

# EVTD Technology

(Thermally Protected Varistor)



# EVTD – EV Series Varistor (Thermal Disconnect)

## EVTD Technology (Thermally Protected Varistor)

### Features

- High energy handling capability
- Wide voltage range available: 50VAC – 550VAC
- Multiple diagnostic options (micro-switch locations both on top & bottom, on top only or on bottom only)
- Industry standard footprint
- UL1449 4th Edition and CUL Type 4 recognized. File #E321567.
- RoHS compliant
- Exceeds industry standard operating and storage temperatures for this type of device. Rated at -40°C to +85°.
- U.S. Patent No.: US 9,165,702B2.



### Part Numbering System

|             |           |          |           |          |          |          |          |
|-------------|-----------|----------|-----------|----------|----------|----------|----------|
| <u>EVTD</u> | <u>34</u> | <u>V</u> | <u>50</u> | <u>K</u> | <u>A</u> | <u>S</u> | <u>C</u> |
| (1)         | (2)       | (3)      | (4)       | (5)      | (6)      | (7)      | (8)      |

**(1) Series**

EVTD= EV Series Varistor TD Thermal Disconnect

**(2) Disk Size**

34 = 34mm

**(3) Type**

V = High Current EV Varistor Series

**(4) AC RMS Voltage Rating**

50 = 50VAC

**(5) Tolerance**

K = ±10%

**(6) Micro-switch Location Option**

Nil = Top and Bottom

A = Top only (3 leads)

B = Bottom only

C = Top center only (2 leads)

**(7) Micro-switch Lead Length Option  
(for "C" location only)**

Nil = Standard Long Lead (11mm ± 1mm)

S = Short Lead (5mm ± 0.5mm)

**(8) Micro-switch Function Option**

Nil = Normally Open

C = Normally Closed

**Date Code 1625** = First digit represents year (16=2016). Second and third digits represent the week of the year.

# EVTD – EV Series Varistor (Thermal Disconnect)

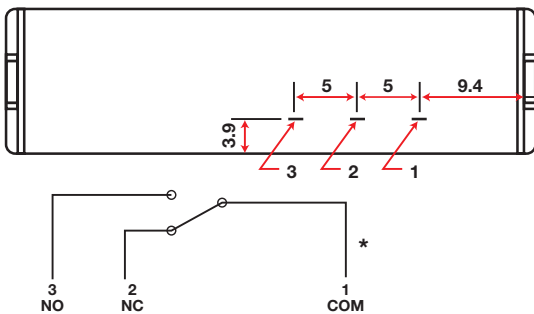
## EVTD Series – Electrical Characteristics

| Part Number | Maximum Continuous Rated Voltage |          | Varistor Voltage @1.0 mA (DC) |         |           | Maximum Clamping Voltage |           | Maximum Peak Current (8/20µs KA) |         | Maximum Energy    |
|-------------|----------------------------------|----------|-------------------------------|---------|-----------|--------------------------|-----------|----------------------------------|---------|-------------------|
|             | AC RMS Volts                     | DC Volts | Min Volts                     | Nominal | Max Volts | VC (Volts)               | IP (Amps) | 15 pulses*                       | 1 pulse | 10/1000µs (joule) |
| EVTD34V50K  | 50                               | 65       | 74                            | 82      | 90        | 135                      | 300       | 20                               | 45      | 156               |
| EVTD34V60K  | 60                               | 85       | 90                            | 100     | 110       | 165                      | 300       | 20                               | 45      | 195               |
| EVTD34V75K  | 75                               | 100      | 108                           | 120     | 132       | 200                      | 300       | 20                               | 45      | 235               |
| EVTD34V150K | 150                              | 200      | 222                           | 246     | 270       | 395                      | 300       | 20                               | 50      | 480               |
| EVTD34V180K | 180                              | 230      | 256                           | 283     | 310       | 470                      | 300       | 20                               | 50      | 540               |
| EVTD34V250K | 250                              | 320      | 371                           | 410     | 449       | 650                      | 300       | 20                               | 50      | 830               |
| EVTD34V275K | 275                              | 350      | 410                           | 453     | 496       | 710                      | 300       | 20                               | 50      | 920               |
| EVTD34V300K | 300                              | 385      | 423                           | 471     | 517       | 775                      | 300       | 20                               | 50      | 1000              |
| EVTD34V320K | 320                              | 415      | 459                           | 510     | 561       | 845                      | 300       | 20                               | 50      | 1060              |
| EVTD34V385K | 385                              | 505      | 558                           | 620     | 682       | 1025                     | 300       | 20                               | 50      | 1250              |
| EVTD34V420K | 420                              | 560      | 612                           | 680     | 748       | 1120                     | 300       | 20                               | 50      | 1250              |
| EVTD34V460K | 460                              | 615      | 675                           | 750     | 825       | 1240                     | 300       | 20                               | 50      | 1280              |
| EVTD34V510K | 510                              | 670      | 738                           | 820     | 902       | 1355                     | 300       | 20                               | 50      | 1395              |
| EVTD34V550K | 550                              | 745      | 819                           | 910     | 1001      | 1500                     | 300       | 20                               | 50      | 1475              |

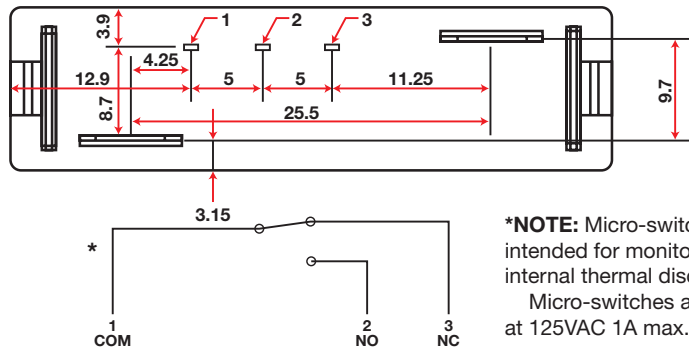
\*I(n) sequencing according to UL1449 3rd Edition.

### Micro-switch Location Options “A” & “B” Only.

Micro-switch (TOP)



Micro-switch (BOTTOM)



**\*NOTE:** Micro-switches are intended for monitoring of the internal thermal disconnect. Micro-switches are rated at 125VAC 1A max.

### Dimensions (mm)

|    |      |
|----|------|
| L  | 43.9 |
| W  | 42.8 |
| W1 | 41   |
| T  | 16   |
| F  | 25.5 |
| L1 | 17.8 |

**Note:** Tolerance for all dimensions are +/- 1mm unless otherwise noted.

