| ELECTRICAL SPECIFICATIONS | |
|-------------------------------|------------------|
| Max. Surge Current | 40kA |
| Max. Line Current (OCOD Size) | 30A |
| Nom. Discharge Current (In) | 20kA |
| Frequency | 50 - 60Hz |
| Operating Temperature | -40°C to 60°C |
| Form C Contact | Yes (See Fig. D) |

550V

2Ph. 480V

3Ph. 480V

| MECHANICAL SPECIFICATIONS | |
|---------------------------|-----------------------------------|
| Termination Method | Screw Terminal (#8 - #12AWG) |
| Disconnect Indication | Visual Indicator & Form C Contact |
| Housing | Themoplastic NEMA 2 (IP20) |
| Dimensions | See Fig. C |
| Mounting | 35mm Symmetrical DIN Rail |
| Outdoor Use | No |
| ROHs Compliant | Yes |

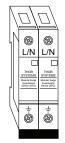


THOR SYSTEMS, INC. 3621 Saunders Avenue Richmond, VA 23227-4354 Ph 804.355.1100 - www.thorsystems.us

Series TSi

Operation Manual





1-Pole Models

2-Pole Models



3-Pole Models



4-Pole Models

THOR SYSTEMS continuously strives to improve its products. Occasionally there may be changes in features or optional equipment. All information contained in this printed material is based on the latest product information available at the time of printing. THOR SYSTEMS reserves the right to implement changes, without notice, in specifications and equipment services.

AVAILABLE MODEL NUMBERS (Connection Figure) L-N & N-G or MCOV L-N or L-G Protection Voltage L-G & N-G Protection 1Ph, 120V TSi 040R 150 1P10 (A1) TSi 040R 150 2P11 (A2) 2Ph, 240/120V 150V TSi 040R 150 2P10 (A3) TSi 040R 150 3P11 (A4) 3Ph, 208/120V TSi 040R 150 3P10 (A5) TSi 040R 150 4P11 (A6) 1Ph, 240V TSi 040R 320 1P10 (A1)* 1Ph, 277V TSi 040R 320 1P10 (A1) TSi 040R 320 2P11 (A2) 2Ph, 240V TSi 040R 320 2P10 (A3)* 320V 2Ph, 480/277V TSi 040R 320 2P10 (A3) TSi 040R 320 3P11 (A4) 3Ph. 240V TSi 040R 320 3P10 (A5)* -----3Ph, 480/277V TSi 040R 320 4P11 (A6) TSi 040R 320 3P10 (A5) 1Ph, 480V TSi 040R 550 1P10 (A1)* -----

LIMITED SUPPRESSION WARRANTIES

TSi 040R 550 2P10 (A3)*

TSi 040R 550 3P10 (A5)*

THOR SYSTEMS, INC. warrants to the original purchaser/end user that this Surge Protective Device (SPD/TVSS), if purchased and used solely in the continental United States, will be free from defects in materials and workmanship for a period of five (5) years from the date of purchase. During such limited warranty period, THOR SYSTEMS will not charge the original purchaser/end user to replace the product, or a part or component therein (with the same or a similar product, part or component) at THOR SYSTEMS of the north user, to THOR SYSTEMS, INC.'S manufacturing facility in Richmond, Virginia, within the limited warranty period. All costs and expenses incurred in connection with the removal, shipment, handling and reinstallation of the repair or replaced product, part or component, as well as diagnosis, shall be borne by the purchaser/end user. A Return Material Authorization (RMA) number must be obtained from the Company's customer service department before returning any products.

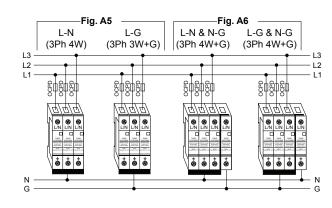
At the request of the purchaser/end user, and at the cost and expense of the purchaser/end user (at our currently published rates, portal-to-portal), and with reasonable expectation of payment, THOR SYSTEMS, INC. will: (a) provide assistance in the diagnosis, removal, and reinstallation of a repaired or replaced product, part or component; (b) undertake to repair or replace any product, part or component at a location other than THOR SYSTEMS' manufacturing facility in Richmond, Virginia.

The foregoing limited warranties shall not apply unless a Warranty Registration Card is completed and returned via mail, fax, or email to THOR SYSTEMS, INC. within thirty (30) days of the date of purchase. The foregoing limited warranties shall not apply if the product, or any parts or components, are modified, tampered with, misused, misapplied, or subjected to abnormal working conditions (including, but not limited to, water or other overexposure). The limited warranty for repaired product or replacement product, parts or components will be only the remaining portion of the original limited warranty.

THESE LIMITED WARRANTIES DO NOT GUARANTEE UNINTERRUPTED SERVICE. REPAIR OR REPLACEMENT AS PROVIDED UNDER THESE LIMITED WARRANTIES ARE THE EXCLUSIVE REMEDY OF THE PURCHASER/END USER. THESE LIMITED WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE: ALL OF WHICH ARE HEREBY EXCLUDED AND EXPRESSLY DISCLAIMED. THOR SYSTEMS, INC. SHALL IN NO EVENT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE, OR CONSEQUENTIAL DAMAGES OF ANY KIND OR CHARACTER, INCLUDING, WITHOUT LIMITATION, LOSS OF REVENUE OR PROFITS, FAILURE TO REALIZE SAVINGS OR OTHER BENEFITS, LOSS OF DATA OR USE, DAMAGE TO EQUIPMENT AND CLAIMS AGAINST THE PURCHASER/END USER BY ANY THIRD PERSON, EVEN IF THOR SYSTEMS, INC. 'HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THOR SYSTEMS, INC.'S TOTAL LIABILITY ON ANY CLAIM MADE AGAINST IT SHALL NOT IN ANY EVENT EXCEED THE PURCHASE PRICE PAID TO THOR SYSTEMS, INC. FOR THE DEFECTIVE PRODUCT.

Fig. A__ - CONNECTION METHOD

Fig. A1 Fig. A2 L-G L-G & N-G L-N L-N & N-G (1Ph 2W) (1Ph 1W+G) (1Ph 2W+G) (1Ph 2W+G) L1 - L1 S OCPD 륑 . 0 0 ė ė ÷. G C Fig. A4 -Fig. A3 L-N L-G L-N & N-G L-G & N-G (2Ph 3W) (2Ph 2W+G) (2Ph 3W+G) (2Ph 3W+G) L2 L2 L1 L1 2020 2020 $\frac{1}{2}$ 888 8 8 8 69 00 0 * * * **.**



G

Fig. B - TECHNOLOGY / SCHEMATIC

TD

F

Μ

С

mi

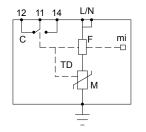
Thermal Disconnect

Metal Oxide Varistor

Mechanical Indicator

Form C Contact (See Fig. D)

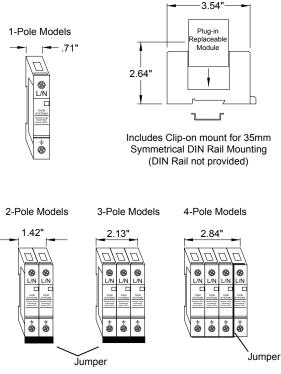
Thermal Fuse



G

Fig. C - DIMENSIONS

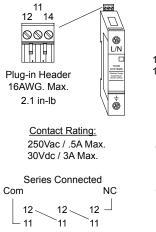
INSTALLATION



2, 3 & 4-Pole Models include output jumpers secured in place by the output terminals. Keep in place when making connection.

FIG. D - FORM C CONTACT

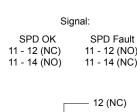
Remote Signal for disconnect indication

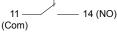


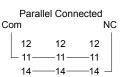
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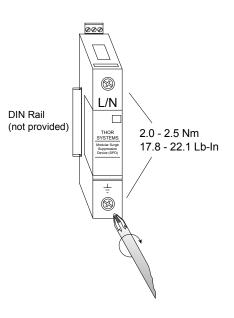
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SPD FAILURE INDICATION

If the SPD fails, the Fault Indictator Window turn RED, and the FORM C Contact (See Fig. D) will change state. Service Interruption will NOT be experienced.

