12-step isolation procedure | Guidance for safe low-voltage installations



NOTE: The following 12-step isolation procedure for live installations is not meant to replace a full risk assessment, but rather be a helpful guide for safely isolating circuits and equipment.

- Step 1: Determine with relevant individuals that it is acceptable to isolate the circuit.
- Step 2: Identify the type of supply system:
 - TN-S (double-pole main switch)

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- TN-C-S (double-pole main switch)
- TT-DP isolation (all circuits and equipment)
- Step 3: Identify which equipment needs to be isolated.
- Step 4: Select an approved voltage indicator device.
- Step 5: Use a voltage and continuity tester to verify equipment. (If a circuit is operational, dead testing might be required to verify the circuit.)
- Step 6: Identify methods of isolation.
- Step 7: Isolate the equipment by switching off the double pole/three-phase isolator, circuit breakers and withdrawing fuse.
- Step 8: It is recommended that you fit an appropriate lock-off device and locks in accordance with local requirements.
- Step 9: Attach a warning label for isolation and identified work.
- Step 10: Verify the equipment is isolated by using a voltage and continuity tester to verify the circuit is dead.
- Step 11: Recheck the approved voltage indicator device is still functional on the same known supply.
- Step 12: It should be safe to carry out circuit work, but always check and recheck to verify this.

Remember, it should never be assumed that equipment is dead just because a particular isolation device has been switched to "off."

Achieve safety goals with the 12-step isolation procedure

It's also worth noting that you should ensure the correct point of isolation is identified before proving dead. The goal is to prevent equipment from becoming electrically charged during work, so use an appropriate locking-off device on the point of isolation.

Click here to download a free visual guide for the 12-step isolation procedure.

This blog post was drafted in partnership with Fluke Corporation. Check out Fluke's original article, "Safe isolation procedures for low voltage installations."

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