

Section H, Part 34

Types MD and ME Color-Light Dwarf Signals

Foreword and General Ordering Information

Types MD and ME signals are compactly built, self-contained units and provide highly satisfactory dwarf signal indications with a minimum of working parts and, accordingly, for a low original and maintenance cost. Being two-indication color-light signals, they are directly controllable by either a neutral or polar relay, the circuit for which may be in turn controlled by a lever in an interlocking machine or by some other method of selection. This combined with the fact that they are operable by circuits similar to and as commonly used for the control of solenoid, or other type, two-indication signals in all-electric interlockings, make them particularly desirable for use in replacement of such types of signals which have become obsolete, worn-out, or which require excessive maintenance and repairs, or which in any other way are not operating satisfactory.

For typical circuits see Bulletin 175.

Features of the MD and ME Signals:

1. They provide more visible and distinct indications than older type two-indication dwarf signals.
2. Any desired color aspect is available in either upper or lower lens compartment.
3. Being small and compactly built, they are less likely to be damaged.
4. Being totally enclosed, they operate perfectly in any weather.
5. Electrical parts such as terminal blocks, wires, and receptacles, susceptible to break-down and grounding, and consequently contributing to low insulation tests, are reduced to a minimum.
6. Low power consumption.
7. The MD signal case provides space for all control relays, transformers, etc., ordinarily required.
8. No wires in addition to those ordinarily used for the control of a two-indication solenoid dwarf signal are required from the control point to the signal indication.
9. Individual cross protection, or its equivalent, may be retained or provided. In addition, a lever light may be provided which will visibly indicate to the operator the operation of the lever, the signal, and the continuity of the filament of the proceed or of the restricting indication lamp, as desired.
10. If signal selection and control exists through a switch repeater relay, or is being installed, these features may be incorporated in the MD and ME signal controls.

The main difference in construction of these two signals is that the signal case of the MD provides housing space for control relays, transformers, etc., while with the ME signal such apparatus must be housed separately.

Sufficient space is provided for housing a combination assemblage such as one Type K Size 2 relay with a Type S1 or S2 transformer, or with a Type WE relay with rectifier, and resistors and terminal posts. The largest single relay which may be housed in the case is a Type K Size 4.

Both signals are equipped with doublet lenses, the outer lens being the clear standard optical smooth face type, with deflecting bullseye, and the inner lens colored as required.

A convex deflecting or spredlite roundel may be applied in front of the lenses if desired.

A "Phankill Unit" can be supplied in the Types MD and ME Signals, which is a device for reducing the phantom indications which are occasionally apparent in signals facing East or West. When used, it is generally assembled in the yellow indications, only.

A shield is provided behind the lamps in the MD signal which excludes any light from an outside source that may be transmitted through the lenses from the rear when the door is opened.