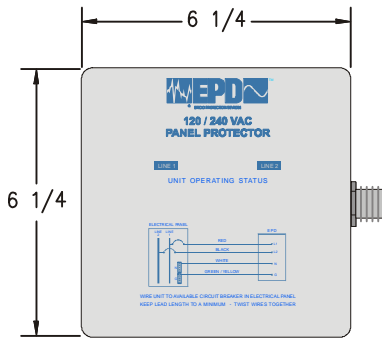
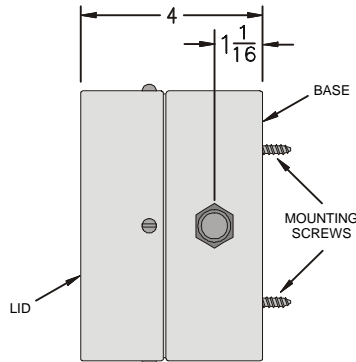
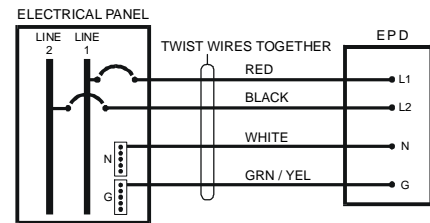


# Installation Instructions


**FIG. 1**

**FIG. 2**

**FIG. 3**

## PREPARATION



**DANGER:** *Electrical shock or burn hazard. Installation of Primary Surge Protector should be made by qualified personnel. Failure to lockout electrical power during installation or maintenance can result in fatal electrocution or severe burns.*

1. Disconnect and lockout power to the breaker box (load center) or point where the Primary Surge Protector is to be installed. Follow all applicable electrical codes & procedures.



**CAUTION:** *Verify line voltage does not exceed Surge Protector voltage requirement.*

## PROTECTOR MOUNTING AND LOCATION

2. The Surge Protector is to be mounted directly to the breaker box, to keep the wiring as SHORT as possible. The Surge Protector can be mounted on the top, the bottom, or the side of the load center, see FIG. 4. In general, it would mount on the side, immediately adjacent to the two pole breaker which will feed it. If physical obstructions prevent this, then the top or bottom mounting positions can be used.
3. Having determined where the Surge Protector is to be mounted, provide a knockout in the load center to receive the 1/2" nipple provided as part of the Surge Protector.
4. If the load center metalwork is of sufficiently heavy gauge, or the Surge Protector is being mounted to the top of the load center, the Surge Protector may be supported by the nipple alone. If this is the case, DO NOT perform the outlined, shaded steps (steps 5, 7, 8 or 9).

5. Remove the screws holding the lid and base of the Surge Protector together.

6. The base (or the complete Surge Protector if step 5 was omitted) can then be butted up against the load center, with the wiring and nipple fed into the load center. Using the provided locknut, fasten the nipple in place inside the load center.

7. Using the holes in the base of the Surge Protector as a template, drill four 3/16 diameter pilot holes in the wall surface.

8. Fix the base to the wall using the (4) #12 x 3/4-lg. screws supplied. See FIG. 2

9. Replace the lid of the Surge Protector back onto the base, and fix in position with the screws previously removed (the screw adjacent to the load center may not be able to be replaced).

10. Pull the wires firmly through into the load center to remove any slack present.

## AC ELECTRICAL CONNECTION

11. The Surge Protector is to be installed parallel to the load center bus via a two pole circuit breaker. The circuit breaker rating should be 20A or 30A.

12. Reference FIG. 3 or the front of the Surge Protector for the wiring diagram. Connect the wire leads from the Surge Protector, beginning with:

- a) Ground (green/yellow wire) to ground bar
- b) Neutral (white wire) to neutral bar
- c) Line wires (black and red wires) to circuit breaker

**NOTE:** The green wire must be properly and securely connected to system ground.

**Primary Surge Protectors****Parallel TVSS Filters**

These wires should be TWISTED and kept as SHORT as possible. This will mean trimming these to length. DO NOT coil extra wire length, as this will impede the function of the Surge Protector. Keep bend radii large where applicable (4"-8" recommended).

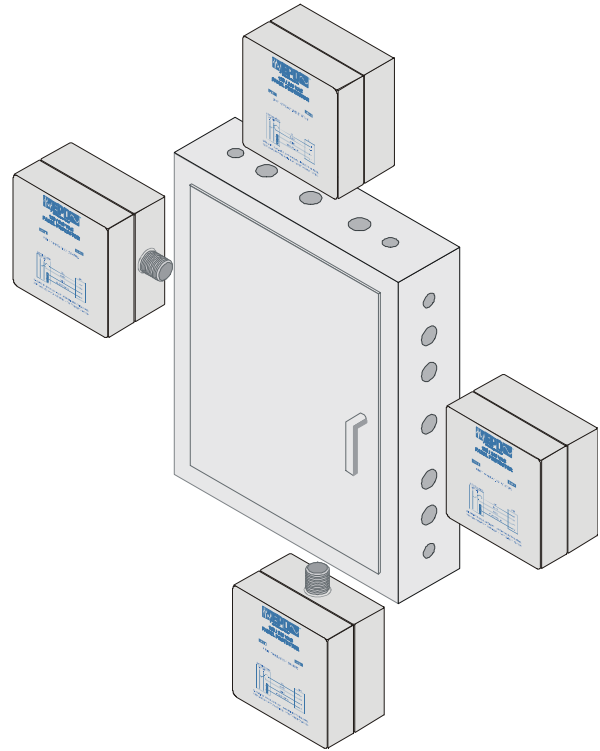
**ENGAGING POWER**

13. Tighten and verify all connections, replace the internal cover of the load center, and engage power to the protector. Both Status LEDs should come on indicating correct operation. If not, disconnect power, check wiring, rectify any deficiencies, and repower. If still experiencing difficulties, please contact your supplier, or the manufacturer:

ERICO, Inc.  
Rail Electrical Products  
34600 Solon Rd  
Solon OH 44139  
Ph. (800) 447-7245  
Ph. (440) 542-3939

**INDICATORS**

14. There is one LED on the front panel for each line protected which, when illuminated, indicates that the protection circuitry is operating correctly for that line. If either LED has extinguished, the Surge Protector has sustained a surge beyond its ratings, and the protection has been compromised. While there may still be some protection provided by the parallel protection stages within the unit, the Surge Protector should be replaced immediately.



**FIG. 4**  
PRIMARY SURGE PROTECTOR  
SHOWN IN FOUR POSSIBLE  
MOUNTING POSITIONS