

TECHNICAL ASSISTANCE

Our staff is ready to support you and answer any questions.
Monday through Friday, 8:00 a.m. to 5:00 p.m. (EST) at 800-647-1911.

WARRANTY STATEMENT

During the applicable warranty period, any Joslyn™ surge protector device which fails due to defect in materials, workmanship, or any electrical anomaly, including lightning, shall be repaired or replaced at Joslyn's discretion.

Prior to shipment of any suspect or known defective product to Joslyn a Return Material Authorization (RMA) number must be obtained. An official Joslyn RMA number and shipping instructions can be obtained from the distributor where the product was originally purchased. Distributors can obtain the official Joslyn RMA number by contacting the Joslyn Customer Service Department at 800-647-1911. Products arriving at Joslyn without an official RMA number will not be accepted and will be returned freight collect to the original point of shipment.

Products being returned with an official Joslyn RMA number should be shipped by prepaid freight to the nominated point of return as shown on the RMA documentation.

The Company shall have no liability under this warranty for problems or defects directly or indirectly caused by misuse of the Product, alteration of the Product (including removal of any warning labels), accidents, improper installation, application, operation or improper repair of the Product.

THIS WARRANTY REPRESENTS THE ENTIRE WARRANTY OF THE COMPANY. ALL OTHER WARRANTIES EXPRESS OR IMPLIED, ORAL OR WRITTEN, INCLUDING, BUT NOT LIMITED TO, THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE HEREBY DISCLAIMED.

THE LIABILITY OF THE COMPANY, AT ITS SOLE OPTION, UNDER THIS WARRANTY IS EXPRESSLY LIMITED TO THE REPLACEMENT OR REPAIR OF THE DEFECTIVE PART THEREOF. IN NO EVENT SHALL THE COMPANY BE LIABLE OR RESPONSIBLE FOR SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR CHARACTER, NOR SHALL ITS LIABILITY EVER EXCEED THE PURCHASE PRICE PAID TO JOSLYN FOR SUCH DEFECTIVE PRODUCT.

This warranty is not transferable and may only be enforced by the original purchaser. Claims under this warranty must be submitted to Joslyn within thirty (30) days of discovery of any suspected product defect.

Warranty Period

LDP Series 3 Years from original date of purchase



5900 Eastport Boulevard Richmond, VA 23231-4453 USA
TEL: 800.647.1911 FAX: 804.236.4047 www.joslynsurge.com

LDP

Surge Protective Device

LDP Series

Installation Operation and Maintenance Manual



DESCRIPTION

The LDP Surge Protective Device (SPD) is designed for protection of downstream distribution equipment and wiring as well as most sensitive electrical and electronic loads from the effects of overvoltage transients that might result from lightning, induction, and switching of loads or capacitor banks. This is a light duty device and should be used in minimum to moderate lightning environments, or in high lightning areas if used downstream of a primary, heavier duty protection device installed at service entrance.

WARNING



The voltages from the power service are potentially lethal. Disconnect the power before attempting installation or replacement of this suppressor.

Installation and maintenance of the suppressor should be performed by a qualified electrician.

It is the responsibility of the installer to ensure that all electrical and safety codes and local jurisdiction requirements are met and the suppressor is properly installed.

Read these instructions completely before beginning installation.

INSTALLATION

Electrical Service

The LDP Surge Suppressor shall not be connected to an electrical service with an available short circuit current of more than 65,000 A ms. The LDP does not require an upstream over current device. If one is used, we recommend 200A maximum. The interrupt rating of the device shall not be less than the available short circuit current.

The LDP Suppressor is intended to be used only on grounded electrical services where the neutral is bonded to ground at the service entrance (types USA and TN-C-S) or bonded to ground at the source and the source grounding conductor is connected to site ground (type TNS).

The LDP Suppressor can be installed on 2-wire and 3-wire single phase, and 4-wire three phase services. See diagrams on facing page.

Location

The LDP Suppressor may be installed on the line or load side of the main service disconnect. It can be located indoor or outdoor; If installed outdoors in hot climates, avoid direct sun exposure. Orient the unit so the functional status lights are visible. This unit cannot be employed on a flush mounted load center with a finished wall surface.

Connection

Mount through ½" knockout (Ø22 mm) in the electrical panel and secure with lock nut. Black wires connect to phase (hot) white wire to neutral bar, green/yellow wire to ground bar. Not all models will have all wire colors.

The black or brown (hot) and white or blue (neutral) wires may connect across the main lugs or buses in the panel (if so provisioned with connection means). The suppressor can also be connected to a double ganged breaker suitable for use with #14 wire – this method allows the device to be isolated for test or replacement without de-energizing the electrical service. Use 20 A min circuit breaker at main panel; use 10 A min at subpanel. To optimize protection levels: this breaker should be adjacent to the panel's main lugs or main disconnect breaker; minimize suppressor wires length and avoid unnecessary bends in suppressor wires.

Monitoring

On some models the internal condition of this device and its protective function are monitored by green LEDs on the face of the unit. When the LEDs are lit, the suppressor is functioning properly and providing protection.

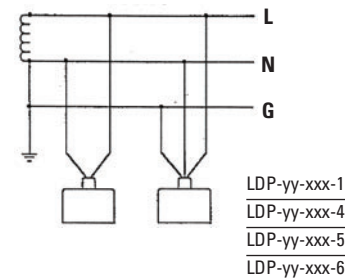
– Replace the LDP Suppressor if a light is out –

At the end of life, the LDP Surge Protective Device (SPD) will generally fail open circuited and not trip a dedicated breaker if used. If the breaker is found tripped, it should be reset: If it re-trips, replace the suppressor. If it resets and the green LEDs remain lit, the suppressor is sound and use may be continued.

Model	Protection Modes	Optimum Application/Location
LDP-yy-xxx-1	L1-N, N-G	2-wire branch circuit (local lightning conditions)
LDP-yy-xxx-2	L1-N, L2-N	3-wire service entry*
LDP-yy-xxx-2	L1-G, L2-G	2-wire L-L branch circuit w/o neutral connected loads
LDP-yy-xxx-3	L1-G, N-G	2-wire incoming branch circuit, common mode lightning protection
LDP-yy-xxx-3	L1-N, L1-G	2-wire branch circuit (no local lightning)
LDP-yy-xxx-4	L1-N	2-wire service entry*
LDP-yy-xxx-5		*within 20 m of service entry, minimal lightning environment
LDP-yy-xxx-6		within 10 m of service entry, moderate lightning environment

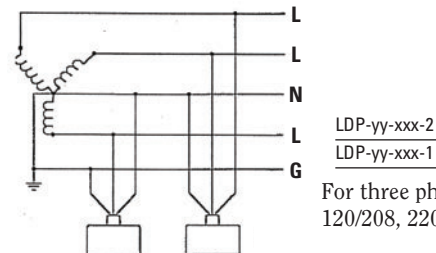
20	120
25	127
30	230
	277

2-WIRE CIRCUITS



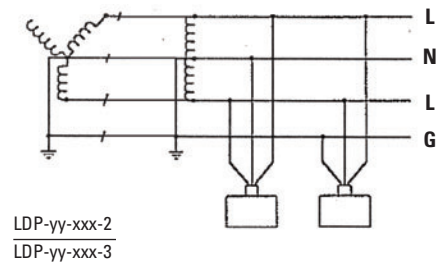
For single phase voltages where L-N could be 120, 230, or 277

4-WIRE CIRCUITS



For three phase circuits, 120/208, 220/380, 230/415, and 277/480

3-WIRE CIRCUITS



For split single phase and "2-legs off a wye" circuits L-N at 120, 230, or 277.

Service may be 120/240V 1ø 3-wire or 208Y/120V 2ø 3-wire