



## Ohio Revised Code

### Section 1567.18 Rules for use of alternating current.

Effective: June 14, 2000

Legislation: House Bill 601 - 123rd General Assembly

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When alternating current is used underground in mines, the following rules apply:

(A) On all low voltage circuits all wires shall be protected by a switch and an automatic overload circuit breaker on each wire of the circuit, except that fuses may be substituted for circuit breakers in the case of lighting circuits and in the case of power circuits transmitting twenty-five kilowatts or less. All wires shall be insulated with a standard insulation and shall be placed between trolley wire and rib or on the rib as close to the roof as practicable and securely supported upon hangers efficiently insulated. Additional switches shall be installed in all branch circuits. All points of connection shall be properly protected so that persons cannot inadvertently come in contact therewith. No voltage in excess of two hundred sixty volts measured at the nearest switchboard shall be used in mobile machinery except with the written approval of the chief of the division of mineral resources management.

(B) When high voltage circuits are used, all wires shall be provided with a suitable ammeter and protected by an oil-break switch on each wire of the circuit, such switch to be equipped with an automatic overload trip. All wires shall be insulated with a standard insulation at least fifty per cent higher than the standard for the commercial rated voltage between conductors and ground and installed in conduit or be lead covered with an additional covering of steel armor wire or steel tape, and all wire shall be subject to carrying capacity according to the rules of the national board of fire underwriters. This cable may be installed either in or on the bottom or in the location prescribed for direct current feed lines, except no further insulation shall be required than specified in this section.

(C) No voltage in excess of eight thousand volts between conductor and ground may be used to operate semipermanent and permanent machinery except with the written approval of the chief. All installations shall be made in accordance with the accepted electrical standards and practices, especially with regard to protective switches, insulation materials, clearance danger signs, and gates. The location, ventilation, and protection against fire hazard and personal injury shall be subject to the approval of the chief.



(D) The division of mineral resources management shall accept standard electrical practices in regard to the underground electrical installations and operation of alternating current equipment, but may augment the same to provide additional safeguards. When exercising this authority, the division shall give due consideration to the safety experience in regard to similar installations and the similar operation thereof under similar conditions.

(E) The mine foreperson shall have posted at the mine opening, and in all permanent substations therein, a copy of instructions as to the method of resuscitation of persons suffering from electric shock. All persons working about such stations, or with electric machines, shall familiarize themselves with such rules.

No operator of a mine shall refuse or neglect to comply with this section.