STABILINE®

Surface Protective Devices

Available Coast-to-Coast and Internationally

Voltage Control Components

VOLT-PAC®	Variable Transformers
POWERSTAT®	Variable Transformers
LUXTROL®	Lighting Controls
5-WAY®	Binding Posts
SUPERCON®	Electrical Connectors

Voltage Control Components are available worldwide through an extensive Authorized Stocking Distributor network. These Distributors offer literature, technical assistance and a wide range of models off the shelf for fastest possible delivery and service.

Power Quality Solutions

STABILINE®	Automatic Voltage Regulators
STABILINE®	Surge Protective Devices
STABILINE®	Uninterruptible Power Supplies
STABILINE®	Power Conditioners

STABILINE Power Quality Solutions are available worldwide through an extensive Authorized Distributor and Reseller network which offer literature, technical assistance and a select range of models off-the-shelf for fastest possible delivery and service.

In addition, Superior Electric Manufacturer's Representatives are available to provide prompt attention to customer needs. Call or Fax for ordering and application information or for the address of the closest Manufacturer's Representative, Authorized Distributor or Reseller.

Superior Electric

One Cowles Road • Plainville, CT 06062 USA

Telephone and Fax Numbers

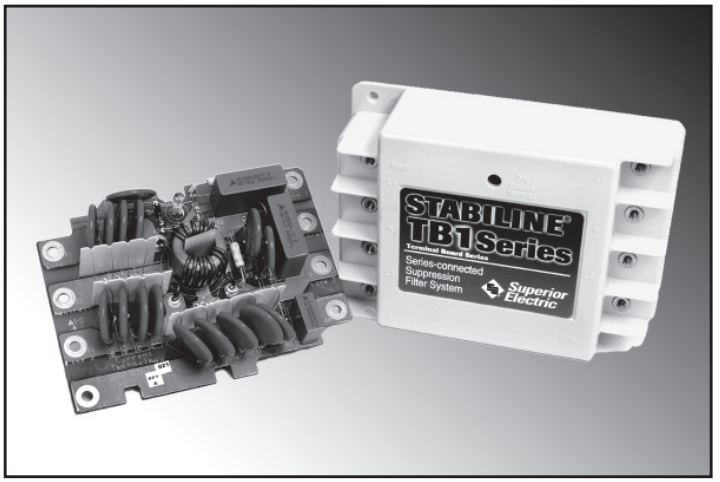
Telephone	860-507-2025
Fax	860-507-2050
Customer Service	860-507-2025, Ext. 70782
Product Application	860-507-2025, Ext. 72058

Toll-Free (in USA and Canada only)

Telephone:	1-800-787-3532
Fax	1-800-821-1369
Customer Service	1-800-787-3532, Ext. 70782
Product Application	1-800-787-3532, Ext. 72058

TB1 Series – Type 4 SPD for Type 2 Applications

Installation, Operation and Maintenance Manual



Congratulations

Thank you for purchasing the TB1 Series STABILINE® Surge Protective Device . . . another Superior product!

Expect exceptional performance. The unit is built to the highest standards for your complete satisfaction.

To assure many years of uninterrupted service, please read this Installation, Operation and Maintenance Manual to familiarize yourself with the operation and proper installation of the TB1 Series unit.

Superior Electric

* Subject to change without notice.

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SAVE THESE INSTRUCTIONS!!

This Manual contains important instructions for the TB1 Series Surge Protective Device that should be followed during installation and maintenance of the Surge Protective Device.

Install the TB1 electrically in series between the AC electrical power source and the load to be protected. The TB1 unit contains no user-serviceable parts.

Before Installation

THE FOLLOWING IS INTENDED FOR QUALIFIED ELECTRICAL PERSONNEL ONLY. COMPLETELY READ THESE INSTRUCTIONS BEFORE INSTALLATION. CALL *SUPERIOR ELECTRIC AT 1-800-787-3532* WITH ANY QUESTIONS. IT IS THE FINAL RESPONSIBILITY OF THE INSTALLING ELECTRICIAN TO ENSURE THAT ALL LOCAL CODES AND OTHER APPLICABLE SAFETY/ ENVIRONMENTAL CONDITIONS ARE MET AND THE UNIT IS CORRECTLY INSTALLED.

Voltage and Current Verification

Prior to installation, verify that the voltage and current ratings of the intended electrical system or circuit in which the product is being installed, do not exceed those of the TB1 product.

WARNING - SERIOUS INJURY OR DAMAGE MAY RESULT FROM INSTALLING A PRODUCT WITH AN IMPROPER VOLTAGE RATING. CONTACT *Superior Electric at 1-800-787-3532* IF VOLTAGE RATINGS ARE NOT IDENTICAL.

Mounting

1. Remove all power feeding the site of the TB1 connection.
2. The TB1 Series is designed for installation within or adjacent to electrical or electrically-driven equipment. Adjacent installation requires a sealed enclosure. Care should be taken to ensure exposed terminals do not come in contact with personnel.
3. Within the equipment to be protected, mount the TB1 securely to the enclosure or other mounting surface using the holes provided in the two opposite corners (see drawing below).

Electrical Connections

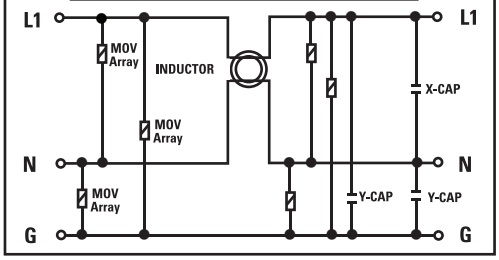
1. The TB1 must be protected via a circuit breaker with a maximum ampacity of 30 amps.
2. Determine the location of the AC source supplying power to the load.
3. The TB1 is to be installed in series between the AC power source and the equipment to be protected.
4. Using the appropriate phase, neutral and ground conductors, connect the incoming power source to the input terminals of the TB1.
5. Connect the output terminals of the TB1 to the corresponding load input.
6. Make all electrical connections using the appropriate conductor size:

Model Number	*Load Current*	*Minimum Wire Size*
TB1-50	**24 Amps**	**#10 AWG THHN**

Operation

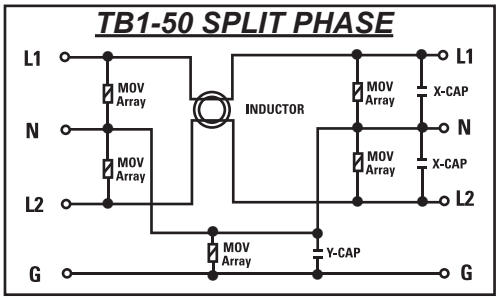
Apply power to the device once proper installation has been completed. An illuminated LED indicates proper operation of the device. See the TB1 line diagrams below.

TB1-50 – SINGLE PHASE



USE ONLY THE L1 TERMINAL LUG FOR THE PHASE WIRES (INPUT & OUTPUT) WHEN CONNECTING TB1 IN A SINGLE PHASE CONFIGURATION

TB1-50 SPLIT PHASE



MATCH THE CORRESPONDING L1 & L2 TERMINAL LUGS FOR THE INPUT AND OUTPUT PHASE WIRES WHEN CONNECTING A SPLIT PHASE CONFIGURATION