 305  | VAC     |  |
| Input Frequency Range     |   | 47   |         | 63   | Hz      |  |
| Input Current             | 100VAC in, 35W output                       |      |         | 0.49 | A       |  |
| Leakage Current           | 277VAC Input, 50Hz                          |      |         | 0.5  | mA      |  |
| Inrush Current            | 230VAC in, 25°C, Cold Start                 |      |         | 60   | A       |  |
| Power Factor              | 220VAC, 110VAC                              | 0.92 |         | 0.98 |         |  |
| Output Specifications     |   |      |         |      |         |  |
| Parameter                 | Conditions/Description                      | Min  | Nom     | Max  | Units   |  |
| Line Regulation           |   |      |         | ±3   | %       |  |
| Load Regulation           |   |      |         | ±5   | %       |  |
| Voltage Range             | See individual models                       | 50   |         | 100  | %       |  |
| Output Current Range      |   | 10   |         | 100  | % I out |  |
| Ripple and Noise          | See individual models                       |      |         |      |         |  |
| Overshoot                 |   |      | 10      |      | %       |  |
| Turn-on Delay             | Measured at 220VAC and full load            |      |         | 3    | s       |  |
| Short Circuit Protection  | Auto Recovery                               |      |         |      |         |  |
| Over Voltage Protection   | Hiccup, Auto recovery                       |      |         |      |         |  |
| General Specifications    |   |      |         |      |         |  |
| Parameter                 | Conditions/Description                      | Min  | Nom     | Max  | Units   |  |
| Isolation Voltage         | Input to Output                             | 3750 |         |      | VAC     |  |
|                           | Input to Chassis                            | 1500 |         |      | VAC     |  |
| Efficiency                | See individual models                       |      | 88      |      | %       |  |
| Safety Agency Approvals   | UL8750, EN61347-1, -2-13, UL1310 Note H     |      |         |      |         |  |
| No load Power Dissipation | Measured at 230 Vac                         |      |         | 6.0  | W       |  |
| MTBF                      | MIL-HDBK-217F, 110VAC input, 80% load, 25°C |      | 541,000 |      | Hours   |  |
| Lifetime                  | 110VAC input, 80% load, 45°                 |      | 87,000  |      | Hours   |  |
| Weight                    |   |      | 480     |      | g       |  |
| Operating Temperature     |   | -35  |         | +55  | °C      |  |
| Storage Temperature       |   | -40  |         | +85  | °C      |  |
| Relative Humidity         | Non-condensing (operating)                  | 10   |         | 100  | %RH     |  |

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| EMC                       |              |  |           |  |       |
|---------------------------|--------------|--|-----------|--|-------|
| Parameter                 | Standard     |  | Level     |  | Units |
| <b>Emissions</b>          |              |  |           |  |       |
| Conducted                 | EN55015      |  | Level B   |  |       |
| Radiated                  | EN55015      |  | Level B   |  |       |
| Harmonic Distortion       | EN61000-3-2  |  | Compliant |  |       |
| Flicker and Fluctuation   | EN61000-3-3  |  | Compliant |  |       |
| <b>Immunity</b>           |              |  |           |  |       |
| ESD                       | EN61000-4-2  |  | Level 4   |  |       |
| Radiated RFI              | EN61000-4-3  |  | Level 3   |  |       |
| Fast Transients - burst   | EN61000-4-4  |  | Level 4   |  |       |
| Conducted RFI             | EN61000-4-6  |  | Compliant |  |       |
| Power Freq Magnetic Field | EN61000-4-8  |  | Compliant |  |       |
| Voltage Dips              | EN61000-4-11 |  | Compliant |  |       |

| Dimming Control               |                                     |     |      |      |       |
|-------------------------------|-------------------------------------|-----|------|------|-------|
| Parameter                     |                                     | Min | Nom  | Max  | Units |
| 10V Output Voltage            |                                     | 9.8 | 10.0 | 10.2 | VDC   |
| 10V Output Source Current     |                                     | -10 |      | 2    | mA    |
| Control Voltage (1-10V input) | Voltage applied on 1-10V input wire | -2  |      | 15   | V     |
| Source Current (1-10V input)  | Source current on 1-10V input wire  | 0   |      | 1    | mA    |

- Note A. If dimming function is not used, 10V(yellow) and 1-10V(purple)wire must be connected together.
- Note B. Primary to Secondary Isolation test not to be carried out on power supply.
- Note C. Load Voltage must be maintained above minimum voltage. See models for voltage range.
- Note D. Dimming range is 20%-100%
- Note E. Dimming Signal Voltage should be above 1V for linear dimming control.
- Note F. See Dimming Implementation diagrams for various dimming methods.
- Note G. Do not connect GND of Dimming cable to Output..
- Note H. UL1310 Class 2 outputs for US and Canada except LXD35-0700SW which is Class 2 in US only

### INPUT / OUTPUT WIRING

#### INPUT CABLE

SJTW 18AWG 3C  
Black (L),White(N), Green (G)310±20mm

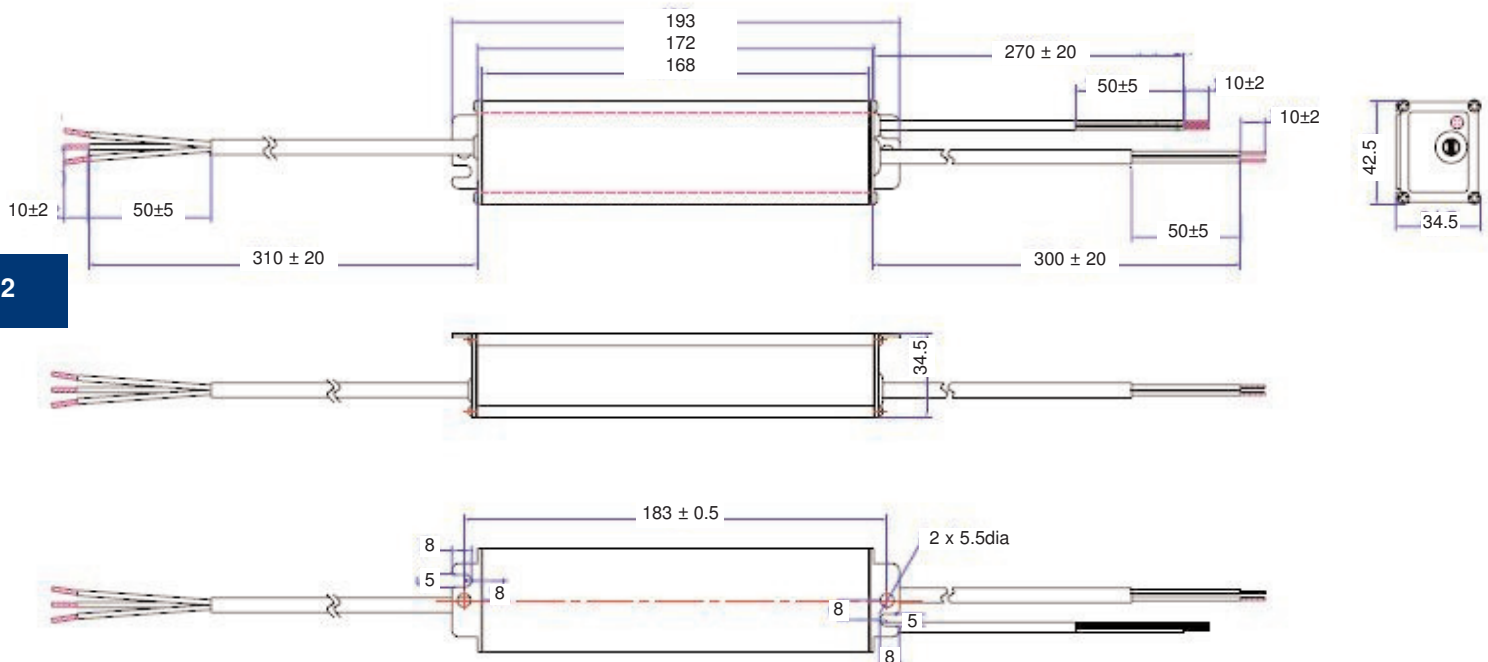
#### OUTPUT CABLE

SJTW 18AWG 2C  
Black (-V) and Red (+V) 300±20mm

#### DIMMING CABLE

SJTW 22AWG 3C  
Yellow (10V), Purple (0-10V), Green (GND)

### MECHANICAL SPECIFICATIONS



Specifications are subject to change without notice

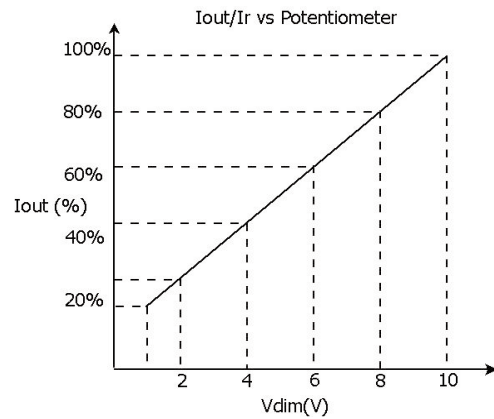
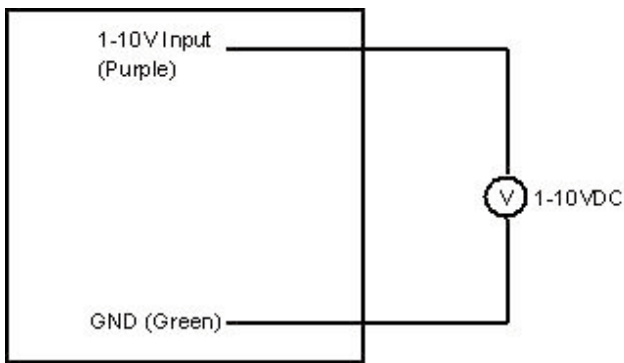
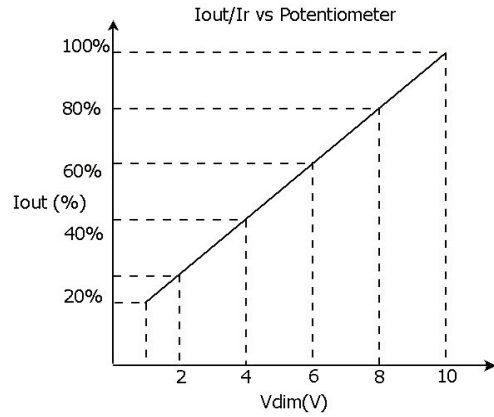
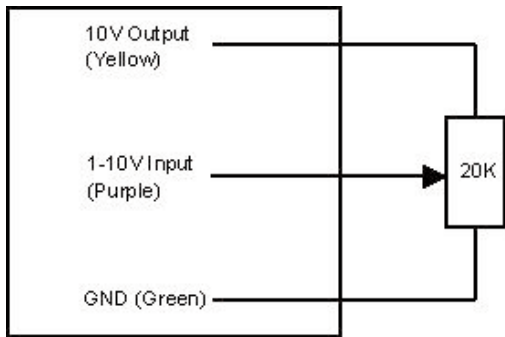


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## Dimming Implementation Diagrams

**LED Power 35W**



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