Control Wire and Wire Markers in Switchgear and Motor Control

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ANSI standards for metal-enclosed switchgear require the use of either Type TBS or Type SIS wire for control wire in this type of equipment. Further, the wire is required to have a minimum size of #14 AWG, and to be flexible (41 strand or more) where it is connected across a hinge. Powell's standard is to use Type SIS flexible wire for all switchgear wiring. The wire will be #14 AWG unless a larger wire is required by the circuit or is specified by the purchaser.

Switchgear control wire has traditionally been colored gray, although this is not called for by any industry standard. Powell's standard is to use gray wire except for ground wires, which are green. Other colors may be used if specified by the purchaser, but elaborate color coding can be rather costly, as wire manufacturers require sizeable runs of special items such as unusual colors.

Special wire types can also be used when required, but are also subject to special charges for non-standard wire mill runs.

Wire markers, or wire tags, are used in most equipment we produce, but are not required by standards. Therefore, they must be specified by the purchaser when desired. When wire markers are used, Powell's standard is a white tube marked with black characters. The wire marker is marked with the wire number shown on the schematic and wiring diagrams.

Special wire markers can be furnished on request. Some special features requested from time to time include special sleeve materials, special colors, heat shrink installation, and special wire designations or numbering. All of these can be furnished, but at a cost.

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