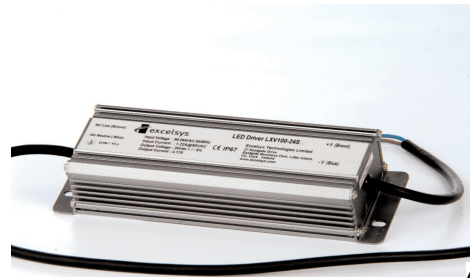


# LXV75 series

## LED Power Supply

### Constant Voltage Power Supplies

LED Power  
75W

#### LED POWER

next generation power source

#### FEATURES

- High Efficiency 93%
- IP67 Waterproof
- Active PFC (Typical 0.99)
- OVP, SCP, OTP
- -35 to 70°C deg operation
- Wide Input 90-305VAC option
- UL8750 recognised
- EN61347-1, -2-13 compliant

The LXV75 series of constant voltage LED power supplies from Excelsys Technologies can deliver up to 75W of output power in an extremely compact package size.

The LXV75 series of constant voltage power supplies provides a range of output voltage solutions for specific LED requirements. With industry leading efficiencies, and an extensive protection feature set, the LXV75 series provides high reliability and high performance in a compact package. The LXV75 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 Max | OCP Hiccup | Efficiency |
|--------------|----------------|----------------|--------------------------|---------|------------|------------|
| LXV75-012S   | 12V            | 6.25A          | 90-264VAC <sup>(3)</sup> | 16V     | 110-180%   | 90.0%      |
| LXV75-024S   | 24V            | 3.13A          | 90-264VAC <sup>(3)</sup> | 34V     | 110-180%   | 92.0%      |
| LXV75-036S   | 36V            | 2.08A          | 90-264VAC <sup>(3)</sup> | 50V     | 110-180%   | 92.0%      |
| LXV75-042S   | 42V            | 1.79A          | 90-264VAC <sup>(3)</sup> | 57V     | 110-180%   | 93.0%      |
| LXV75-048S   | 48V            | 1.56A          | 90-264VAC <sup>(3)</sup> | 63V     | 110-180%   | 92.0%      |
| LXV75-054S   | 54V            | 1.39A          | 90-264VAC <sup>(3)</sup> | 75V     | 110-180%   | 92.0%      |
| LXV75-081S   | 81V            | 0.93A          | 90-264VAC <sup>(3)</sup> | 100V    | 110-180%   | 92.0%      |
| LXV75-105S   | 105V           | 0.71A          | 90-264VAC <sup>(3)</sup> | 140V    | 110-180%   | 92.0%      |

#### Input Specifications

| Parameter             | Conditions/Description      | Min  | Nom | Max     | Units |
|-----------------------|-----------------------------|------|-----|---------|-------|
| Input Voltage Range   | Universal Input. see Note 3 | 90   |     | 264/305 | VAC   |
| Input Frequency Range |                             | 47   |     | 63      | Hz    |
| Input Current         | 100VAC in, 75W output       |      |     | 0.90    | A     |
| Inrush Current        | 230VAC in, 25°C, Cold Start |      |     | 65      | A     |
| Power Factor          | 220VAC, 110VAC              | 0.95 |     | 0.99    |       |
| Leakage Current       | 240VAC, 50Hz                |      |     | 0.75    | mA    |

#### Output Specifications

| Parameter                  | Conditions/Description   | Min | Nom | Max | Units   |
|----------------------------|--|-----|-----|-----|---------|
| Line Regulation            |  |     |     | ±1  | %       |
| Load Regulation            |  |     |     | ±2  | %       |
| Voltage Accuracy           | % of Vout  |     |     | ±5  | %       |
| Ripple and Noise           | 20MHz Bandwidth. See Note 1  |     |     | 2.0 | % pk-pk |
| Dynamic Response           | Output Deviation R/S : 1 A / $\mu$ S<br>Settling Time Load : 25% ~ 75% full Load |     |     | 5   | %       |
| Overshoot                  |  |     |     | 10  | mS      |
| Turn-on Delay              | Measured at 220VAC and full load   |     |     | 10  | %       |
| Short Circuit Protection   | Auto Recovery  |     |     | 3   | s       |
| Over Voltage Protection    | Latching. See individual models OVP levels                                       |     |     |     |         |
| OverTemperature Protection | Internal Component Temperature   |     |     | 110 | °C      |

#### General Specifications

| Parameter                 | Conditions/Description                         | Min          | Nom     | Max | Units      |
|---------------------------|--|--------------|---------|-----|------------|
| Isolation Voltage         | Input to Output See Note 2<br>Input to Chassis | 3750<br>1500 |         |     | VAC<br>VAC |
| Efficiency                | See individual models                          |              | 93.0    |     | %          |
| Safety Agency Approvals   | UL8750, EN61347-1, -2-13                       |              |         |     |            |
| No load Power Dissipation | Measured at 120VAC and 220VAC                  |              |         | 1.5 | W          |
| MTBF                      | MIL-HDBK-217F, 110VAC, 80% load, 25°C          |              | 467,000 |     | Hours      |
| Lifetime                  | 110VAC, 80% load, 45°C                         |              | 83,000  |     | Hours      |
| Weight                    |  |              | 950     |     | 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 0.1 $\mu$ F ceramic capacitor and 10 $\mu$ F electrolytic capacitor.

Note 2. Primary to Secondary Isolation test not to be carried on power supply.

Note 3. 90-305VAC input voltage range available. Add Suffix "W" to part number e.g. LXV75-012SW



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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   |       |
| Input Line Surges         | EN61000-4-5  |  | Level 4   |       |
| Conducted RFI             | EN61000-4-6  |  | Compliant |       |
| Power Freq Magnetic Field | EN61000-4-8  |  | Compliant |       |
| Voltage Dips              | EN61000-4-11 |  | Compliant |       |

**INPUT / OUTPUT WIRING**

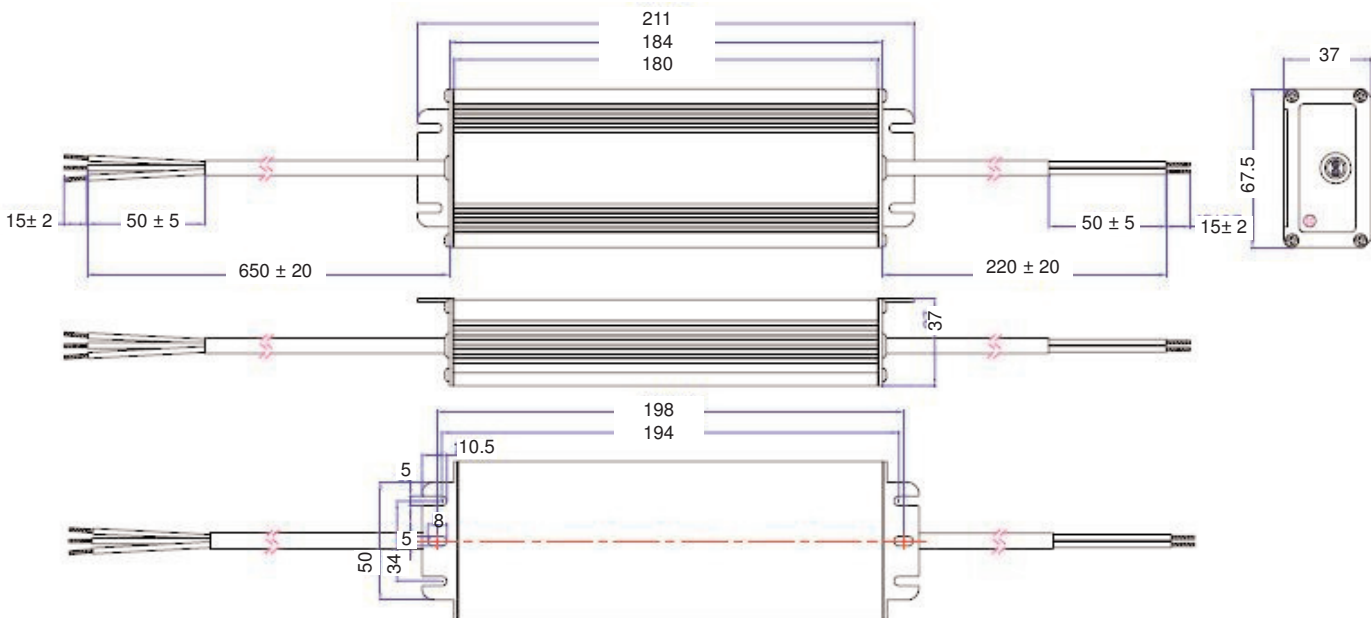
**INPUT CABLE**

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

**OUTPUT CABLE**

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

**MECHANICAL SPECIFICATIONS**



All Tolerances ± 0.2mm unless specified

Specifications subject to change without notice  
LXV75 Datasheet 27 April 2011

