

**§ 75.518-1**

Three-phase motors on all electric equipment shall be provided with overload protection that will deenergize all three phases in the event that any phase is overloaded.

**§ 75.518-1 Electric equipment and circuits; overload and short circuit protection; minimum requirements.**

A device to provide either short circuit protection or protection against overload which does not conform to the provisions of the National Electric Code, 1968, does not meet the requirement of § 75.518. In addition, such devices on electric face equipment and trailing cables that are required to be permissible must meet the requirements of the applicable schedules of the Bureau of Mines.

**§ 75.518-2 Incandescent lamps, overload and short circuit protection.**

Incandescent lamps installed along haulageways and at other locations, not contacting combustible material, and powered from trolley or direct current feeder circuits, need not be provided with separate short circuit or overload protection, if the lamp is not more than 8 feet in distance from such circuits.

**§ 75.519 Main power circuits; disconnecting switches.**

[STATUTORY PROVISION]

In all main power circuits, disconnecting switches shall be installed underground within 500 feet of the bottoms of shafts and boreholes through which main power circuits enter the underground area of the mine and within 500 feet of all other places where main power circuits enter the underground area of the mine.

**§ 75.519-1 Main power circuits; disconnecting switches; locations.**

Section 75.519 requires (a) that a disconnecting switch be installed on the surface at a point within 500 feet of the place where the main power circuit enters the underground area of a mine, and (b) that, in an instance on which a main power circuit enters the underground area through a shaft or borehole, a disconnecting switch be in-

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stalled underground within 500 feet of the bottom of the shaft or borehole.

**§ 75.520 Electric equipment; switches.**

[STATUTORY PROVISION]

All electric equipment shall be provided with switches or other controls that are safely designed, constructed, and installed.

**§ 75.521 Lightning arresters; ungrounded and exposed power conductors and telephone wires.**

Each ungrounded, exposed power conductor and each ungrounded, exposed telephone wire that leads underground shall be equipped with suitable lightning arresters of approved type within 100 feet of the point where the circuit enters the mine. Lightning arresters shall be connected to a low resistance grounding medium on the surface which shall be separated from neutral grounds by a distance of not less than 25 feet.

[38 FR 4975, Feb. 23, 1973]

**§ 75.522 Lighting devices.**

[STATUTORY PROVISION]

No device for the purpose of lighting any coal mine which has not been approved by the Secretary or his authorized representative shall be permitted in such mine.

**§ 75.522-1 Incandescent and fluorescent lamps.**

(a) Except for areas of a coal mine inby the last open crosscut, incandescent lamps may be used to illuminate underground areas. When incandescent lamps are used in a track entry or belt entry or near track entries to illuminate special areas other than structures, the lamps shall be installed in weather-proof sockets located in positions such that the lamps will not come in contact with any combustible material. Lamps used in all other places must be of substantial construction and be fitted with a glass enclosure.

(b) Incandescent lamps within glass enclosures or fluorescent lamps may be used inside underground structures (except magazines used for the storage of