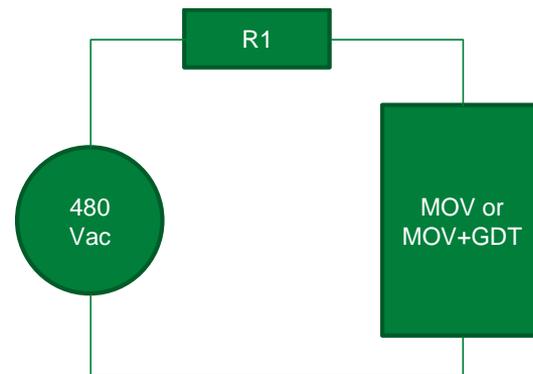
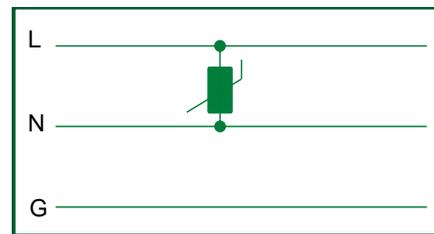


# Select varistors for differential mode protection according to Annex G.8

- Comply with a varistor component standard
  - IEC 61051-1 or IEC 61643-331
- $MCOV \geq 1.25 \times$  rated voltage of equipment
  - Example (240 Vac power supply)
    - $240 \times 1.25 = 300 \text{ V}$
- Withstand multiple strikes as defined by 2.3.6 of IEC 61051-2 or 8.1.1 of IEC 61643-331
  - Example (240 Vac power supply)
    - 10 pulses of 2.5 kV / 1.25 kA combination wave of 1.2/50  $\mu\text{s}$  voltage and 8/20  $\mu\text{s}$  current
    - 10 mm\* or larger varistor diameter required
- Pass varistor overload test (G.8.2.2)
  - If used in series with other devices, G.8.2.2 applies to series combination
  - Example (240 Vac power supply)
    - Apply 2x rated voltage =  $2 \times 240 = 480 \text{ V}$
    - R1 of test one = 3.84 k $\Omega$
    - Subsequent tests, halve the R value until circuit opens
  - 300 V thermally protected varistor passes
  - 420 V or higher required for non-thermally protected varistor
    - Clamping voltage is higher than 300 V MOV



Recommend 14mm\* 300 V TMOV