as not to damage the cable. Cable shall be supported at intervals not exceeding 1.2 m (4 ft).

(D) Fittings. Fittings shall be used at all points where irrigation cable terminates. The fittings shall be designed for use with the cable and shall be suitable for the conditions of service.

675.5 More Than Three Conductors in a Raceway or Cable. The signal and control conductors of a raceway or cable shall not be counted for the purpose of ampacity adjustment as required in 310.15(C)(1).

675.6 Marking on Main Control Panel. The main control panel shall be provided with a nameplate giving the following information:

(1) The manufacturer's name, the rated voltage, the phase, and the frequency
(2) The current rating of the machine
(3) The rating of the main disconnecting means and size of overcurrent protection required

675.7 Equivalent Current Ratings. Where intermittent duty is not involved, Article 430 shall be used for determining ratings for controllers, disconnecting means, conductors, and the like. Where irrigation machines have inherent intermittent duty, the determinations of equivalent current ratings in 675.7(A) and (B) shall be used.

(A) Continuous-Current Rating. The equivalent continuous-current rating for the selection of branch-circuit conductors and overcurrent protection shall be equal to 125 percent of the motor nameplate full-load current rating of the largest motor, plus a quantity equal to the sum of each of the motor nameplate full-load current ratings of all remaining motors on the circuit, multiplied by the maximum percent duty cycle at which they can continuously operate.

(B) Locked-Rotor Current. The equivalent locked-rotor current rating shall be equal to the numerical sum of the locked-rotor current of the two largest motors plus 100 percent of the sum of the motor nameplate full-load current ratings of all the remaining motors on the circuit.

675.8 Disconnecting Means.

(A) Main Controller. A controller that is used to start and stop the complete machine shall meet all of the following requirements:

(1) An equivalent continuous current rating not less than specified in 675.7(A) or 675.22(A)
(2) A horsepower rating not less than the value from Table 430.251(A) and Table 430.251(B), based on the equivalent locked-rotor current specified in 675.7(B) or 675.22(B)

Exception: A listed molded case switch shall not require a horsepower rating.

A listed molded case switch used as a motor controller is not required to have a horsepower rating, but it is required to have a continuous-current (ampere) rating not less than that specified by 675.7(A) or 675.22(A).

(B) Main Disconnecting Means. The main disconnecting means for the machine shall provide overcurrent protection, shall be at the point of connection of electric power to the machine, or shall be in sight from the machine, and it shall be readily accessible and lockable open in accordance with 110.25. This disconnecting means shall have a horsepower and current rating not less than required for the main controller.

Exception No. 1: Circuit breakers without marked horsepower ratings shall be permitted in accordance with 430.109.

Exception No. 2: A listed molded case switch without marked horsepower ratings shall be permitted.

The main disconnecting means is permitted to be up to 50 feet from the machine but must be in sight, readily accessible, and capable of being locked in the open position. This eliminates one set of overcurrent protective devices (OCPDs) and one disconnecting means where the circuit originates at the motor control panel for the irrigation pump and the panel is located within 50 feet of the center pivot machine. It also alleviates some potential problems with machines designed to be towed to a second site.

(C) Disconnecting Means for Individual Motors and Controllers. A disconnecting means shall be provided to simultaneously disconnect all ungrounded conductors for each motor and controller and shall be located as required by Article 430, Part IX. The disconnecting means shall not be required to be readily accessible.

675.9 Branch-Circuit Conductors. The branch-circuit conductors shall have an ampacity not less than specified in 675.7(A) or 675.22(A).

675.10 Several Motors on One Branch Circuit.

(A) Protection Required. Several motors, each not exceeding 2 hp rating, shall be permitted to be used on an irrigation machine circuit protected at not more than 30 amperes at 1000 volts, nominal, or less, provided all of the following conditions are met:

(1) The full-load rating of any motor in the circuit shall not exceed 6 amperes.
(2) Each motor in the circuit shall have individual overload protection in accordance with 430.32.
(3) Taps to individual motors shall not be smaller than 14 AWG copper and not more than 7.5 m (25 ft) in length.

(B) Individual Protection Not Required. Individual branch-circuit short-circuit protection for motors and motor controllers shall not be required where the requirements of 675.10(A) are met.