



# INSTALLATION • OPERATION • MAINTENANCE INSTRUCTIONS

## TYPE JM ANNUNCIATOR AND CURRENT INDICATOR

**CAUTION** Before putting relays into service, remove all blocking which may have been inserted for the purpose of securing the parts during shipment, make sure that all moving parts operate freely, and operate the relay to check the settings and electrical connections.

### APPLICATION

The type JM relay is available for two different applications. The JM annunciator may be used to indicate circuit operations of any relay scheme. The target indicators provide visual indication of any desired circuit operation.

The JM current indicator provides a range of six steps of current level, indicating the highest current reached in a series circuit.

### CONSTRUCTION AND OPERATION

The JM annunciator consists of a group of identical operating units connected as shown in Fig. 1, or 2. The JM current indicator contains 6 operating units connected as shown in Fig. 3.

The operating unit consists of a small solenoid coil mounted in a steel frame, a spring-restrained armature, and a white target flag. When the coil is energized, the armature releases the white target which then falls into a visible position indicating that a particular circuit has been energized. The indicators are reset from outside of the case by a push rod in the cover.

### CHARACTERISTICS

The standard JM annunciator is supplied with 0.2, 1 or 2 ampere d-c coils with the following ratings:

Rated Current (amperes)	Resistance (ohms)	Continuous Rating (amperes)	One-second Rating (amperes)
0.2	2.8	0.6	18
1	.16	3	70
2	.06	6	110

Coils are available for 25, 50 and 60 cycles.

The JM current indicator is available in a six-step range, between 3 and 50 amperes, 60 cycles.

### INSTALLATION

The relays should be mounted on switchboard panels or their equivalent in a location free from dirt, moisture, excessive vibration, and heat. Mount the relay vertically by means of the four mounting holes on the flange for semi-flush mounting or by means of the rear mounting stud or studs for projection mounting. Either a mounting stud or the mounting screws may be utilized for grounding the relay. The electrical connections may be made directly to the terminals by means of screws for steel panel mounting or to the terminal studs furnished with the relay for thick panel mounting. The terminal studs may be easily removed or inserted by locking two nuts on the stud and then turning the proper nut with a wrench.

For detailed FT case information refer to I.L. 41-076.

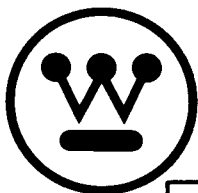
### ADJUSTMENTS

Adjust the indicator to operate at its rated current, gradually applied, by loosening the two screws on the under side of the assembly, and moving the bracket forward or backward. In the current indicator relay, if the two helical springs which reset the armature are replaced by new springs, they should be weakened slightly by stretching to obtain the proper calibration.

### RENEWAL PARTS

Repair work can be done most satisfactorily at the factory. However, interchangeable parts can be furnished to the customers who are equipped for doing repair work. When ordering parts, always give the complete nameplate data.





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**SUPERSEDES I.L. 41-741**

\*Denotes change from superseded issue.

- \* The voltage operated JM annunciator is supplied with .03 ampere d-c coils with the appropriate series resistor for the supply voltage.

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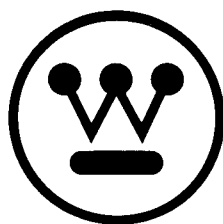
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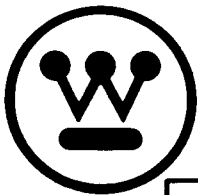
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**WESTINGHOUSE ELECTRIC CORPORATION**  
**RELAY-INSTRUMENT DIVISION**

**NEWARK, N. J.**

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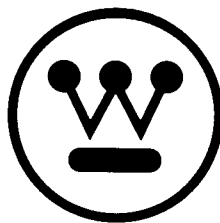
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SUPERSEDES I.L. 41-741A

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EFFECTIVE AUGUST 1968



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**NEWARK, N. J.**

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