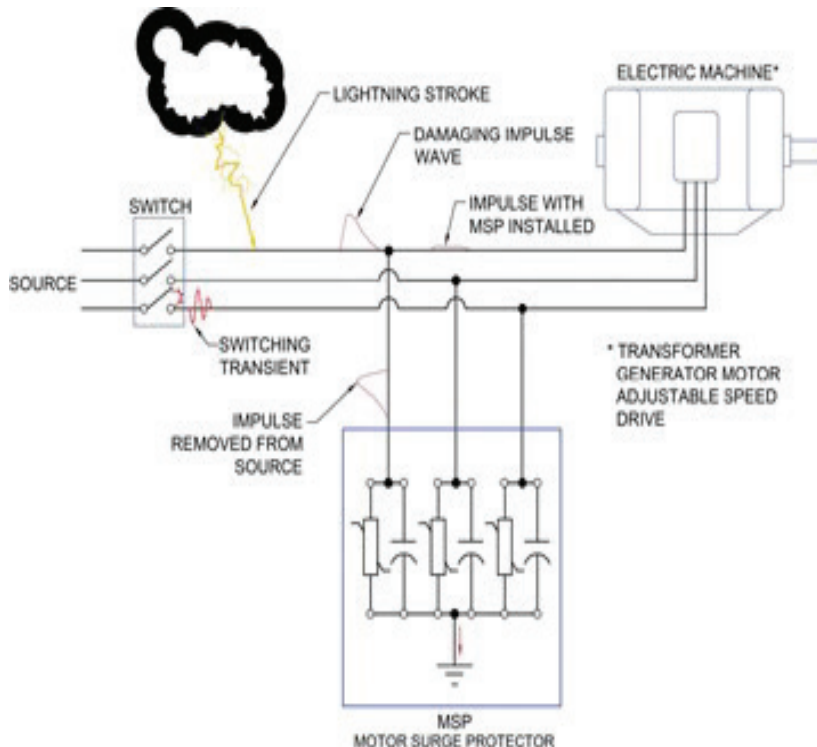


Deenergized Electric Motor Testing with Capacitor Bank or Surge Arrester

Many medium to high voltage electric motors are equipped with a Capacitor bank or Surge Arrester to protect equipment from unexpected transient power surges due to external lightning strikes, internal switching events or other transient voltage surges. These devices are crucial to protect equipment that could easily be damaged by these unexpected surges in power. When conducting a motor test with one of ALL TEST Pro's line of deenergized motor testers it is particularly important that these capacitor banks or surge arresters are disconnected and isolated from the motor.



These capacitors and surge arresters will filter test results and create incorrect and inconsistent readings which can lead to false diagnoses of the motor. When testing a motor with a capacitor bank or surge arrester it is recommended to take a test directly at the motor with the incoming motor cables disconnected. You can also disconnect the motor cables at the load side of the capacitor bank or surge arrester and conduct a motor test at that point. Always remember to conduct multiple tests before condemning a motor to verify consistency of results. Please refer to the Motor Circuit Analysis manual for more details on condemning criteria.