

# GFCI, AFCI protection by Finn Home Inspectors

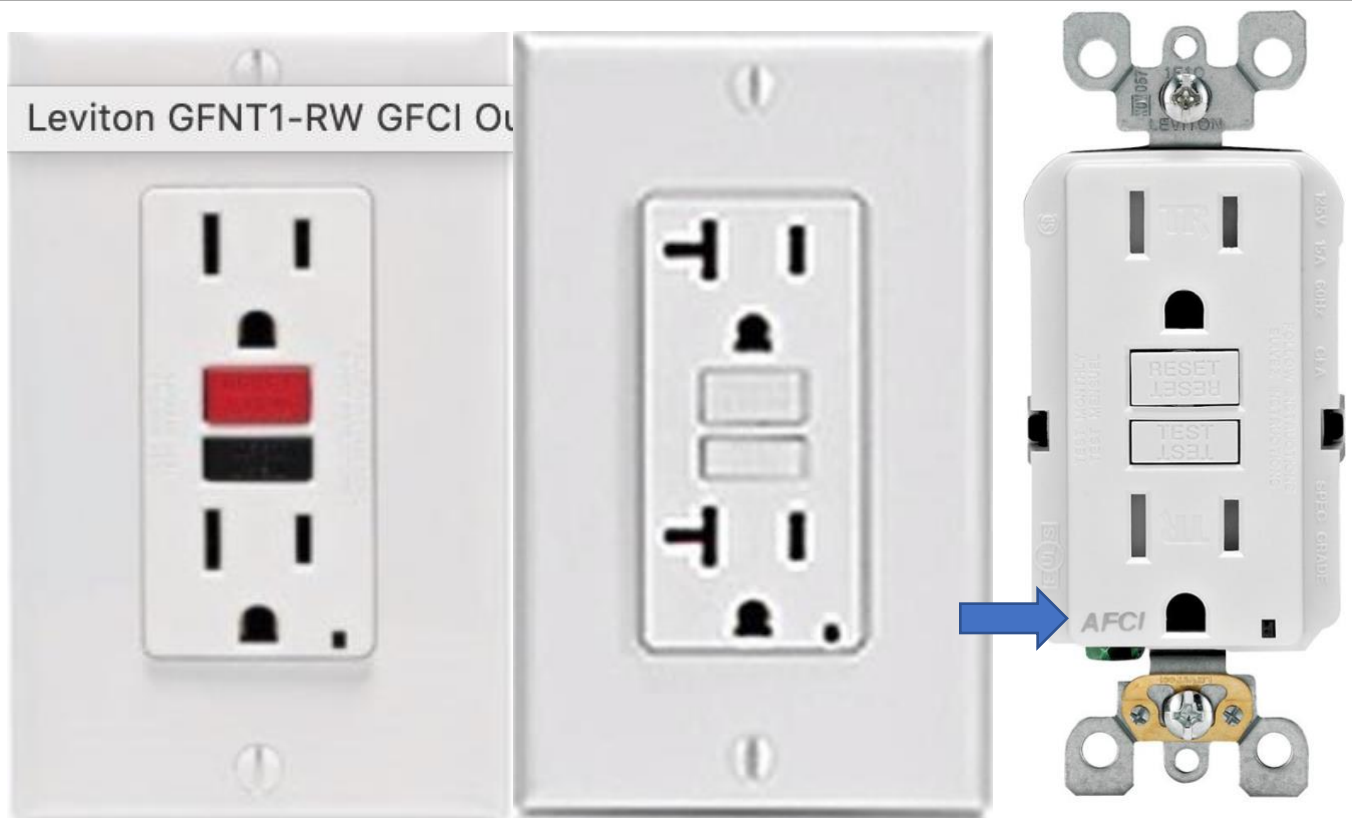
GFCI stands for Ground Fault Circuit Interrupt, which will stop the power if there is a fault to ground, such as electricity going through you. It is the only electrical safety device that is intended to avoid human electrocution.

AFCI stands for Arc Fault Circuit Interrupt, which will cut the power if arcing occurs. Electrical fires often start with arcing. Arcing is seen as sparks between two conducting articles. Today standards require them in most locations.

GFCI's were initially required near water, then in more locations. AFCI's became a requirement in bedrooms, but now are required in most areas in new construction.

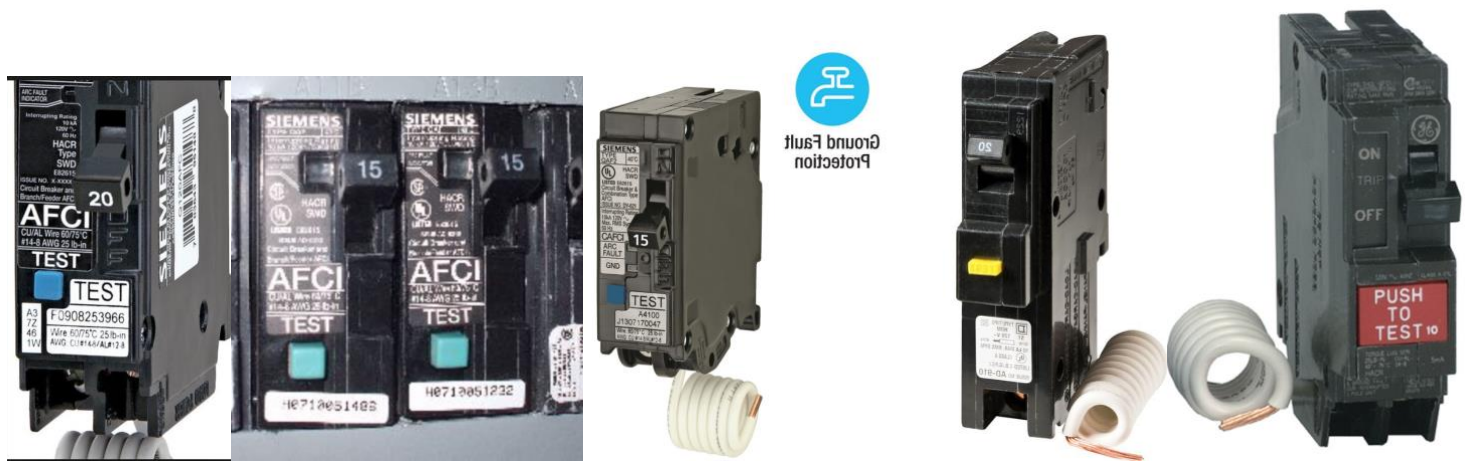
One problem you may encounter is some motors are likely to trip off a AFCI because the way they work there is often arcing between the motor rotor and its brushes.

Below are photos of GFCI's and AFCI's. AFCI's have only been incorporated in electrical breakers, but some are now made for receptacles, see photo below far right side.



Two types of GFCI receptacles.

A newer AFCI receptacle



Several AFCI circuit breakers

Two GFCI circuit breakers



And without Circuit Interrupters this can happen