Megger

IMPORTANT SAFETY ADVISORY NOTE

REQUIREMENTS FOR SAFE WORK ENVIRONMENT WHEN PERFORMING MV or LV POWER CABLE FAULT LOCATING BY DISCHARGING A HIGH VOLTAGE CAPACITOR

Not paying attention or correcting unsafe conditions can lead to personal injury and potential death

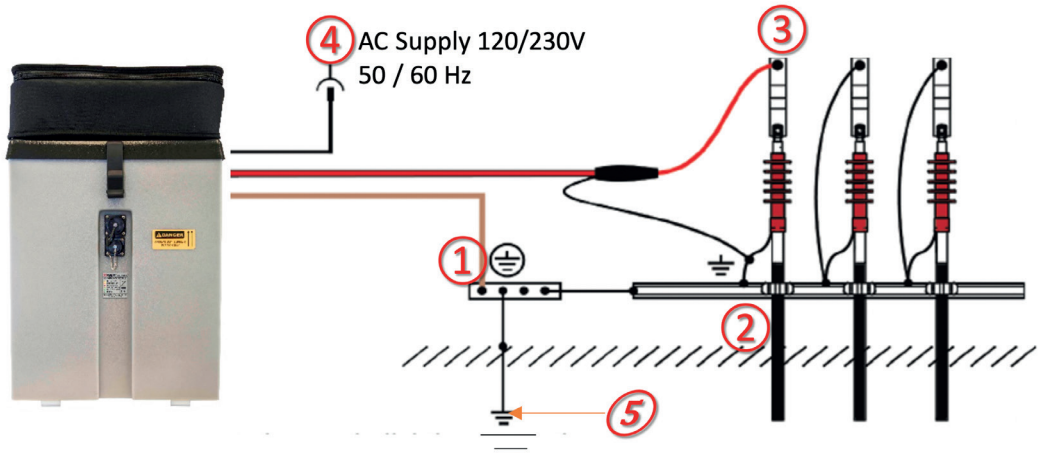
Background:

- Increasing population of old/aged substations / cable cabinets etc., with the consequence of insufficient/bad grounding conditions
- Design of LV networks, especial street lightning with inadequately grounding conditions for pulse shape voltage stress
- More and more smart HV test equipment is coming to market
- Facilitates field use and operation by larger group of potential operators
  - Operation of equipment itself becomes easier and requires less training
  - Lack of knowledge what constitutes a safe work environment when using High Voltage
  - Lack of knowledge becomes proliferated due to lack of adequate training

Requirements for safe High Voltage work environment :

1. Safety Ground lead of unit is connected to system grounding point of power device, (1), e.g. transformer, switchgear etc., via proper clamp, no alligator clip
2. High Voltage Return (= shield of test lead) (2) is connected via clamp to concentric neutral (shield) of power cable to be tested or to the grounded second faulty core in case of belted MV cables or to the second faulty core of a LV cable
3. High Voltage lead (3) is connected via clamp or other proper means to the conductor of the power cable to be tested, no alligator clip
4. The Concentric Neutral (shield of the cable to be tested) of the power cable, or the second faulty core of the cable to be tested must be bonded to the system grounding point of the power device (see also 1)
5. The resistance of the system grounding point of the power device to earth ground must be 5 Ohms or less when measured with an earth ground meter
6. If a 5Ω or less condition cannot be attained, the operator must follow the specific work procedures and instructions, applicable to a "hot" / "energized" /"live" work site; in Europe EN 50110-1 is mandatory

If you have any questions, please contact your local Megger Representative



Resistance between grounding point of power device (1) / (2) and system earth and earth ground (5) must be ≤ 5Ω
NOTE: the safety ground (earth) conductor of the AC power cord (4) is not a sufficient ground when discharging a high voltage surge capacitor