

TERMINAL BOARD

FOR RESISTANCE TEMPERATURE DETECTORS

The terminal board for resistance temperature detectors is employed on installations in which the temperature meter is energized from an ungrounded direct-current supply circuit. It serves to connect the temperature detectors with the temperature meter, and to prevent the latter from receiving an excessive potential in the event of a failure of the stator-coil insulation adjacent to a detector. The latter function is accomplished through connecting each detector permanently with the ground.

The terminal board, Fig. 1, consists essentially of a moulded base (14) with cover (13), in which are arranged the connections (1-7) for joining together the leads from the temperature detectors and temperature meter. The center (b) row of connections is connected with the grounding strip (15). Part (16) serves as a ground connection and also as a stud for attaching the terminal board to its grounded support on the stator frame.

The "A" (red) leads from the temperature detectors and temperature meter are connected on the bottom row "A" connection studs, while one remaining lead from each detector and the meter are connected to the middle row "B" connection studs, and the third lead from each detector and meter are connected to the top row "C" connection studs.

OPERATION

If it should be desired permanently to insulate from ground one of the temperature detectors (usually the one giving the highest temperature readings in operation) for connection with a temperature relay, the following procedure should be observed: Remove the cover (13) and disconnect the temperature meter leads from all three connection studs of the detector in question. Remove the "B" lead of this detector from the center stud, and unscrew and remove this stud from the grounding strip. Using a small machine screw and nut suitable for the purpose, bolt together the "B" lead of the detector and the "B" lead from the relay. Wrap the joint thus formed with ordinary friction tape for insulating from the other studs and connections. The "A" and "C" leads of the relay should next be connected to the corresponding terminal-board studs, replacing the leads from the temperature meter which were removed, and the cover then replaced.

GENERAL  ELECTRIC
SCHENECTADY, N. Y.

- 1 - Connections for leads from temperature detector No. 10
- 2 - Connections for leads from temperature detector No. 9
- 3 - Connections for leads from temperature detector No. 8
- 4 - Connections for leads from temperature detector No. 7
- 5 - Connections for leads from temperature detector No. 6
- 6 - Connections for leads from temperature detector No. 5
- 7 - Connections for leads from temperature detector No. 4
- 8 - Leads from temperature detector No. 3
- 9 - Leads from temperature detector No. 2
- 10 - Leads from temperature detector No. 1
- 11 - Insulation
- 12 - Lead terminal
- 13 - Cover for terminal board
- 14 - Base for terminal board
- 15 - Grounding strip
- 16 - Stud for attaching to support
- 17 - Temperature detector located in armature slot
- 18 - Lead support
- 19 - Hole for screw for stator frame and 18
- 20 - Armored leads - temperature detector
- 21 - Nut for 16
- 22 - Nut for 23
- 23 - Upset stud for 12
- 24 - Lockwasher for 22
- 25 - Acorn nut - for holding cover in place with 16
- 26 - Washer for 21 and 25
- 27 - Washer for 23
- 28 - Leads from temperature meter

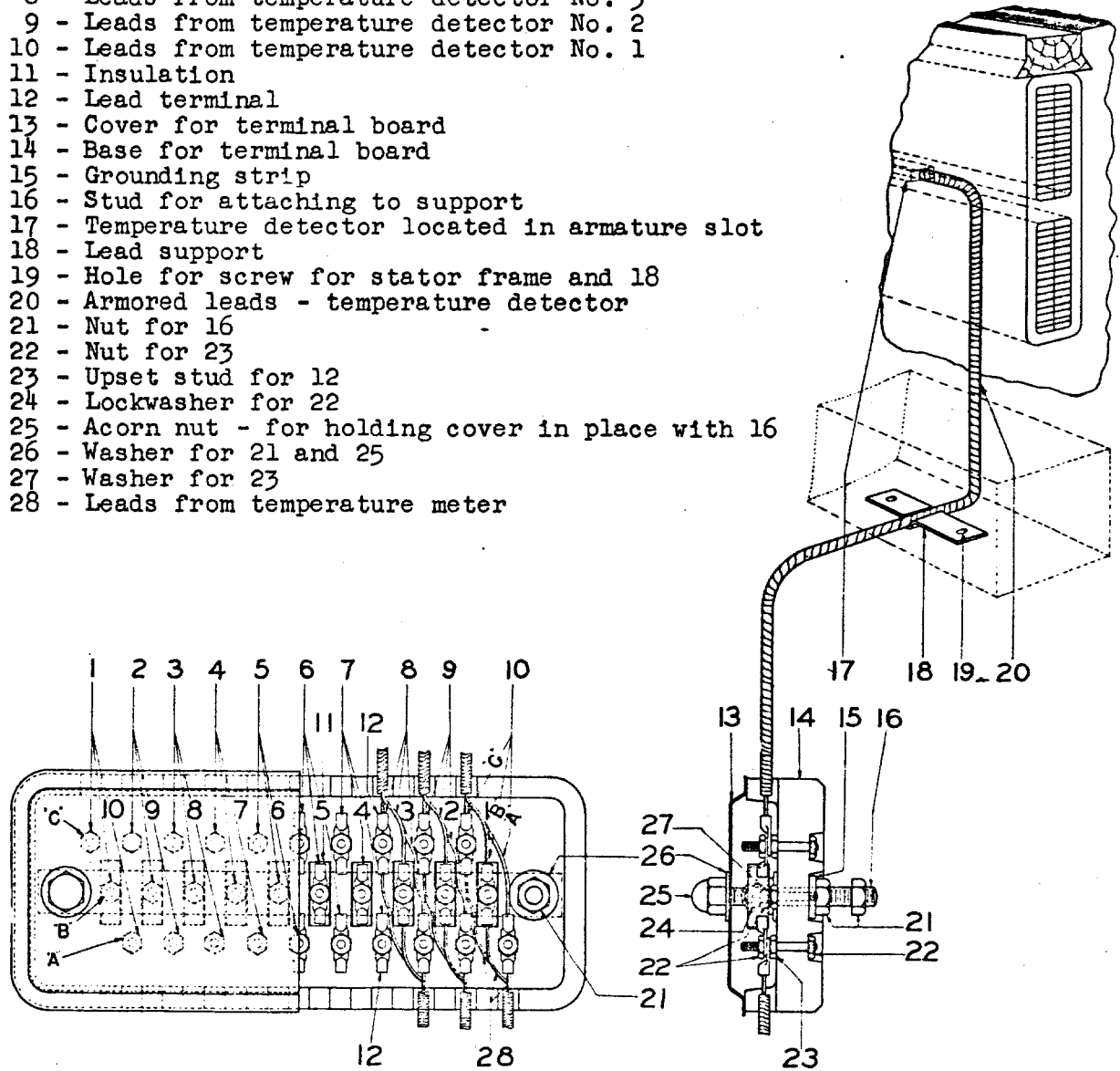


Fig. 1. Terminal Board for Resistance Temperature Detectors