

Electrical Circuit Breaker Safety Instructions

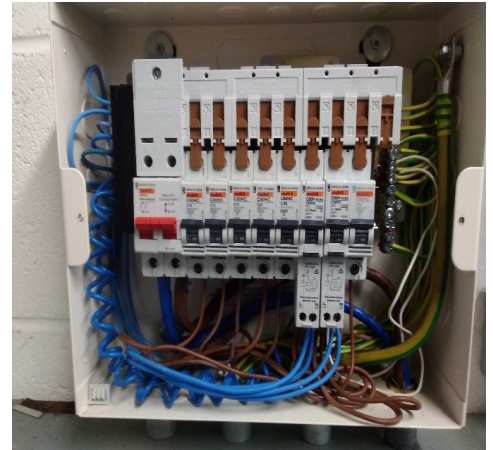
The **Safety Instructions for Electrical Circuit Breakers** are for ACU personnel who are trained to reset an electrical circuit breaker and are unqualified electrical workers.

You may reset a tripped circuit breaker only **once**. If the breaker trips again, the cause may not be an overload condition; it may be a fault condition. Fault conditions are potentially hazardous conditions that could cause personal injury or property damage if not handled correctly.

Electrical circuit breakers are designed to “trip” (i.e., stop electrical current from flowing through the circuit) when more current flows through the circuit than the overcurrent or trip current protection allows.

Before resetting a breaker, you must determine the **cause** of the trip. It is safe to reset a breaker only if it has been determined that the circuit was **overloaded**. Repeatedly resetting a breaker could result in an arc flash or a fire.

If the cause is due to a short-circuit or a ground fault, a **qualified electrician** must be notified to investigate the problem.



Warning signs of an overloaded circuit include:

- Lack of power in appliances
- Lights that flicker or dim, especially when other appliances are turned on
- Buzzing noises from outlets or switches
- Outlet or switch covers warm to the touch

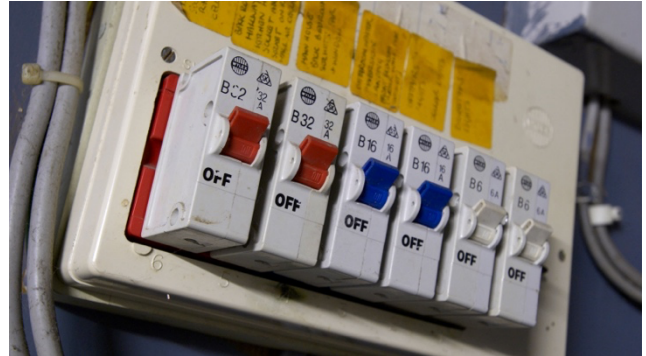
Be aware of the amperage of the breakers to avoid circuit overload. Appliances that may draw a high amperage include refrigerators and vacuum cleaners. Avoid **daisy-chaining** (connecting more than two extension cords with high amperage appliances to one power board/outlet).

STEPS TO RESET AN ELECTRICAL CIRCUIT BREAKER

*(note: An unqualified electrical worker may reset a breaker if they are trained to do so, and the cause of the trip was an **overloaded circuit**).*

1. You must **determine the source of the overload** before resetting the breaker.
2. You must **identify the correct circuit breaker**; You must confirm through the **labelling** that the circuit breaker in question is the one controlling the tripped circuit.
3. Inspect all equipment and assess the total amperage on the affected circuit.
4. If the circuit breaker operation appears to have been caused by an identified overload condition, remove the causative load.

5. If an overload condition cannot be identified, **STOP** and contact ACU Properties and Facilities as the circuit breaker operation may have been due to a fault.
6. Only the breaker connected to the tripped circuit may be reset. If other tripped breakers are discovered in this process, do not attempt to reset other circuits. **STOP** and contact ACU Properties and Facilities.
7. It is highly recommended to wear **personal protective equipment** such as safety glasses or goggles, and a long-sleeved shirt and pants made of untreated, natural fibres.
8. Stand to the side of the panel box and turn your head away from the panel.
9. Make sure your hands are dry. Use one hand to move the tripped breaker to the “off” and then to the “on” position. If the breaker immediately trips again, **STOP** and contact ACU Properties and Facilities.
10. Do not contact any metal with the other arm or body.



As a best practice, **document each time** a circuit breaker trips to help determine if there is an underlying root cause that can **prevent** additional problems.

KNOW WHEN TO **STOP**

- If the panel is **wet**
- If any wires are visible behind the breaker
- If breakers are **not labelled**
- If the equipment has an **out-of-service** or faulty tag
- If there is **more than one** tripped breaker
- If the breaker has been tripped repeatedly

KEEP IN MIND

- ACU **WHSMS Managing Electrical Risk** Procedure
- Remember to submit reports of electrical, other incidents, or hazards within **riskware** and engage your supervisor and ACU Properties and Facilities about complex issues requiring an electrician.
- Watch **Safety Hub videos about electrical safety**
- **Electrical Risks at the Workplace** – Safe Work Australia
- **Call 000 in case of Fire and/or Emergency**