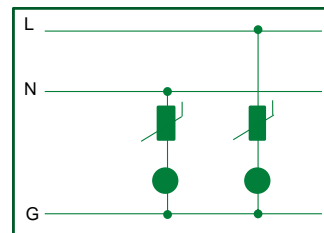
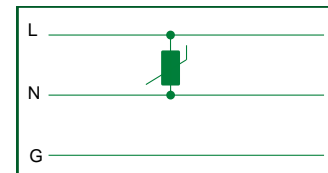
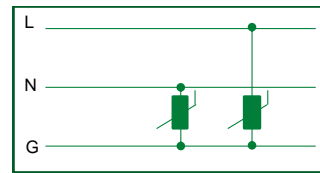


Surge protection requirements: Section 5.5.7

- Multiple technologies possible (varistors, TVS diodes, protection thyristors, gas discharge tubes)
- Varistor & GDT specifically mentioned & most widely used
- Varistors
 - Allowed between mains and protective earth if ground is reliable
 - Must comply with varistor requirements in section G.8
 - Allowed between line and neutral & between lines (L-N & L-L)
- GDTs
 - If ground is unreliable; between mains and PE (G), use a varistor with a GDT
 - Comply with Electric strength tests, clearances and creepage distances (sections 5.4.9.1, 5.4.2, and 5.4.3)



Next: select MOV for L-N and MOV+GDT for mains to PE