OLS250220
Off-Line Power Supply/Charger

Installation Guide

Overview:

Altronix OLS250220 power supply/charger converts 220VAC (working range 198VAC-256VAC), 50/60Hz input into 24VDC at 10A of continuous supply current (see specifications). This general purpose power supply has a wide range of applications for access control and security system accessories that require additional power.

Specifications:

Input:
- 220VAC (working range 198VAC-256VAC), 50/60Hz, 0.95A.

Output:
- 24VDC output.
- 10A continuous supply current.
- Filtered and electronically regulated output.
- Short circuit and thermal overload protection.

Supervision:
- AC fail supervision (form "C" contacts).
- Low battery supervision (form "C" contacts).

Visual Indicators:
- AC input and DC output LED indicators.

Battery Backup:
- Built-in charger for sealed lead acid or gel type batteries.
- Automatic switch over to stand-by battery when AC fails.
- Maximum charge current 0.7A.

Features:
- Power ON/OFF switch.
- Includes battery leads.

Board Dimensions (L x W x H approx.)**:**
7.25" x 4.5" x 1.75"
(184.1mm x 114.3mm x 44.5mm).

Installation Instructions:

OLS250220 should be installed in accordance with The National Electrical Code and all applicable Local Regulations.

1. Mount the OLS250220 in the desired location/enclosure (mounting hardware included).
2. Slide [Power ON/OFF] switch to OFF position *(Fig. 1, pg. 2)*.
3. Connect AC power to the terminals marked [L & N], connect ground to the terminal marked [G].
   Use 18 AWG or larger for all power connections (Battery, DC output, AC input).
   Use 22 AWG to 18 AWG for power limited circuits (AC Fail/Low Battery reporting).
   Keep power-limited wiring separate from non power-limited wiring (220VAC, 50/60Hz Input, Battery Wires). Minimum 0.25" spacing must be provided.
   CAUTION: Do not touch exposed metal parts.
   Shut branch circuit power before installing or servicing equipment.
   There are no user serviceable parts inside.
   Refer installation and servicing to qualified service personnel.
4. Slide [Power ON/OFF] switch to ON position *(Fig. 1, pg. 2)*.
5. Measure output voltage before connecting devices. This helps avoiding potential damage.
6. Slide [Power ON/OFF] switch to OFF position *(Fig. 1, pg. 2)*.
7. Connect devices to be powered to the terminals marked [– DC +].
   When the use of stand-by batteries is desired, they must be lead acid or gel type.
8. Connect battery to the terminals marked [– BAT +] (battery leads included).
   Note: When batteries are not used, a loss of AC will result in the loss of output voltage.
9. Connect appropriate signaling notification devices to AC Fail & Low battery supervisory relay outputs marked [NC, C, NO].
10. Slide [Power ON/OFF] switch to ON position *(Fig. 1, pg. 2)*.

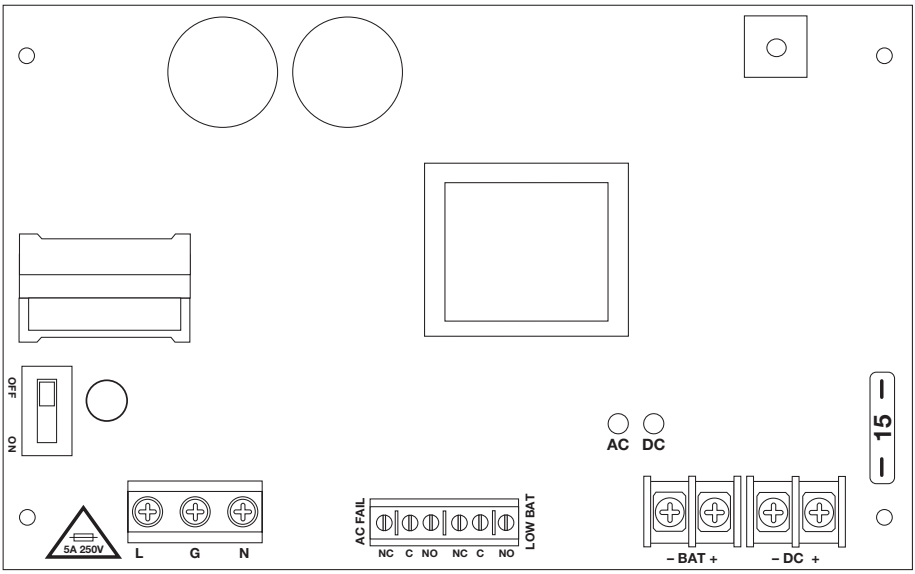
LED Diagnostics:

Red (DC)	Green (AC)	Power Supply Status
ON	ON	Normal operating condition.
ON	OFF	Loss of AC. Stand-by battery is supplying power.
OFF	ON	No DC output. Short circuit or thermal overload condition.
OFF	OFF	No DC output. Loss of AC. Discharged or no battery present.

Terminal Identification:

Terminal Legend	Function/Description
L, G, N	Connect 220VAC to these terminals: L to Hot, N to Neutral, G to ground.
– DC +	24VDC @ 10A continuous supply current.
AC FAIL NC, C, NO	Used to notify loss of AC power, e.g. connect to audible device or alarm panel. Relay normally energized when AC power is present. Contact rating 1A @ 28VDC.
Low Battery NC, C, NO	Used to indicate low battery condition, e.g. connect to alarm panel. Relay normally energized when DC power is present. Contact rating 1A @ 28VDC Low battery threshold: 24VDC output threshold set @ approximately 21VDC.
– BAT +	Stand-by battery connections. Maximum charge rate 0.7A.

Fig. 1



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