

nameplate is not less than the current marked on the fan or blower motor nameplate, the full-load current marked on the nameplate of the appliance shall be used to determine the ampacity of branch-circuit conductors in addition to the current ratings of the following:

- (1) Disconnecting means
- (2) Motor controllers
- (3) Short-circuit and ground-fault protective devices
- (4) Separate overload protective devices

Exception No. 3: For a listed motor-operated appliance that is marked with both motor horsepower and full-load current, the motor full-load current marked on the nameplate of the appliance shall be used instead of the horsepower rating on the appliance nameplate to determine the ampacity of branch-circuit conductors in addition to the current ratings of the following:

- (1) Disconnecting means
- (2) Motor controllers
- (3) Short-circuit and ground-fault protective devices
- (4) Separate overload protective devices

(2) Nameplate Values. The motor nameplate current ratings shall be used to determine the values for the following:

- (1) Separate motor overload protection
- (2) For motors built for low speeds (less than 1200 RPM), high torques, canned pumps, or multispeed motors, the following:
 - a. Ampacity of conductors
 - b. Current ratings of switches
 - c. Current ratings of branch-circuit short-circuit and ground-fault protection
- (3) Large motors exceeding the values in Part XIV shall use the nameplate current rating for conductor sizing.

In 430.6(A)(1), for motors other than those built for low speeds (less than 1200 rpm), or high torque and multispeed motors, the ampacity of motor branch-circuit conductors, branch-circuit and ground-fault protection, and ampere rating of the motor disconnecting means are determined by the ampere values listed in Tables 430.247 through 430.250, rather than by the ampere values marked on the motor nameplate. Regarding 430.6(A)(2), the current rating provided on the motor nameplate is used to size the overload protective devices (i.e., thermals or heaters) that protect the motor, motor control apparatus, and motor branch-circuit conductors. If the motor is marked with a current rating rather than a horsepower rating, the horsepower rating can be found in Tables 430.247 through 430.250, by using the motor ampere rating, service factor, voltage, and single- or three-phase information from the nameplate.

(B) Torque Motors. For torque motors, the rated current shall be locked-rotor current, and this nameplate current shall be used to determine the ampacity of the branch-circuit conductors covered in 430.22 and 430.24, the current rating of the motor

overload protection, and the current rating of motor branch-circuit short-circuit and ground-fault protection in accordance with 430.52(B).

Informational Note: See 430.83(D) and 430.110 for information on motor controllers and disconnecting means.

(C) Alternating-Current Adjustable Voltage Motors. For motors used in alternating-current, adjustable voltage, variable torque drive systems, the ampacity of conductors, or current ratings of switches, branch-circuit short-circuit and ground-fault protection, and so forth, shall be based on the maximum operating current marked on the motor nameplate or the control nameplate, or both. If the maximum operating current does not appear on the nameplate, the current rating determination shall be based on 150 percent of the values given in Table 430.249 and Table 430.250.

(D) Valve Actuator Motor Assemblies. For valve actuator motor assemblies (VAMs), the rated current shall be the nameplate full-load current, and this current shall be used to determine the maximum rating or setting of the motor branch-circuit short-circuit and ground-fault protective device and the ampacity of the conductors.

430.7 Marking on Motors and Multimotor Equipment.

(A) Usual Motor Applications. A motor shall be marked with the following information:

- (1) Manufacturer's name.
- (2) Rated volts and full-load current. For a multispeed motor, full-load current for each speed, except shaded-pole and permanent-split capacitor motors where amperes are required only for maximum speed.
- (3) Rated frequency and number of phases if an ac motor.
- (4) Rated full-load speed.
- (5) Rated temperature rise or the insulation system class and rated ambient temperature.
- (6) Time rating. The time rating shall be 5, 15, 30, or 60 minutes, or continuous.
- (7) Rated horsepower if $\frac{1}{8}$ hp or more. For a multispeed motor rated $\frac{1}{8}$ hp or more, rated horsepower for each speed, except shaded-pole and permanent-split capacitor motors rated $\frac{1}{8}$ hp or more where rated horsepower is required only for maximum speed. Motors of arc welders are not required to be marked with the horsepower rating.
- (8) Code letter or locked-rotor amperes if an alternating-current motor rated $\frac{1}{2}$ hp or more. On polyphase wound-rotor motors, the code letter shall be omitted.

Informational Note No. 1: See 430.7(B).

- (9) Design letter for design A, B, C, or D motors.

Informational Note No. 2: See ANSI/NEMA MG 1-2016, *Motors and Generators*, Part 1, Definitions, for information on motor design letter definition.