

Combination Arc Fault Circuit Interrupter Selection and Application Guidelines

The 2005 National Electric Code (NEC®) mandated that Arc Fault Circuit Interrupters (AFCIs) be used in bedroom circuits. It also mandated the use of Combination AFCIs by January 2008. Combination AFCIs protect against parallel arc faults plus series arc faults (arcing on the same conductor). The 2008 NEC expands the use of the new combination AFCIs to all single phase, 15 and 20 amp, non-ground fault circuits supplying power to dwelling areas. Affected areas typically would include: family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sun rooms, recreation rooms, closets, hallways and similar areas.

2008 and earlier NEC versions are adopted by each state and its municipalities. Please visit www.afcisafety.org for more information related to state adoption status of combination AFCIs.

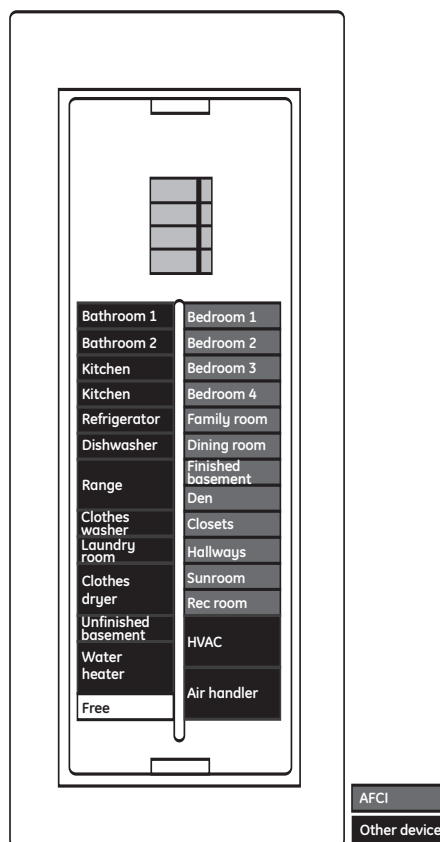
GE Combination AFCI selection

Amp Rating	In states on 2002 NEC or earlier		In states on 2005 NEC or later	
	Interrupting rating		Interrupting rating	
	10KAIC	22KAIC	10KAIC	22KAIC
15A	THQL1115AF	THHQL1115AF	THQL1115AF2	THHQL1115AF2
20A	THQL1120AF	THHQL1120AF	THQL1120AF2	THHQL1120AF2

Combination AFCIs are not a substitute for ground fault protection and are not required on any circuits requiring ground fault protection. A ground fault receptacle, however, can be fed by an AFCI.

Circuit selection for combination AFCIs

Think of this diagram as the layout of a typical 32-circuit load center. Circuits for the types of areas requiring AFCI protection are in gray. Those not appropriate for AFCIs are in black.



Combination Arc Fault Circuit Breakers Distributor Inventory information

Developing NEC requirements will drive changes to your product inventory mix. Your initial inventory purchase should be about 4 times your current AFCI stock volume. You can use your current records to calculate the mix between 15 and 20 amp models. If you have no history, use 70% for 15 amps and 30% for 20 amps.

Once you start selling combination AFCIs, do not immediately return your existing AFCI inventory. It is appropriate to wait a minimum of 3 months before returning your stock. Follow all existing RGA processes for your return.

Your load center mix might change, too, if you currently sell 1/2" THQP breakers that will have to migrate to be 1" AFCIs. This table may help in identifying the mix changes.

Current load centers (number of circuits)	Equivalent load centers (number of circuits) to accommodate AFCIs
2	4
4	8
5	5
6	8
8	12
12	16
16	24
20	24
24	32
32	40
40	42
42	42

Contact your GE Account Manager with any additional questions. Visit www.afcisafety.org for more information on AFCIs.

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