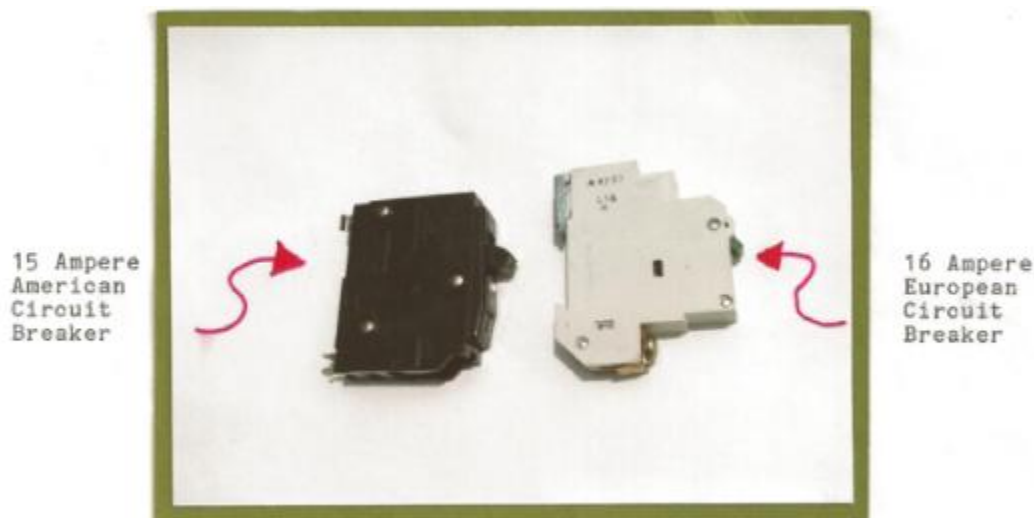


## “KEEPING PACE” - #15

(REVISED)

### LOWERED MAGNETIC TRIP:

In this newsletter first issued in 1986, I pointed out the differences between American circuit breakers and European circuit breakers. The European circuit breakers were much more sensitive to arcing currents, and much more likely to trip quickly enough to prevent an arcing fire. I began a lengthy campaign to get American circuit breakers improved. In 1993, the circuit breaker industry agreed to make common circuit breakers more sensitive, with a magnetic trip averaging 10X. Some of them had been as high as 40X.



In addition, in 1997 Arcing Fault Circuit Interrupters (AFCI's) were invented. These are circuit breakers which contain a computer chip to detect arcing currents. They have virtually a 100% probability of preventing a fire, in my opinion. AFCI's became code in 2002 for bedroom outlets, and virtually all outlets in 2008.

For more information on AFCI's, search "arc fault."

Sincerely,

Frederick F. Franklin, P.E.  
Forensic Engineer

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