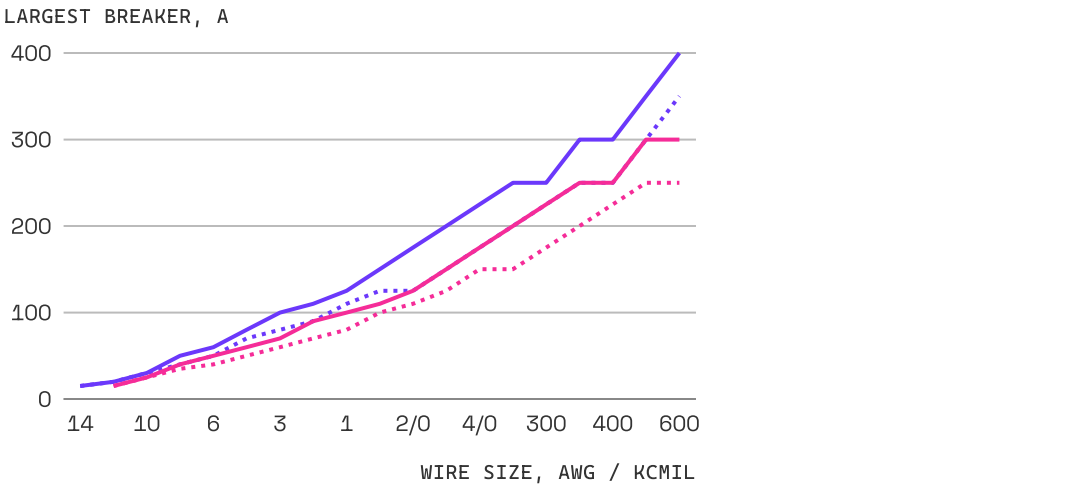
Breaker size chart

14 AWG copper wire takes a breaker of up to 15 A, 12 AWG up to 20 A, 10 AWG up to 30 A and 8 AWG up to 50 A with 75 °C terminations (40 A in NM-B cable).

Largest standard breaker for each copper and aluminum wire size at 60 °C and 75 °C terminations; NM-B cable uses the copper 60 °C column and is made up to 2 AWG

WIRE SIZE	COPPER 60 °C	COPPER 75 °C	ALUMINUM 60 °C	ALUMINUM 75 °C
14 AWG	15 A	15 A	—	—
12 AWG	20 A	20 A	15 A	15 A
10 AWG	30 A	30 A	25 A	25 A
8 AWG	40 A	50 A	35 A	40 A
6 AWG	50 A	60 A	40 A	50 A
4 AWG	70 A	80 A	50 A	60 A
3 AWG	80 A	100 A	60 A	70 A
2 AWG	90 A	110 A	70 A	90 A
1 AWG	110 A	125 A	80 A	100 A
1/0 AWG	125 A	150 A	100 A	110 A
2/0 AWG	125 A	175 A	110 A	125 A
3/0 AWG	150 A	200 A	125 A	150 A
4/0 AWG	175 A	225 A	150 A	175 A
250 kcmil	200 A	250 A	150 A	200 A
300 kcmil	225 A	250 A	175 A	225 A
350 kcmil	250 A	300 A	200 A	250 A
400 kcmil	250 A	300 A	225 A	250 A
500 kcmil	300 A	350 A	250 A	300 A

WIRE SIZE	COPPER 60 °C	COPPER 75 °C	ALUMINUM 60 °C	ALUMINUM 75 °C
600 kcmil	350 A	400 A	250 A	300 A



Largest breaker by wire size.

How the breaker size chart works

Each value is the largest standard breaker that does not exceed the wire's ampacity, after the small-conductor limits for 14, 12 and 10 AWG. In some cases the code allows the next standard size up when the ampacity falls between two breaker sizes; this chart does not apply that allowance, so it errs on the safe side.

Motor circuits, air conditioners and other equipment with a nameplate maximum breaker follow their own rules: use the size printed on the nameplate.

SOURCES

- NFPA 70, National Electrical Code (2023): Allowable ampacities of insulated conductors, Table 310.16
- NFPA 70, National Electrical Code (2023): Overcurrent protection of small conductors, Section 240.4(D)

▶ Compared with 6 published documents, last on 2026-11-13

Calculated by Calculate.diy with the method of the National Electrical Code® (NEC®), 2023 edition; not the NEC text. Methodology. For planning only: check local code and use a licensed electrician.