WARRANTY STATEMENT

During the applicable warranty period, any Total Protection Solutions® surge protector device which fails due to defect in materials, workmanship, or any transient surge event to include lightning, shall be repaired or replaced at the expense of the manufacturer.

Prior to shipment of any suspect or known defective product a Return Material Authorization (RMA) number must be obtained. An official RMA number and shipping instructions can be obtained from the distributor where the product was originally purchased. Distributors can obtain the official RMA number by contacting the Total Protection Solutions Customer Service Department at 800-647-1911. Products arriving 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 RMA number should be shipped by prepaid freight to the nominated point of return as shown on the RMA documentation.

Total Protection Solutions 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 TOTAL PROTECTION SOLUTIONS. 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 TOTAL PROTECTION SOLUTIONS, AT ITS SOLE OPTION, UNDER THIS WARRANTY IS EXPRESSLY LIMITED TO THE REPLACEMENT OR REPAIR OF THE DEFECTIVE PART THEREOF. IN NO EVENT SHALL TOTAL PROTECTION SOLUTIONS 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 FOR SUCH DEFECTIVE PRODUCT.

Warranty period begins from the date of original owner purchase. This warranty is not transferable and may only be enforced by the original purchaser. Claims under this warranty must be submitted to Total Protection Solutions within thirty (30) days of discovery of any suspected product defect.

Warranty Period

PanelTrack® - 10 Years from original date of purchase



Total Protection Solutions™

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1-800-647-1911
www.TPSsurge.com

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Total Protection Solutions™

PanelTrack®

Type 1 SPD

AC Surge Protective Device

Series:

TK-PK050-1P120-L
120V, Single-Phase, 2 Wire + Ground
TK-PK050-1P240-L
240V, Single-Phase, 2 Wire + Ground
TK-PK050-1P277-L
277V, Single-Phase, 2 Wire + Ground
TK-PK050-1S240-L
120/240V, Single-Phase, 3 Wire + Ground
TK-PK050-1S480-L
277/480V, Single-Phase, 3 Wire + Ground
TK-PK050-3Y208-L
120/208V, 3-Phase WYE, 4 Wire + Ground
TK-PK050-3Y380-L
220/380V, 3-Phase WYE, 4 Wire + Ground
TK-PK050-3Y400-L
230/400V, 3-Phase WYE, 4 Wire + Ground
TK-PK050-3Y415-L
240/415V, 3-Phase WYE, 4 Wire + Ground
TK-PK050-3Y480-L
277/480V, 3-Phase WYE, 4 Wire + Ground
TK-PK050-3Y600-L
347/600V, 3-Phase WYE, 4 Wire + Ground
TK-PK050-3D240-L
120/240V, 3-Phase high-leg DELTA, 4 Wire + Ground
TK-PK050-240NN-L
240V, 3-Phase DELTA, 3 Wire + Ground
TK-PK050-380NN-L
380V, 3-Phase DELTA, 3 Wire + Ground
TK-PK050-400NN-L
400V, 3-Phase DELTA, 3 Wire + Ground
TK-PK050-480NN-L
480V, 3-Phase DELTA, 3 Wire + Ground
TK-PK050-600NN-L
600V, 3-Phase DELTA, 3 Wire + Ground

Installation Operation and Maintenance Manual

INTRODUCTION

The PanelTrack Surge Protection Device(SPD) is designed for protection of small service entrance panels and downstream panels and equipment, as well as sensitive electrical and electronic loads from the effects of transient surges that might be produced from lightning, induction, or power company surges. LED(s) indicate the functional status of the protection components within the suppressor.

! WARNING - Do not HIPOT the PANELTRACK units or the electrical system to which the PANELTRACK unit is connected without disconnecting the PANELTRACK unit's conductors including phases, neutral and ground.

Important Safety Instructions

All work must be performed by qualified electrical personnel. The electrical system must beproperly grounded in accordance with applicable codes for this suppressor to work correctly.The PanelTrack SPD does not require the use of an upstream overcurrent device and has a short circuit current rating of 100kAIC maximum.

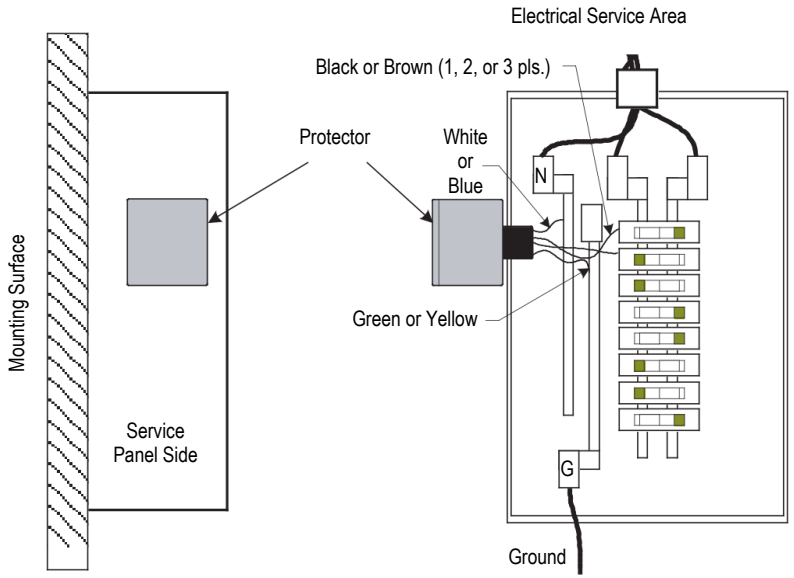
Installation

The suppressor does not require an upstream overcurrent protection device and can be installed on either the line or load side of the main service disconnect. The unit must be installed in parallel to the electrical distribution system. Careful consideration should be made in selecting the knockout location because excess lead length and sharp bends in the wire drastically decrease the effectiveness of the SPD. For this reason choose a knockout location that minimizes lead length and sharp bends. The SPD may also be mounted by it's metal bracket within the equipment enclosure.

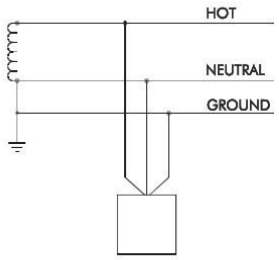
1. Disconnect all power supplying the electrical panel.
2. Remove the panel screws and cover. Retain these parts for re-installation.
3. Either remove a knockout 0.5 inches (13mm) or install provided metal bracket.
4. Remove lock washer from the SPDs threaded nipple. Carefully feed the wires through to avoid cutting wire insulation. Slide lock washer over the wires to anchor the threaded nipple. Rotate the SPD so that the function status LED indicators can be easily viewed. Tighten the lock washer to secure the SPD.
5. If this is to be a NEMA 4X enclosure, then all conduits and fittings must be rated and properly installed such that the final installation maintains the NEMA 4X rating.
6. Locate the neutral bar inside the electrical panel (except for TK-PK050-240NN-L and other Delta wired models) and connect the white or blue wire to the neutral bar and tighten to torque specified on inside of panel. Keep conductor length as short as possible and avoid sharp bends in the wire.
7. Locate the ground bar inside the electrical panel. Connect the green/yellow wire to the ground bar and tighten the terminal to the torque specified on the panel. Keep conductor length as short as possible and avoid sharp bends. If neutral is bonded to ground, green wire may be terminated to neutral.
8. Black or brown wires (model dependent) should be connected to either the breaker or the bus of the panel, as long as the short circuit current rating does not exceed 100kAIC. On High-Leg Delta units, connect the orange wire to phase B (the high-leg). If you would like to be able to turn the unit off, then you may consider connecting it to a breaker (# of breaker pole positions determined by the # of black or brown wires provided with the unit). Tighten terminals to torque specified on inside of panel. Keep lead lengths as short as possible and avoid sharp bends.
9. Re-install panel cover.

Operation

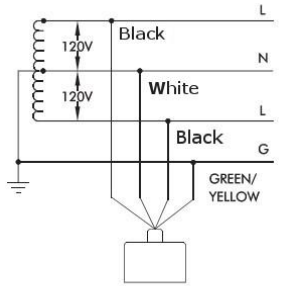
1. Apply power to the panel. If the electrical and grounding wirings are done correctly, the green function status LED will illuminate. If the LED is not on, remove the power and review all of the previous installation procedures.
2. If after a known heavy lightning strike has occurred and the LED is off, reset the breaker if it is tied to a breaker. If the function LED lights come back on then the protector is fine. If the light is still out, or you can not reset the breaker, the protector must be replaced. This unit contains no user serviceable parts.



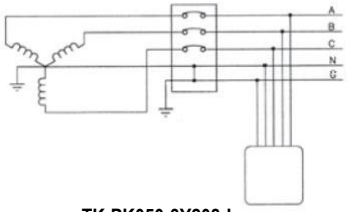
! WARNING - Hazardous voltages can cause severe personal injury or death and/or property damage. Remove all power to the electrical panel before installing or servicing this Surge Protection Device (SPD).



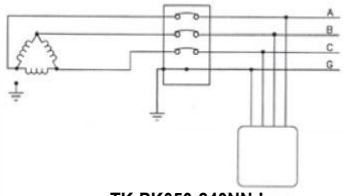
TK-PK050-1P120-L
single pole



TK-PK050-1S240-L
single phase



TK-PK050-3Y208-L
three phase wye



TK-PK050-240NN-L
three phase delta

These instructions do not purport to cover all details or variations in equipment nor to provide for every possible contingency to be met in connection with installation operation or maintenance. Should further information be desired or should particular problems arise which are not covered sufficiently for the purchaser's purposes the matter should be referred to Total Protection Solutions.