



## GENERATOR SIZING

The generator must be capable of supplying the maximum connected load, in addition to the required starting current of the largest motor. The minimum generator ratings to serve the connected load are determined as follows (also see Generator Sizing Example):

1. *Determine the minimum generator wattage and ampere rating for the required loads.* The actual wattage of lighting and other loads are added, using nameplate information for appliances. When appliance nameplate information is not available, current and power requirements of the actual loads are measured or taken from page 103. The starting wattage required by the largest motor only (not all motors in the dwelling) is included in this calculation.
2. *Determine the minimum current rating of the generator* based on the power requirements of the connected load as determined in Step 1.
3. *First list the loads on a panelboard schedule and then balance them as closely as possible between phases.* This step is necessary because the generator must be sized to supply the largest required phase current of the connected load.
4. *Select a generator* with power and ampere ratings greater than the maximum connected load and with the maximum unbalanced load current.

### Generator Sizing Example

This example determines the size of a generator needed to supply essential circuits only (not the entire dwelling unit load).

1. *Determine the minimum output power rating needed.*
2. *Select the generator.* A 10-kilowatt (10000 watts) model would be sufficient to support the essential loads in this dwelling.