

# LXC75 series

## LED Power Supply

### Constant Current Power Supplies

LED Power  
75W

**LED POWER**  
next generation power  
source

#### FEATURES

- High Efficiency (up to 92%)
- Constant Output Current
- Active PFC (Typical 0.99)
- IP67 Waterproof
- OVP, SCP
- -35 to 70°C deg operation
- Universal Input 90-305VAC
- UL8750 compliant
- EN61347-1, -2-13 compliant

The LXC75 series of constant current LED power supplies from Excelsys Technologies can deliver up to 75W of output power in an extremely compact package size.

The LXC75 series of constant current power supplies provides up to 5000mA of output current and 214V output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXC75 series provides high reliability and high performance in a compact package.

| Model Number                | Output Voltage | Output Current | Input Voltage | OVP Latching max | Efficiency |
|-----------------------------|----------------|----------------|---------------|------------------|------------|
| LXC75-0350SW                | 107-214V       | 350mA          | 90-305VAC     | 250V             | 92.0%      |
| LXC75-0450SW                | 83-166V        | 450mA          | 90-305VAC     | 215V             | 92.0%      |
| LXC75-0700SW                | 54-108V        | 700mA          | 90-305VAC     | 130V             | 91.0%      |
| LXC75-1050SW                | 36-72V         | 1050mA         | 90-305VAC     | 88V              | 90.0%      |
| LXC75-1400SW                | 27-54V         | 1400mA         | 90-305VAC     | 70V              | 90.0%      |
| LXC75-2100SW <sup>(3)</sup> | 18-36V         | 2100mA         | 90-305VAC     | 45V              | 89.0%      |
| LXC75-2800SW                | 13-27V         | 2800mA         | 90-305VAC     | 38V              | 89.0%      |
| LXC75-3750SW <sup>(3)</sup> | 10-20V         | 3750mA         | 90-305VAC     | 30V              | 88.0%      |
| LXC75-5000SW <sup>(3)</sup> | 7-15V          | 5000mA         | 90-305VAC     | 25V              | 88.0%      |

| 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, 75W output                      |      |           | 0.9  | A       |
| Inrush Current            | 230VAC in, 25°C, Cold Start                |      |           | 50   | A       |
| Power Factor              | 220VAC, 110VAC                             | 0.96 |           | 0.99 |         |
| Output Specifications     |  |      |           |      |         |
| Parameter                 | Conditions/Description                     | Min  | Nom       | Max  | Units   |
| Line Regulation           |  |      |           | ±1   | %       |
| Load Regulation           |  |      |           | ±3   | %       |
| Voltage Range             | See table of outputs                       |      |           |      |         |
| Output Current Range      | % of Vout                                  |      |           | ±5   | %       |
| Ripple and Noise          | 20MHz Bandwidth. See Note 1                |      |           | 5.0  | % pk-pk |
| Turn-on Delay             | Measured at 220VAC and full load           |      |           | 1.2  | s       |
| Short Circuit Protection  | Auto Recovery                              |      |           |      |         |
| Over Voltage Protection   | Latching. See individual models OVP levels |      |           |      |         |
| General Specifications    |  |      |           |      |         |
| Parameter                 | Conditions/Description                     | Min  | Nom       | Max  | Units   |
| Isolation Voltage         | Input to Output See Note 2                 | 3000 |           |      | VAC     |
|                           | Input to Chassis                           | 1500 |           |      | VAC     |
| Efficiency                | See individual models                      |      | 90        |      | %       |
| Safety Agency Approvals   | UL8750, EN61347-1, -2-13, UL1310 Note 3    |      |           |      |         |
| No load Power Dissipation | Measured at 230 Vac                        |      |           | 1.0  | W       |
| MTBF                      | Telecordia SR-33, 25°C                     |      | 2,000,000 |      | Hours   |
| Lifetime                  | 25°C                                       |      | 65,000    |      | Hours   |
| Weight                    |  |      | 750       |      | g       |
| Operating Temperature     |  | -35  |           | +70  | °C      |
| Storage Temperature       |  | -40  |           | +85  | °C      |
| Relative Humidity         | Non-condensing (operating)                 | 10   |           | 100  | %RH     |

Note 1.

Output connected in parallel with 0.1uF ceramic capacitor and 10uF electrolytic capacitor.

Note 2.

Primary to Secondary Isolation test not to be carried out on power supply.

Note 3.

Certain models are UL1310 Class 2 output. marked with (3)



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| EMC                       |              |           |       |
|---------------------------|--------------|-----------|-------|
| Parameter                 | Standard     | Level     | Units |
| <b>Emissions</b>          |              |           |       |
| Conducted                 | EN55015      | Compliant |       |
| Radiated                  | EN55015      | Compliant |       |
| 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   |       |
| Surge Immunity            | EN61000-4-5  | Level 4   |       |
| Conducted RFI             | EN61000-4-6  | Compliant |       |
| Power Freq Magnetic Field | EN61000-4-8  | Compliant |       |
| Voltage Dips              | EN61000-4-11 |           |       |

## INPUT / OUTPUT WIRING

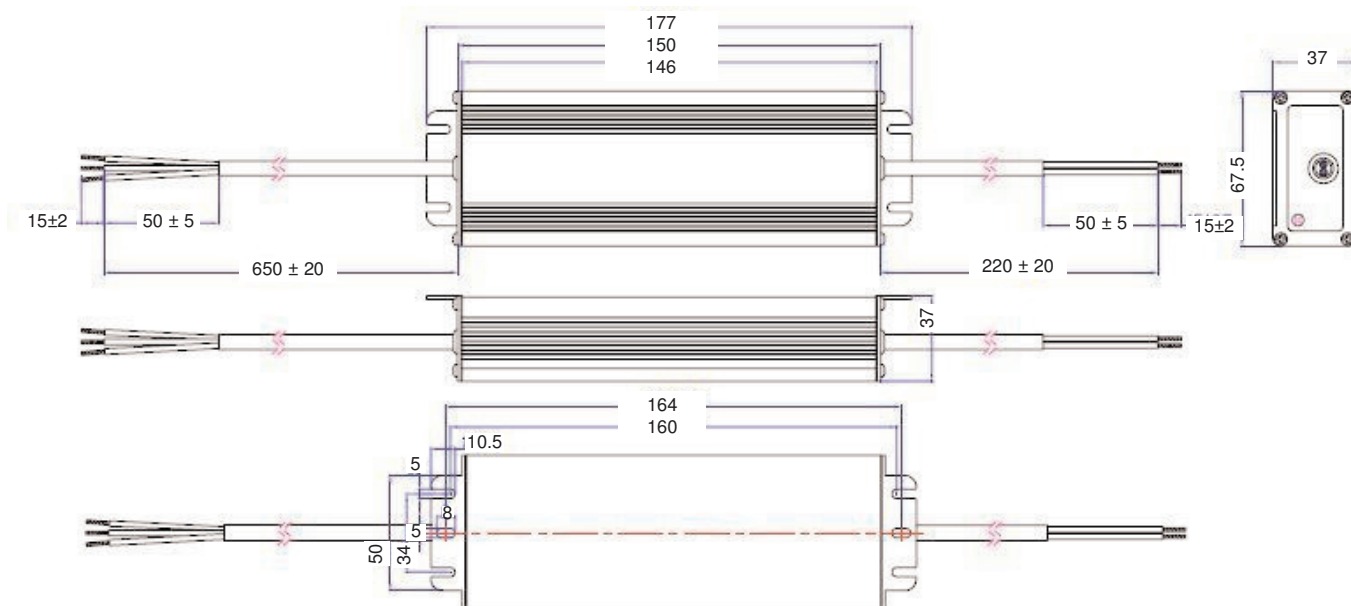
### INPUT CABLE

SJTW 18AWG 3C  
Black (L), White(N), Green (G) 650±20mm

### OUTPUT CABLE

SJTW 18AWG 2C  
Black (-V) and Red (+V) 220±20mm

## MECHANICAL SPECIFICATIONS



Specifications are subject to change without notice

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