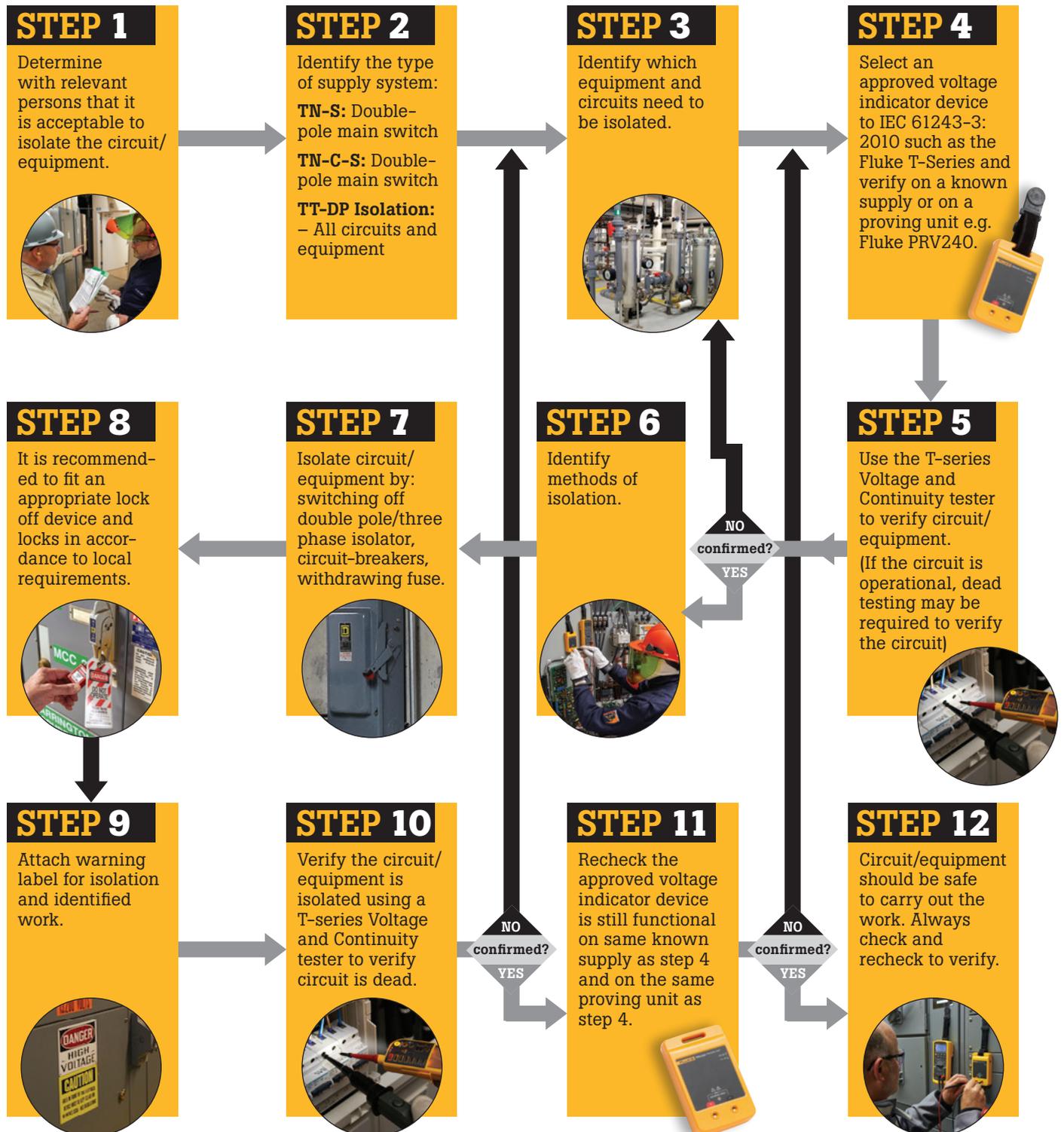


12 STEPS to safe isolation

These suggested 12 steps for isolating circuits and equipment are no substitute for a thorough risk assessment. However, they are a good starting point when identifying a method of safely isolating circuits and equipment.



Safe isolation procedures for low voltage installations

Prior to beginning work on any live installation, Regulation 14 of the Electricity at Work Regulations 1989 requires that three conditions must be met. These include:

- ▶ Circumstances make it unreasonable to conduct work on dead circuit;
- ▶ it is reasonable given circumstances to work in or near live circuit; and
- ▶ suitable precautions are taken prior to work. Where possible, dead work is always preferable to live work.

Where these three conditions are met, live work may proceed but **minimum safe isolation procedures** should be followed. These include:

1 Identify correct isolation point or device

For all work on low voltage electrical equipment or circuits, it is important to ensure that the correct point of isolation is identified. When isolating the main source of energy, it is also essential to isolate any secondary sources (such as standby generators, uninterruptible power supplies and micro generators).

2 Check condition of voltage indicating device – such as a test lamp or two-pole voltage detector.

3 Switch off installation /circuit to be isolated - It should never be assumed that equipment is dead because a particular isolation device has been placed in the OFF position.

4 Verify with voltage indicating device that no voltage is present. It is important to ensure that the correct point of isolation is identified before proving dead. Adequate precautions should be taken to prevent electrical equipment which has been made dead, is carried out on or near that equipment, from becoming electrically charged during that work.

5 Re-confirm that voltage indicating device functions correctly on proving unit. Use proving unit to confirm that the voltage on the indicating device is functioning correctly.

6 In Germany, Switzerland, and Austria standards require additional steps, including:

- a. Carry out earthing and short circuiting
- b. Provide protection against adjacent live parts

7 Lock-off device used to isolate installation circuit. It is preferable for an appropriate locking –off device be used on the point of isolation.

8 Post warning notices. Suitable labeling of the disconnected conductors using a caution notice is vital to prevent the supply being reinstated.

